Accents, Punctuation or Cantillation Marks?

A Study of the Linguistic Basis of the ṭəʿāmīm

Matthew Phillip Monger

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(Proverbs 1:7)
Abstract

This thesis discusses different strategies for interpreting the placement of the ṭə́ʾāmîm in Masoretic Text of the Hebrew Bible. After introducing the signs and their distribution in the text, the thesis looks at different levels of linguistic analysis where the ṭə́ʾāmîm provide interesting information. At the word level, word stress and vowel length are discussed. At the phrase level, the different types of phrases are analyzed in light of a closest constituent analysis. At the verse level, the distribution of the ṭə́ʾāmîm is shown to depend on simple rules which maximize the most common structures of Tiberian Hebrew. Prosodic structure is also evaluated to show what bearing that it has on the placement of the ṭə́ʾāmîm. Finally, the ṭə́ʾāmîm are discussed in relation to discourse features.

The goal of the thesis is to show that the ṭə́ʾāmîm are not simply musical notation, but have a linguistic basis, and provide insight into linguistic features of Tiberian Hebrew.
Forword

This thesis is the culmination of work I have done while living in three countries on two continents – but the research has always been based in the text of the Hebrew Bible. Though the research required no travel, my life did. I feel privileged to be able to work with such ancient texts and carry them with me around the world. I certainly would never have embarked on this scholarly work had it not been for Professor Lutz Edzard, University of Oslo. Professor Edzard has been my advisor, teacher, mentor, motivator, tour guide and friend over the past few years, and I have greatly benefited not only from his vast knowledge, keen eye for detail and relaxed style of tutoring, but also from his love for what he does and his encouragement for me to become a “hardcore Semitist”. For all this I give my sincere thanks.

My wife Maria and three children Andreas, Petter and Mia have stood by my side throughout this process, allowing me to stay up late, leave the house early and be lost in thought at the dinner table without ever criticizing my work. Even now as I put the finishing touches on this thesis, the three children are at home alone with me, quietly playing while I work. I am ever grateful that they put up with my peculiarities and love of books.

In the end, any shortcomings or mistakes are all mine.

Drøbak, Norway

May 24, 2012
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Transliteration

Transliterations follow the style sheet of the Encyclopedia of Hebrew Language and Linguistics (EHLL)\(^1\) except where otherwise noted. In addition, primary word stress is marked with an *acute accent* (é) and secondary stress with a *grave accent* (è). Short vowels are unmarked, long vowels are marked with a *macron* (ë) and ultra-short vowels are marked with a *breve* (ë). The following chart shows the Hebrew letters with their transliteration in the EHLL standard.

<table>
<thead>
<tr>
<th>Heb.</th>
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| א ʾ | ח ḥ | פ p | ० | ָ/å | ב b | ט ṭ | פ ṭ | ० | a
| ב b | י y | י y | ४ | ḥ | כ c | ק q | ० | e
| ג g | כ c | ק q | ४ | ḫ | כ c | ר r | ० | ò |
| ד d | ל l | ש š | ० | ü/u | ד d | מ m | ש š | ४ | i/i |
| ה h | נ n | ת ţ | ४ | ā | w w | כ c | ת ţ | ४ | ā |
| ז z | י y | ० | ४ | ĕ | w w | כ c | ת ţ | ४ | e

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\(^1\) Geoffrey Khan (forthcoming)
1 Introduction

Through a period of over 1000 years, the traditional reading of the Hebrew Bible (HB) was transmitted orally, from teacher to pupil, rabbi to student, in order to preserve the text. During the Masoretic Period, 500-950 CE,² this reading tradition was written down. The text of the HB, which had up to this point been only consonantal, was marked with vowels and other signs which served to aid others in reading the text as the rabbis had handed it down. One group of signs is the ṭāʾā’āmīm, traditionally called accents or cantillation marks. The purpose of this thesis is to investigate Masoretic ṭāʾā’āmīm and their linguistic basis in light of modern linguistic theory.

As the title implies, the ṭāʾā’āmīm have been alternately explained as being marks of word stress, punctuation and musical notation for the Masoretic Text (Masoretic Text) of the HB.³ The ṭāʾā’āmīm, which are 27 in number for the prose books of the HB and 21 for the poetic books, are superimposed on the consonant text, just like the vowels of Masoretic Text, and with other signs (e.g. dāgeš, maqqep, etc.) make up the Masoretic pointing system.⁴ These diacritic signs are of a later date than the consonant text itself (cf. 1.2 below), thus the placement of the ṭāʾā’āmīm must be in relation to the already established consonant text of the HB and the Masoretic understanding of that text.

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² Yeivin (1980:1)
³ All citations from the HB are from Kittel and Elliger (1967/1977)
⁴ Gesenius, Kautzsch and Cowley (1963:54-65)
Despite over a thousand years of research, there is no consensus on the system which the Masoretes used to place the $\text{ṭəʿamîm}$, leaving the accentual system largely untouched by the broader community of Hebraists and Semitists. This thesis will discuss the different understandings of the $\text{ṭəʿamîm}$ which have developed over time, at different linguistic levels. The goal is not to present new qualitative research but to collect the various strands of research on the $\text{ṭəʿamîm}$ and present them together – evaluating their relevance from a modern linguistic perspective. The $\text{ṭəʿamîm}$ are placed in such a careful manner as to open a window into the Masoretic understanding of Hebrew grammar, making the $\text{ṭəʿamîm}$ an uncanny resource for understanding the text of the HB as well as its grammar.

1.1 Scope and Method

The starting point for this thesis is the fact that this is not simply a question of which came first, the chicken or the egg. In fact, we know that the Hebrew language existed long before the Masoretes began their work (cf. 1.2 below). The rules for phonology, morphology, syntax and prosody in the Hebrew language are not a result of the Masoretic work, but are prerequisites for it. Thus, we can assume that the Masoretic pointing system is a tool to maintain the quality of the text, or at the very least to establish it, instead of the consonant text being set up to reflect the pointing system. Because the system of the $\text{ṭəʿamîm}$ is so complex (cf. 1.4 below), it stands to reason that there is a purpose to that complexity and the placement of the $\text{ṭəʿamîm}$. Based on these reflections, I will examine the use of the $\text{ṭəʿamîm}$ on different linguistic units with a twofold goal. The first goal is to describe different bases for
the use of the ṭəʿāmīm and what information can be garnered from them. The second goal is to compare their uses in relation to different linguist units with modern linguistic theories which arose 1000 years later.

1.1.1 Linguistic Terminology

Up to this point, I have used the term *modern linguistic* as a term for the theoretical framework I will use to evaluate the ṭəʿāmīm. This is purposefully imprecise. In this thesis I will not be restricting the work to a specific strand of linguistic research, for example *Generative Linguistic* or *Cognitive Linguistic* methodology for one particular reason: research into the accentuation of the HB has not been done from a single perspective. The point is rather to see in which ways the use of the ṭəʿāmīm compares with any modern linguistic model. Researches have taken different perspective in their work, and thus I will follow their lead. For example, in section 2.2 I will touch on Churchyard’s use of autosegmental phonology in the discussion of primary and secondary word stress in Hebrew, in chapter 4 I will work with Aronoff’s interpretation of syntax in the nearest constituent theory and in chapter 5 I will look at Lode’s work with discourse analysis and the ṭəʿāmīm. The goal is not to prove the Masoretes to be anachronistically adept at modern linguistics, but to see how the work of the Masoretes can be useful and insightful in light of various modern theories.


1.1.2 Methodology

I will be discussing the *ṭə‘āmīm* both in relation to the information we can garner from the text based on their usage and in comparison with modern understandings of linguistic theory. To this end, I have divided the remainder of this thesis into 5 chapters, one for each of the different linguistic features investigated followed by a concluding chapter. In each chapter I will discuss the unit from a linguistic and grammatical point of view before discussing how the *ṭə‘āmīm* are used in relation to the structure. The discussions will be based on research from a number of different scholars who, as is expected, have focused on some but not all elements of the *ṭə‘āmīm*. Thus, chapter 2 looks at the *ṭə‘āmīm* as they relate to the TH word. Chapter 3 deals with the TH phrase, both verbal and nominal. Chapter 4 is concerned with the *ṭə‘āmīm* and the syntax of TH. Chapter 5 looks at how the *ṭə‘āmīm* can be give clarity in relation to prosody and discourse features. In chapter 6, I review the different conclusions from each chapter and summarize a unified understanding of the uses of the *ṭə‘āmīm*.

Before moving into the body of the thesis, I will present a brief history of * }): to aid in understanding where the *ṭə‘āmīm* come from (1.2). In 1.3 I will outline a history of research on the *ṭə‘āmīm* upon which I will build in each of the following chapters. Finally, in 1.4 I will present the *ṭə‘āmīm* and a formal explanation of their distribution in * ):
1.2 History of the Masoretic Text

The Masoretic text is in many ways a very important text for the study of the HB. The Masoretes worked to preserve the text of the HB in many different ways. In addition to adding the diacritical signs indicating vowels, accents, and other features, they developed an apparatus to aid in the understanding of difficult readings or linguistic phenomena. This apparatus is traditionally called the Masorah, from the root *m-s-r meaning ‘to transmit’ or ‘to hand on’, and is “the collected body of instructions used to preserve the traditional layout and text of the Bible unchanged.” The enormous amount of notes and explanations shows the detail to which the Masoretes went in order to hand on the correct text to coming generations.

There are several different layers to Ṣ which need to be discussed separately in order to understand its history as a whole as the different layers represent different stages of the evolution of the text. Tov cites 5 different features of the text that together comprise Ṣ. For the purposes of this paper, I will not discuss two of Tov’s proposed 5 layers: the “para-textual elements” and “the apparatus of the Masorah.” That leaves us with the consonantal framework (1.2.1), the vocalization (1.2.2) and the accentuation (1.2.3). After discussing these issues I will discuss the “language” of the Masoretes – Tiberian Hebrew, and what this term implies (1.2.4).

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5 The Masorah is divided into two parts, the Masorah Parva is printed in Kittel and Elliger (1967/1977) The Masorah Magna is printed in a separate volume: Weil (1971).
6 Yeivin (1980:63)
7 Tov (2001:23)
1.2.1 The Consonant Text

The consonant text of the HB grew over time and was well known before the end of the Second Temple Period (70 CE).\textsuperscript{8} It builds on a group of texts that show a great degree of stability and reliability over a period of several hundred years. The consonant text served as the basis for the addition of other signs, vowels and accents among them. There are three types of evidence for the oldest texts of the HB, Hebrew manuscripts, translations and citations. The indirect evidence of the translations and citations serves to establish the validity of the Hebrew manuscripts, as they are often of an older date but still confirm the readings of \textit{ם}. The evidence of Hebrew manuscripts from before 900 CE has changed dramatically since the discovery of texts in the Judean desert from the middle of the 20\textsuperscript{th} century and onward.\textsuperscript{9} The existence of texts dating to the 3\textsuperscript{rd} century BCE provides compelling evidence of the antiquity of the text of the HB, and thus the consonantal framework of \textit{ם}. The earliest manuscripts of the HB found to date were preserved in the Judean desert and provided Biblical texts dating as far back as 250 BCE and up until the 2\textsuperscript{nd} century CE. These manuscripts provide a point of comparison for the later manuscripts and confirm the reliability of the consonant text. These earliest manuscripts do not have the Masoretic vocalization or accentuation.\textsuperscript{10}

Indirect evidence to the credibility of the consonant text of the HB is found in ancient translations and citations of the text. The translation of the HB to Greek is

\textsuperscript{8} Tov (2001:28-29)
\textsuperscript{9} Tov (2001:100-108)
\textsuperscript{10} Tov (2001:40)
very old, and is for many passages the oldest extant source. Direct and indirect evidence suggest that the translation into Greek took place in the 3rd century BCE.\(^\text{11}\) In addition to the translations, there are as many as 55 citations of HB texts in the New Testament book of Matthew alone\(^\text{12}\), not to mention other early Christian writers, as well as the use of the text in Midrashic literature. All this comes in addition to the Talmud and other Jewish writings. The value of the translations and the citations is not proof of the consonant text in itself, but shows that the meaning was established. There are few major discrepancies between what is found in the translations and citations and the text 𝔭.

The consonant text was from an early date divided into paragraphs and, eventually, verses. The pisqot or paragraph divisions are explicitly mentioned in the Talmud written at by the 3rd century CE and based on other evidence, were likely already in place before the 1st century CE.\(^\text{13}\) There is also evidence for the further division into verses during the Talmudic period,\(^\text{14}\) and certainly verse divisions were in place by the time of the addition of the accents (cf. 1.2.3 below). The reliability of the text as established by the direct evidence and supported by the others shows that the consonant text of the HB is reliable from a very early date.

\(^{11}\) Tov (2001:136-137)  
\(^{12}\) Blomberg (2007:1)  
\(^{13}\) Yeivin (1980:41-42)  
\(^{14}\) Yeivin (1980:42)
1.2.2 Vocalization

As the Hebrew language became less and less well known, there developed a need to indicate in the text the vocalization in order to preserve the “correct” reading where the consonant text was ambiguous. In some texts, especially some found at Qumran, extensive use of *matres lectionis*, consonant signs placed to indicate a long vowel, lessened the need for vowel symbols.\(^{15}\) The tradition that became \(\text{𐤀ochond.gr} \), however, worked to maintain the consonant text as it was received and did not add *matres lectionis*. Thus, the need for vocalization arose as time passed and uncertainties about pronunciation arose.

There were at least three different vocalization traditions, called the *Palestinian*, *Babylonian* and *Tiberian* traditions. It was the Tiberian system that became the basis for \(\text{𐤀ochond.gr} \), and the other systems are not greatly represented among ancient manuscripts. The manuscripts discovered at Qumran do not show vocalization,\(^{16}\) meaning that this addition must be later than the latest Qumran texts. Later, Jerome (342-420) explicitly claims that the HB does not contain vowel signs.\(^{17}\) There is no evidence for the vowel signs in the Talmud either, making the earliest date for the use of the system after 600 CE.\(^{18}\) The vocalization is thus quite late in comparison with the consonant text.

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\(^{15}\) Tov (2001:40-41)
\(^{16}\) Tov (2001:40)
\(^{17}\) Wickes (1887:5)
\(^{18}\) Dotan (1981)
1.2.3 The $t\varphi'amîm$ and Other Signs

In this discussion of the accentuation of the HB, I am referring to the Tiberian accentuation system. There are, in fact, at least three different systems of accentuation that were developed and are represented in the manuscript evidence. The three systems are generally termed, as with the vowel signs, Babylonian, Palestinian and Tiberian. The relationship between the systems is not clear, and at least some scholars\(^\text{19}\) are of the opinion that the Tiberian system is a development of the Palestinian system. $\mathfrak{M}$ represents the culmination of the Tiberian system and is the standard up to this day. As the theme of this thesis is the Tiberian $t\varphi'amîm$, I will not delve into the complexities of the other systems nor present a systematic comparison with them.

The term $t\varphi'amîm$ refers specifically to the diacritical marks in $\mathfrak{M}$ to which are associated melodies. Etymologically speaking, the word $t\varphi'amîm$ (pl; $t\varphi'am$ sg.) comes from the Hebrew and common Semitic root $^*\tau'-m$. The verb $t\varphi'am$ means ‘to taste’ or ‘to savor’ and the noun $t\varphi'am$ can mean a ‘taste’ or a ‘sense’, among other things. This points in the direction that the $t\varphi'amîm$ were seen as adding *spice* or *flavor* to the text, by adding the melodies.

The exact date of the development of the Tiberian $t\varphi'amîm$ is not easy to determine. It seems likely that they are influenced by the accent systems found in ancient Greek and Syriac manuscripts,\(^\text{20}\) which the Masoretes likely came into contact with. The

\(^{19}\) Yeivin (1980:166)
\(^{20}\) Segal (1953:6-10)
$\tau\delta\alpha\mu\mu$ are completely lacking from the Qumran manuscripts, but there are references in both the Jerusalem and Babylonian Talmud that point towards an awareness of a system of accentuation.\textsuperscript{21} Yeivin\textsuperscript{22} interprets these references as being directed at the oral recitation the text, also possible using hand signals to indicate the accent.\textsuperscript{23} Thus he dates the beginning of the accentuation of the text to after the close of the Talmud, ca. 600 CE.\textsuperscript{24} Dotan,\textsuperscript{25} on the other hand, argues that the allusions to the $\tau\delta\alpha\mu\mu$ in the Talmud are ambiguous and do not exclude a written system. In addition, he argues that the placement of the $\tau\delta\alpha\mu\mu$ indicates that they were in existence before the vowel signs, thus necessitating an earlier date for the $\tau\delta\alpha\mu\mu$. No matter what the earliest date is, it is clear that the need to properly accentuate the Biblical text was well known in Talmudic times.

As to the terminal date, the earliest complete manuscripts use the fully developed system of the $\tau\delta\alpha\mu\mu$. Tov\textsuperscript{26} places the date for The Cairo Codex of the Prophets to 896 AD and this manuscript is completely accented. Yeivin claims that a period of at least 100 years would be necessary for the full development of the accent system.\textsuperscript{27} Though this figure is arbitrary, there must be a certain gap between the development of the accents and the writing of C. In broad terms, however, we can

\begin{itemize}
  \item \textsuperscript{21} Yeivin (1980:163-164)
  \item \textsuperscript{22} Yeivin (1980:163-164)
  \item \textsuperscript{23} cf. b. Ber. 62a
  \item \textsuperscript{24} Neusner (2011:I, xxvi)
  \item \textsuperscript{25} Dotan (1981)
  \item \textsuperscript{26} Tov (2001:47) Cf. Yeivin (1980:20)
  \item \textsuperscript{27} Yeivin (1980:164)
\end{itemize}
say that the accent system began to be used on Hebrew texts sometime between 600 and 896 AD.

### 1.2.4 Tiberian Hebrew

I have regularly referred to the language of מ as *Tiberian Hebrew*. In this section I will briefly discuss what is meant by this term and how it affects this thesis.

In sections 1.2.1, 1.2.2 and 1.2.3 I have presented the basic outline of מ so that the background of the work of the Masoretes can be understood. I have argued that the consonant text of מ is ancient and that the addition of the vowels and the תָּאָמִים was done to aid in the understanding of the text. This means that the work of the Masoretes, over a millennium after the final books of the HB were written, was based on their understanding of Hebrew. The Hebrew that is found in מ, the combination of the ancient consonant text with the Masoretic vowels and תָּאָמִים, is called *Tiberian Hebrew*. The name Tiberian comes from the city Tiberias, which was from some time in the 2nd century CE a seat of rabbinic scholarship. It was the final meeting place of the Sanhedrin, the Jewish high council, and it was where the most important post-Biblical Jewish writings, the Mishnah and the Talmud, were collected.\(^{28}\) The language of מ is generally accepted to be reliable,\(^{29}\) reflecting an understanding of Late Biblical Hebrew or dialectal differences,\(^{30}\) though it clearly represents further developments after BH.

\(^{28}\) Negev (1990:"Tiberias")
\(^{29}\) Waltke and O'Connor (1990:27-28)
\(^{30}\) Tov (2001:48-49)
Tiberian Hebrew can be reconstructed based on several sources other than the systems of vocalization and accentuation, for example grammatical treatises, manuscripts written in the Hebrew language but with the Arabic script and texts in other languages using Hebrew letters and Tiberian vocalization.\textsuperscript{31} Developments after BH include a shift from $i$ to $a$ in word-initial unstressed closed syllables and the addition of an epenthetic vowel in nouns with the pattern CVCC. I will not undertake a systematic comparison of TH and BH here, but I will comment more on the vowel system in TH in section 2.3, below.

### 1.3 History of Research on the ṭəʾāmīm

I have divided this history of research into two themes, the musical values of the accents and the syntactic analysis of the accents. It is not meant to be an exhaustive list of contributions, but to define eras and thinking related to the ṭəʾāmīm throughout the past 1000 years.

#### 1.3.1 The Musical Values of the ṭəʾāmīm

Scholarship on the accents is not limited to the modern period. The first account of the ṭəʾāmīm, albeit incomplete, is credited to Aharon ben Asher himself. His work, \textit{Diqduqe ha-Ṭeʾāmin}, lists the ṭəʾāmīm and some of the rules which govern the system.\textsuperscript{32} Early accounts of the ṭəʾāmīm grouped them in categories based on musical

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\textsuperscript{32} Yeivin (1980:160-161)
value. The division was based on similar musical or tonal use of each of the ￼ ʿamim. The study of the musical value of the ʿamim is difficult, mainly because the original musical values are not known and impossible to reconstruct on the basis of the information available today. This phenomenon has been reconsidered during the late 1900’s by French musicologist Suzanne Haïk-Vantoura whose book *The Music of the Bible Revealed* claims to show the original melodies of the HB. The basic principle is that the ʿamim placed below the consonants of the HB represent the “fixed pitches on a tonal scale” and are in fact in the key of C. The ʿamim placed above the consonants are *ornaments* of 1-3 notes. Reactions have been varied and the scholarly response can be summed up with Aronoff’s comment:

Because of our ignorance of the original musical values of the symbols, it is difficult to understand much of the system from a musical point of view: we can tell that certain regularities must have been musically motivated originally, but can go no further. We cannot give a particular musical explanation without knowing the original melodies which motivated the phenomena. Thus, though the musical significance of these symbols is what people are most aware of when they use the accents, the study of this phenomenon holds less reward than one might expect.

An important view on the development of the actual musical values of the ʿamim is expressed by Joshua R. Jacobson in his learners guide, *Chanting the Hebrew Bible: The Complete Guide to the Art of Cantillation:*

We don’t know what the original melodies were for the ʿamim. But we are reasonably sure that throughout the years of the Diaspora these original melodies evolved and mutated as they were passed on orally from one singer to the next. Inevitably, the

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33 Yeivin (1980:168)
34 Haïk-Vantoura and Wheeler (1991)
35 Haïk-Vantoura and Wheeler (1991:38)
36 See Peter Daniels’ review of Haïk-Vantoura’s book: Daniels (1992:499)
37 Aronoff (1985:33-34)
chanting of the *ṭəʿāmim* became tinted by the alien colors of non-Jewish music. Eventually the cantillation motifs sung by German Jews began to sound different from those sung by Syrian Jews. Furthermore, even within the community, each individual brought something of himself to the *ṭəʿāmim*. No two Jews chanted the Bible in exactly the same way.\(^{38}\)

Thus we must be careful not to attempt to find the original melodies and by doing so reinvent the system. The important matter here is that the melodies do influence the system, and were certainly a part of the original system by which the accents were placed. But finding the original melodies of the marks is unlikely, unless manuscript evidence from the 6\(^{th}\) – 10\(^{th}\) centuries should come to light.

### 1.3.2 1500 – 1880: Advent of Syntactic Analysis

Most scholarship up to the modern period is descriptive in nature, providing descriptions of the *ṭəʿāmim* and the combinations in which they occur. In 1538 Eliahu Levita published his book *Ṭuv Ṭaʿam*. He gives a detailed account of the *ṭəʿāmim* and notes that there are different rankings of the pausal value of the disjunctive *ṭəʿāmim*.\(^{39}\) R. Zalman Hanau began to develop the relationship between the *ṭəʿāmim* and syntax which was furthered by Y.L. Ben-Ze’ev. Their analysis of the accent system claimed that the verse was first divided into two or three parts, marked by the major *ṭəʿāmim*, ʾʾaṭnāḥ if one division, ʾʾaṭnāh and segōltā if two divisions. Then, each word was analyzed to see whether it was more connected to the word preceding it or following it. This led to the placement of the minor *ṭəʿāmim*, both disjunctive and conjunctive.\(^ {40}\)

\(^{38}\) Jacobson (2002:514)
\(^{39}\) Yeivin (1980:161)
\(^{40}\) Yeivin (1980:171-172)
Another method employed in this analysis of the accent system was the development of a hierarchy based on the absolute pausal value of the ūmim. These categories were labeled emperors, kings, dukes and counts showing to show their strength. This view, that the ūmim showed absolute value, that the actual pauses in speech that followed each accent were absolutely defined, is now generally rejected by scholars. The fourfold division and the labels, however are still used, but in a modified way.

1.3.3 1880 – Present: Wickesian Scholarship

The end of the 19th century marks an important development for the study of the Tiberian accent system in the publication of W. Wickes’ two studies41 on the systems of the poetic and prose books, respectively. Wickes’ main contribution to scholarship, which is indeed still important today, is his description of the dichotomy which is formed in each verse with the help of the disjunctive ūmim and the way in which this dichotomy is built on syntax.42 Wickes opposed the view presented above that the verse was divided into two or three parts, saying that the verse was divided into two parts, and those parts were further divided into two parts each until there remained groups of no more than two words. This is termed “the law of continuous dichotomy” by Wickes.43 The conjunctive ūmim were then used to indicate the connections where there were no disjunctive ūmim. Wickes continued to use the fourfold distinction between the ūmim, as described above, but now in relative terms. He claimed that the ūmim do not have absolute value,

41 Wickes (1881) and Wickes (1887)
42 Wickes (1887:2-4)
43 Wickes (1887:29)
but mark different relative levels of pause. Thus, there is a complex system for choosing the placement of each of the ṭəʿāmīm. A few of the rules that guide the placement of the ṭəʿāmīm are as follows: ⁴⁴

- The main division is generally placed about the middle of a verse, at a major syntactic division which is also a semantic division.

- Two words which are subject and predicate, or have a similar grammatical relationship, are usually joined by a conjunctive accent.

- A word in construct to a following word is generally joined to it by a conjunctive.

- In lists, and similar cases of words in parallel syntactic usage, two words (or phrase) are joined by a conjunctive.

In addition, certain ṭəʿāmīm only follow or precede certain other ṭəʿāmīm, and others require a certain number of words or syllables before the next major ṭəʿāmīm in order to appear. I will present this formal analysis in 1.4, below.

Following Wickes, several scholars, including Spanier, Breuer, Cohen and Dotan, ⁴⁵ have continued his work, but “have only amended the analysis which Wickes provided and have not questioned its basic tenets.” ⁴⁶

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⁴⁵ Cited in Yeivin (1980) See also the bibliography in Yeivin (1980:297-314)
⁴⁶ Aronoff (1985:34)
Yeivin’s book on the Tiberian Masorah\(^{47}\) provides a detailed description of the \(\text{ṭəşimim}\) within the Wickesean framework and provides a great number of examples, but adds no new theoretical insight.

James D. Price has taken Wickes’ research and gone a step further, adding the concept of near and remote subordination.\(^{48}\) His analysis looks at every verse of the HB and seeks to provide a comprehensive “syntax” of the distribution of the \(\text{ṭəşimim}\). Interestingly, Price’s work is focused on the accents their syntax and does instead of being focused on the syntax of Hebrew and the relation of the accents to it. In this way it is not helpful in understanding the underlying causes of the placement of the accents, outside of the framework he develops. It seems to me that Price fails to see the connection between the consistency in the underlying structure of the grammar of BH and the placement of the accents onto that structure. However, he adds a dimension to the analysis that is new, the discussion of near and remote segments, which are in his opinion a better way of explaining the distribution of the \(\text{ṭəşimim}\).

Aronoff\(^{49}\) places Wickes’ analysis of the accents in a linguistic framework and argues that the evidence suggests that the accents “do not represent … a direct codification of a traditional recitation.”\(^{50}\) Aronoff’s analysis shows that the binary division of verses in the HB, first truly brought to light by Wickes, is a “Complete, unlabeled, binary, constituent structure analysis of each verse.”\(^{51}\) Thus Aronoff does what Price

\(^{47}\) Yeivin (1980)  
\(^{48}\) Price (1990:26-29)  
\(^{49}\) Aronoff (1985)  
\(^{50}\) Aronoff (1985:67)  
\(^{51}\) Aronoff (1985:35, 70)
does not, he allows the syntax of TH to be the basis of the system onto which the ṭəʿāmīm were placed. I will go into more details on Aronoff’s analysis and show extensive examples in chapter 4.

Recently, the ṭəʿāmīm have been interpreted in light of modern prosodic representation. The work of Dresher\textsuperscript{52} claims the basis for the system of accentuation was not syntactic, but prosodic. Churchyard\textsuperscript{53} uses a statistical analysis of the ṭəʿāmīm in relation to the \textit{pausal forms} in the HB to discuss the prosodic basis of the ṭəʿāmīm. Both of these studies will be looked at in chapter 5.

Now that we have seen how we got to the state of research today, I will present the individual ṭəʿāmīm.

\textbf{1.4 The ṭəʿāmīm and their Distribution}

There are altogether 27 ṭəʿāmīm used in the Tiberian prose system. 18 of these are disjunctive and 9 are conjunctive. In this section I will present each of the disjunctive ṭəʿāmīm, define its distribution in terms of its relationship to the other disjunctive ṭəʿāmīm and note which of the conjunctive ṭəʿāmīm that may be used before it. First, I will present a list of all of the ṭəʿāmīm, divided into groups of disjunctive and conjunctive ṭəʿāmīm and the according to the 4 levels of the pausal hierarchy; this will be followed by a further discussion of each of the disjunctive ṭəʿāmīm. I will deal with other Masoretic signs, \textit{maqqua}p and gaʿyāʾ, in chapter two as

\textsuperscript{52} Dresher (1994)
\textsuperscript{53} Churchyard (1999)
they relate to the phenomena discussed there.\textsuperscript{54} I have chosen to include this formal presentation here as an aid for the rest of this thesis. While I will argue below that the system is syntactic and prosodic in nature, not simply musical, the relationship between the accents provides the background for that discussion. In addition, I hope to present the data found in Yeivin’s comprehensive treatment\textsuperscript{55} in a more systematic and accessible way.

The pausal hierarchy is also important, as it helps explain the distribution and meaning of the accents. I have followed the older terminology here for the sake of clarity as well as including the more modern D\textsubscript{I} – D\textsubscript{IV} notation. I will provide a more systematic assessment of the accents as they relate to syntax below in chapter 4, here I will attempt to explain the distribution of the accents without focusing on syntax.

Wickes’ original thesis is that each verse is at least governed by an emperor or D\textsubscript{I}– accent. The domain created by the emperor can be divided by another emperor or by a king (D\textsubscript{Ii}). A king domain may be divided by another king domain or by a duke (D\textsubscript{III}). A duke domain may be divided by another duke or by a count (D\textsubscript{IV}). Finally, a count domain may be divided by another count. This division is done in two directions at once: Words that are closely related to one another will usually be connected by conjunctive \textit{ṭāmim} (servants) while at the same time the verse is broken into smaller and smaller pieces until all words have been marked. The following two

\textsuperscript{54} Yeivin (1980:157)  
\textsuperscript{55} Yeivin (1980)
tables show the signs of each of the ṭəšāmīm, their names and which rank they hold in the two different notations.
Figure 1: Disjunctive творами

<table>
<thead>
<tr>
<th>Sign</th>
<th>Name</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>דָבָּֽר׃ silliq/sop pāsūq</td>
<td>D_I  Emperor</td>
<td></td>
</tr>
<tr>
<td>דָבָָֽר so</td>
<td>D_I  Emperor</td>
<td></td>
</tr>
<tr>
<td>דָבָָ֥ר segolṭä</td>
<td>D_II King</td>
<td></td>
</tr>
<tr>
<td>דָבָ֪֜ר šalšelet</td>
<td>D_II King</td>
<td></td>
</tr>
<tr>
<td>דָבָּ֑ר zāqēp qāṭān</td>
<td>D_II King</td>
<td></td>
</tr>
<tr>
<td>דָבָָ֝ר zāqēp gādōl</td>
<td>D_II King</td>
<td></td>
</tr>
<tr>
<td>דָָּ֑ר tūpḥā</td>
<td>D_II King</td>
<td></td>
</tr>
<tr>
<td>דָּ֚ר rōbīa‘</td>
<td>D_III Duke</td>
<td></td>
</tr>
<tr>
<td>דָּ֛ר pašṭā</td>
<td>D_III Duke</td>
<td></td>
</tr>
<tr>
<td>דָּ֜ר zarrqā</td>
<td>D_III Duke</td>
<td></td>
</tr>
<tr>
<td>דָּ֝ר yəṭīb</td>
<td>D_III Duke</td>
<td></td>
</tr>
<tr>
<td>דָּ֑֟ ר tōbīr</td>
<td>D_III Duke</td>
<td></td>
</tr>
<tr>
<td>דְָ֟ ע pāzēr</td>
<td>D_IV Count</td>
<td></td>
</tr>
<tr>
<td>דְָ֖ ע pāzēr gādōl</td>
<td>D_IV Count</td>
<td></td>
</tr>
<tr>
<td>דְָ֥ ע tālīšā gādōlā</td>
<td>D_IV Count</td>
<td></td>
</tr>
<tr>
<td>דֳָ֠ ע gērēš</td>
<td>D_IV Count</td>
<td></td>
</tr>
<tr>
<td>דָָ֣ ע garšāyim</td>
<td>D_IV Count</td>
<td></td>
</tr>
<tr>
<td>דָָ֩ ע logārmēḥ</td>
<td>D_IV Count</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2: Conjunctive творами

<table>
<thead>
<tr>
<th>Sign</th>
<th>Name</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>דָֺּ֖ ר mūnah</td>
<td>Servant</td>
<td></td>
</tr>
<tr>
<td>דָּ֞ ר mōḥuppāk</td>
<td>Servant</td>
<td></td>
</tr>
<tr>
<td>דָָ֖ ר mērāḵā</td>
<td>Servant</td>
<td></td>
</tr>
<tr>
<td>דָָ֘ ר mērāḵā kāpūlā</td>
<td>Servant</td>
<td></td>
</tr>
<tr>
<td>דְָ֟ ע dargā</td>
<td>Servant</td>
<td></td>
</tr>
<tr>
<td>דְָ֟ ע ʿazlā</td>
<td>Servant</td>
<td></td>
</tr>
<tr>
<td>דְָ֥ ע tōlišā qəṭannā</td>
<td>Servant</td>
<td></td>
</tr>
<tr>
<td>דָָ֣ ע galgal</td>
<td>Servant</td>
<td></td>
</tr>
<tr>
<td>דָָ֨ ע maʿayyolā</td>
<td>Servant</td>
<td></td>
</tr>
</tbody>
</table>
I will now look at each \( \text{ṭa‘am} \) in turn and discuss its place in the hierarchy and which accents it relates to. This section is based on Yeivin’s overview.56

1.4.1 **Sillūq**

*Sillūq* is the \( \text{ṭa‘am} \) placed on the last word in a verse, under the stressed syllable. Following the word marked with *sillūq*, there is a *sop pāsūq*, written as 2 dots (\( \cdot \)).

*Sillūq* has the value emperor/D, and is the strongest pausal \( \text{ṭa‘am} \), generally associated with pausal forms.57 The only conjunctive \( \text{ṭa‘am} \) which may precede *sillūq* is *ə* as seen in (1):

1. Genesis 1:1\(^{58}\) : וְאֵ֥ת ה אָֽֽ֖ İ ę ɛ ʻ ə ̀ ʼ ɛ ʂ
   \( \text{wə-} \text{́ːt} \text{̣á-} \text{̣dres} \)  
   ‘and the Earth’

In 5 cases, *sillūq* is supplemented by *mə’ayyelā* on the same word as in (2):

2. Leviticus 21:4 : לְהָֽֽכָֽל׃
   \( lə-\text{́ːhəlló} \)  
   ‘to defile himself’

Being the final \( \text{ṭa‘am} \) in each verse, *sillūq* is said to govern the verse. Most commonly, the unit governed by *sillūq* is divided by ‘\( \text{ṭa‘am} \)’ atnāh. In short verses, ‘\( \text{ṭa‘am} \)’ atnāh can be omitted and the unit is divided by either tīfḥā (3) or zāqēp (4):

56 Yeivin (1980:157-218)
57 For a discussion of pausal forms, cf. section 2.3.
58 English references are taken from NRSV (1989) or are the author’s own translations.
The unit between 'atnāh and sillūq is divided regularly: if the main division immediately precedes the sillūq the accent is tīphā (3 above), which is the only disjunctive that may directly precede sillūq, except in situations where there are no intervening accents between 'atnāh and sillūq:

When the main division is on the second word before sillūq, the division is made by either tīphā (6) or zāqēp. When a zāqēp is used there is always a tīphā before the sillūq (7).

If the main division is more than two words away from sillūq, zāqēp is used (8). If there are several major divisions, zāqēp is repeated, the furthest from sillūq having the greatest pausal value (9).
Genesis 1:4

And God separated the light from the darkness.

Genesis 2:5

Upon the earth, and there was no one to till the ground.

1.4.2 ʿAtnāḥ

ʿAtnāḥ is the only other emperor/D, accent – like sillūq often found in conjunction with pausal forms. It is found in most verses and marks the primary division. It appears, like sillūq, only once per verse. In general ʿatnāḥ takes only one conjunctive accent, mūnah (10).

Genesis 1:3

And God said, “Let there be light”; and there was light.

In certain cases, ʿatnāḥ can be preceded by two mūnahs, generally when preceded by a monosyllabic word (11). Like sillūq, and under the same circumstances, ʿatnāḥ may also take maʾayyalā on the same word (12). There is always a tīḥā preceding ʿatnāḥ, even when a conjunctive accent would be expected (13) except when ʿatnāḥ is the first accent in the verse (14):

Genesis 40:16

That the interpretation was good.
12 Genesis 8:18
way-yēṣē-nōah
‘So Noah went out’

13 Leviticus 19:11
lō tīgōbū
‘You shall not steal’

14 Genesis 35:5
way-yissāʿū
‘As they journeyed’

For the division of the unit between the beginning of the verse and ’atnāḥ, the rules are the same as for the unit between ’atnāḥ and sīlūq, except for one feature: in the unit governed by ’atnāḥ, a distant major division may be marked by segōltā instead of zaqēp (15). segōltā cannot be repeated and cannot follow zaqēp.

15 Genesis 44:1
lē-mōr mallē ’et-’amtōhōt ha-’ānāsām ’ōkel ka-’āsēr yūklīn šo’ēt
‘saying: fill the men’s sacks with food, as much as they can carry’

1.4.3 Segōltā

Segōltā is a king/D₂ accent, and can only mark the first division in a verse. In one case (16) it marks the main verse division, but in all others it marks the main division in the unit governed by ’atnāḥ (17). It cannot, however mark the accent on the first word of a verse. Segōltā be preceded by one or two mūnaḥs (16,18).

16 Ezra 7:13
minnī šām ṭarēm
‘I decree that’
way-bárek ʾotām ʾelōhim way-yómer lā-hém ʾelōhim pórú ʿr-hú u-milʾú ʿet-hā-ʾāres wə-
kibšáḥa
‘God blessed them, and God said to them, “Be fruitful and multiply, and fill the earth and subdue it;’

Isaiah 8:23
la-ʾāšer mūšaq lā-h
‘for those who were in anguish’

Segōltā must be preceded by zarqā, a duke/Di accent. Thus, if segōltā is preceded by only one word, that word is marked with zarqā (19).

way-yómer hā-ʾāḏām
‘Then the man said’

If segōltā is preceded by two or more words with the major division being on the word before segōltā the major division is marked by zarqā (20).

way-yaʿās ʾelōhim ʾet-hā-rāqīaʾ
‘So God made the dome’

If the major break is on the second word before segōltā, the accent it is usually marked by zarqā (21) or alternatively by ṭōbiy with zarqā on the intervening division (22).

bā-ʾāres b-ay-yāmīm hā-hém
‘on the earth in those days’
If the major division is three or more words removed from segolta, the accent is raḥia, followed by zarqa (23). Raḥia may be repeated if necessary but always with a zarqa preceding the segolta (24).

Two raḥia’s cannot be separated by less than 3 words. When two raḥia are required too close together the raḥia that is closest to the segolta is replaced by pašṭa (25).

Pašṭa, however, must be separated from the following zarqa by at least two words, if not, that pašṭa is replaced by a zarqa (26).
1.4.4 Šalšellet

When segolta would mark the accent on the first word of a verse, it is not possible for a zarqa to precede it. In such cases, 7 in total, the segolta is replaced by a šalšellet (27).

27 Genesis 19:16 | יָיִמְמָּהְיוּ הַ בַּ ‘but he lingered’

1.4.5 Zaqēp

Zaqēp, a king/D II accent, is the most common disjunctive accent. Zaqēp qattān and zaqēp gadol share the same pausal value and are differentiated by a vertical line beside the zaqēp sign above the word. 59 Zaqēp can be preceded by one or two conjunctives, always munāh (28). When a zaqēp is preceded by a munāh, the zaqēp qattān is used. When a munāh does not precede the word, a zaqēp gadol is used (29).

28 Genesis 1:4 | יָאַבַּד הָלֹהִים 'and God separated’

29 Jeremiah 31:3 | מֵרָחֹוק ‘from far away’

As for the distribution of accents in a zaqēp clause, if the clause contains two words and the word marked by zaqēp is long, it is preceded by paštā (30), if the word is short it is preceded by a munāh (31).

59 I am grouping here the so-called munāh- zaqēp and metīgah- zaqēp as variants of the zaqēp qattān, but cf. Yeivin (1980:183-186)
And Abraham said, “I swear it.”

And Abram said

In a clause with three or more words, if the major division is on the first word before zāqēp, it is marked by paštā (32).

Then the LORD said to Cain

If the major division is on the second or third word before zāqēp, a paštā, may be used (33) or alternatively a raḥia followed by a paštā (34).

God saw everything that he had made

in the morning, and saddled his donkey

If the major division is four words or more from the zāqēp, it is marked by raḥia followed by a paštā (35).

And God said, “Let the waters under the sky be gathered together into one place’
1.4.6 **Ṭifḥā**

Ṭifḥā is a very common disjunctive accent, often appearing twice in a verse, before ḥānāh and sillūq. It is normally preceded by the conjunctive accent mēroḵā (36) but can also be preceded two: dargā and mēroḵā kafālā (37).

36 Genesis 1:1

boneśi bārāʾ ṣēlōhîm ṭē haš-šāmâyim wa-ṭē haš-ṭâres
‘In the beginning when God created the heavens and the earth’

37 Leviticus 10:1

rāqēr lō šiwâ ṣe-m
‘such as he had not commanded them’

For the distribution of ṭifḥā in ḥānāh and sillūq units, see above 1.4.1 and 1.4.2, respectively. As for the distribution of the disjunctive accents within a ṭifḥā unit, if the major division is on the first word preceding the ṭifḥā, it is marked by tabīr (38). If the major division is on the second word preceding ṭifḥā, it is usually marked by tabīr (39) although raḥiaʾ is also possible, followed by tabīr, especially with long words (40). If the major division is three words or more from the ṭifḥā, it is always marked by raḥiaʾ followed by tabīr (41).

38 Genesis 1:4

wāy-ṭvāʾ ṣēlōhîm ṭē-haš-ṭār ki-tōb
‘And God saw that the light was good’

39 Genesis 3:10

wā-irāʾ ki-ṭerōm ṣēniḵi wā-ṭēhēbē
‘and I was afraid, because I was naked; and I hid myself.’

40 Joshua 9:17

way-yāsīrō ṭaḥ-nē-yāsīrē ṭē way-yāyōhō ṭē-ṭārēhēm b-ay-yōm haš-ṣolīšī
‘So the Israelites set out and reached their cities on the third day.’
31

Genesis 32:1

‘in the morning Laban rose up, and kissed them’

1.4.7 Rabhia

Rabhia is a duke/DIII accent, generally dividing ūfḥā and segoltā units. It may be preceded by up to three conjunctive accents: mūnah if one, mūnah-darga if two, mūnah-darga-mūnah if three (42).

42 Numbers 4:14

‘which are used for the service there’

Four different disjunctive accents may be used to divide the rabhia unit: lagarmēh, gērēš, tališā and pāzēr. When the second word before rabhia is the major division, it is often marked by lagarmēh (43). All four accents, however, may stand in different combinations preceding rabhia and will not be dealt with in detail here.

43 Deuteronomy 14:28

‘Every third year’

1.4.8 Paštā

Paštā is a duke/DIII accent that generally divides segoltā and zāqēp units. It can be preceded by up to six conjunctive accents: if one, mōhuppāk or mērākā. If two, mōhuppāk or mērākā followed by mūnah or ‘azlā. If three, the third from the paštā is tališā qaṭannā, which is always followed by ‘azlā. If four, five or six, the fourth, fifth and sixth from paštā are mūnahs (44).

44 2 Kings 18:14

‘King Hezekiah of Judah sent to the king of Assyria at Lachish, saying, “I have done wrong’
The paṣṭā unit is divided in a very similar way to the raḥi'a unit. The exceptions are as follows. Loğarmeh does not commonly precede paṣṭā. Gērēš is much more common preceding raḥi'a than paṣṭā. Otherwise, pažēr, tašīš and gērēš can divide the unit in various combinations.

1.4.9 Yāṭīb

Yāṭīb has the same value as paṣṭā, and occurs under the same conditions, except that it is only found where the paṣṭā would occur on the first letter of a word and where there are no preceding conjunctive accents (45).

45 Genesis 4:10

qōl dōmē ʾāḥēkā

‘The sound of your brother’s blood’

1.4.10 Zarqā

Zarqā is a duke/DIII accent that can be preceded by up to four conjunctive accents. Mūnah is usually the first and the rules for the second, third and fourth conjunctive accents are the same as those for paṣṭā and yāṭīb, cf. 2.9 above.

The main function of zarqā is to divide the segōltā unit, cf. 2.3 above. Further division of the zarqā unit is based on the same rules as paṣṭā and yāṭīb, cf. 2.9 above.

1.4.11 Ṭabūr

Ṭabūr is a duke/DIII accent that may be preceded by up to four conjunctive accents: dargā or mērōkā is used if there is only one accent. The second, third and fourth preceding conjunctive accents follow the same rules as those for paṣṭā, cf. 2.9 above.

Ṭabūr is used to mark a division of the tifḥā unit (46), cf. 2.7 above.

46 Genesis 1:4

way-yār Ḩēlōhêm ʾet-hā-ʾiš ki-tōb

‘And God saw that the light was good’
1.4.12 **Pāzēr**

**Pāzēr** is a common *count*/*D* accent that may have up to 6 conjunctive accents preceding it, all of them *mūnahs* (47).

\[\text{ū-ḇ-hag̱īa` tōr-`ēstēr bāt-`ēḇiḥāyīl dōḏ mārḏāḵāy} \]

‘When the turn came for Esther daughter of Abihail the uncle of Mordecai’

1.4.13 **Pāzēr gādōl**

**Pāzēr gādōl** is an uncommon *count*/*D* accent that occurs only 16 times in the Bible, never with fewer than 2 conjunctive accents preceding it. The first conjunctive accent is *galgal* and the rest are *mūnahs* (48).

\[\text{ū-bōnē tōrīn wa-ḏīkrīn wa-`immārīn la-`ālāwān le`ēlāh šmāyyā} \]

‘young bulls, rams, or sheep for burnt offerings to the God of heaven’

1.4.14 **Tēlīšā Gōdōšā**

**Tēlīšā** is a *count*/*D* accent that may be preceded by up to 5 conjunctive accents, all *mūnahs* (49).

\[\text{wə-`al-han-nāḥal ya`ālē `al-ṣaḥāgō miz-zē ū-miz-zē kāl-`ēṣ-ma`ākāl} \]

‘On the banks, on both sides of the river, there will grow all kinds of trees for food.’

Tēlīšā divides units governed by *revia*, *pašṭā*, *tōbīr* and *zarqā*.

1.4.15 **Gērēš**

**Gērēš** is a *count* accent that occurs only when it is marked on a word that has penultimate stress or when it is preceded by *ʿazlā*. It takes up to two conjunctive
accents. The rules for the marking of the conjunctive accents are the same as for the second accents preceding pašṭā, təḥr and zarqā.

Gēreš divides the units governed by revia, pašṭā, təḥr and zarqā.

1.4.16 Garšáym

Whereas the gēreš is marked on words with penultimate stress and when preceded by ʿazlā, garšáym is used when there is word-final stress or when it is not preceded by a conjunctive accent. Otherwise the rules for distribution are the same.

1.4.17 Ləğarmēh

Ləğarmēh is a count accent that can be preceded by up to two conjunctive accents. The first is mērākā and the second is mūnāh, mērākā or ʿazlā.

Ləğarmēh usually serves to divide the rōbiʿ unit (50), but can also divide units governed by gēreš, pašṭā, təḥr and pāzer.

50 Genesis 7:2

מִכּ ַ֣ל׀ הַבְּהֵמַָ֣ה הַטְהורָׇ֗ה

‘all clean animals’
2 The ṭəʾāmīm and the Tiberian Hebrew Word

2.1 Introduction

I will begin the discussion of the system of the Masoretic ṭəʾāmīm by looking at word-level issues. The ṭəʾāmīm are placed on words in a specific way which aids the reader and marks grammatically important information. I will be looking at two ways the ṭəʾāmīm shed light on word-level issues: first in relation to primary and secondary stress in the TH word and second in relation to vowel length.\(^{60}\) Because of the complexity of the terminology, I will begin by discussing the concept of a “word” in TH in 2.2.1. In 2.1.2 I will briefly discuss modern theories of how word-stress is applied in TH. This sets the theoretical background for the discussion of how the system of ṭəʾāmīm is used in relation to stress in 2.1.3. Section 2.2.1 looks briefly at the question of phonemic vowel quality and vowel quantity in TH. 2.2.2 looks at the way the ṭəʾāmīm relate to the situation of long and short vowels in TH. In 2.3 I will reflect on what these findings may mean for the understanding of the ṭəʾāmīm thus far.

\(^{60}\) Vowel length is dealt with during the discussion of the Hebrew word because there is no way to evaluate the place of the accents without words. The question of vowel length in Biblical and Tiberian Hebrew is influenced by many other factors than simply the accents, but I will here deal with the material relevant to the discussion at hand.
2.1.1 The Tiberian Hebrew Word

The term “word” carries different meanings. The most important distinction is between the *grammatical word* and the *phonological word*.\(^6^1\) A grammatical word is defined as one of the “different forms of a single word that occur depending on the syntactic context.”\(^6^2\) The phonological word, however, is a unit that may contain more than one morphological word, it is “a string of sounds that behaves as a unit for certain kinds of phonological processes, especially stress or accent.”\(^6^3\) In the TH orthography, words that are phonologically dependent on other words are either connected directly, as is the case with *clitics* or they are connected by a *maqqep*.

Clitics

The term *clitic*\(^6^4\) refers to a category of words that do not fit entirely into the categories of affixes or independent words.\(^6^5\) Clitics are by definition attached to another word (the *host*) and are not able to receive independent stress. In this aspect clitics differ from (free) phonological words. The clitic and the host together comprise a phonological word. This fact makes it impossible to move the clitic to a different syntactic position independently of a host in order to provide emphasis, for example by clefting or topicalization. Clitics are thus prosodically dependent on a

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\(^6^1\) Aronoff and Fudeman (2005:36-39)
\(^6^2\) Aronoff and Fudeman (2005:36)
\(^6^3\) Aronoff and Fudeman (2005:39)
\(^6^4\) This topic is further complicated by the lack of uniform terminology among Hebraists when it comes to what I here term clitics and affixes. Traditionally, Hebraists have used the term *particles* to refer to clitics. This discussion is meant to help clarify the fact that words that otherwise are not clitics are orthographically cliticized to a host word in נ.
\(^6^5\) This discussion is based on Haspelmath (2002:148-154)
free word form. The same can be said of affixes, which cannot be separated from the free form to which they are attached. There are several theoretical differences between clitics and affixes, the most important being that affixes are generally abstract in meaning whereas clitics are considered word forms. Also, clitics will always be found further from the base than affixes. Both groups are bound prosodically to a host or base, but affixes cannot be separated from their base and generally have strict placement rules. The discussion here is on TH clitics and in that connection I will only emphasize that in מ, it seems that clitics are able to appear as independent words when the phonological and prosodic restraints of the text require so. Dresher outlines three broad reasons for cliticization: small words, simplification of phrasing and clash avoidance. These categories broadly cover phonotactic rules which require the movement of stress in closely related words and/or clitics. There is a variety of circumstances under which a word may be cliticized, but with certain words, for example the monosyllabic prepositions, cliticization is obligatory. To avoid cliticizing, however, a longer full form may be used (51), though these are rarely found in מ and are often cliticized to a host.

51 כְּמַ֣ו תַנׇ֔וּר
kamó tannúr
‘like an oven’

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66 Haspelmath (2002:155)
67 Dresher (2009)
68 Cf. Waltke and O’Connor (1990:189 = §111.181.182d) It is most likely that the “long form” prepositions are older as they are found in archaic texts. Through a process of grammaticalization they were cliticized and subsequently shortened.
I disagree with Dresher on the analysis of the clitics in that I believe there are (at least) two different types of clitics in TH. The first type is words which must be cliticized, like that of the monosyllabic prepositions. These forms cannot carry their own accent and thus are always cliticized. The second group of clitics is comprised of words which are long enough to carry their own stress, both form and function words, which may or may not be cliticized depending on the same constraints as the first group. The difference here is that the first group is made up of default clitics which may be reanalyzed in the prosodic structure as free forms. The second group is comprised of free forms which may be cliticized in order to aid the prosodic structure.

Orthographically, the monosyllabic prepositions, the definite article and the interrogative particle can be attached directly to the host. All other clitics, including the full form prepositions, must be attached by other means, namely the diacritic sign maqqep.

**Maqqep**

The *maqqep* is used orthographically to represent the cliticization of words, causing two grammatical words to be read as a single phonological unit. In fact, up to 4 words may be bound together by the *maqqep*. The form of the *maqqep* in the MT is a raised hyphen:

69 The use of full form prepositions is quite limited and the constraints are not well understood. Their use may be stylistic and prosodic but may also be a remnant of an earlier stage of Hebrew.

70 Yeivin (1980)
The *maqqeṣ* is a part of the accentual system, in that it was added at the same time as the *taʿāmim*. When *maqqeṣ* is marked, the first word(s) is(are) considered clitics and the unit is to be read as a single unit for the purposes of stress. Thus in example 1 above, the main stress is on the penultimate syllable of the entire phonological word. There is not yet a good enough understanding of the use of *maqqeṣ* to be able to entirely predict its placement. On the other hand, the placement of the *taʿāmim* in relation to *maqqeṣ* is understood. The *maqqeṣ* creates a single phonological unit which is accented accordingly. That is to say that main stress is not found on the proclitic element, but on the host. An example of this is the phrase consisting of *ki* and *yārū* found in two different contexts:

52 Exodus 22:8

‘In any case of a crime’

53 Exodus 1:21

‘For they feared’

54 2 Kings 25:26

‘For they feared’
In (38) the phrase is written with a *maqpeg* creating a single phonological unit while in (39) it is written without the *maqpeg*. Thus, in (38) we see two morphological words but only one phonological word whereas in (39) we find two morphological and phonological words. This is seen in the fact that both words bear stress in (39) while (38) has a single stress for the unit as a whole. Note that the meaning is identical, so there is no lexical change.

With regards to the discussion at hand, that of the system of *ṭəʿāmim*, this is quite important. The system of *ṭəʿāmim* in the MT is based not on the grammatical word, but on the phonological word. That is to say that when the Masoretic phonological constraints require several morphological words to be seen as a single phonological word, the result is accented as a single unit. Notice that in the first example above is word stress is marked with a *mēroḵā* under the ‘*ašp* and secondary stress is marked by *gaʾyoṭ* under the *yōd* and *kāp*. In the second example, on the other hand, main stress is marked with a *mēroḵā* under the *kāp* as well as a *ṭiḥa* under the ‘*ašp*. I will return to the question of why identical phrases are accented differently later, but for now the important point is that the *ṭəʿāmim* clearly are placed in relation to the phonological word, not the grammatical word.

### 2.2 Primary and Secondary Stress in TH

Word stress is the term used to describe the prominence a syllable in a word or phrase and plays an integral role in the grammar of some languages. A syllable may be prominent in volume, being louder than other syllables, in duration, being held longer than similar syllables in non-prominent context or may be pronounced more
clearly or forcefully. In addition, prominent syllables are often the point where change in pitch (accent) is situated in a word. In TH (and for that matter BH) stress is contrastive, meaning that two words that are otherwise identical can only be identified by where the primary stress is placed. A classic example is:

55 Genesis 11:5 ויֶנָּה
bănû
‘they built’
56 Genesis 37:8 וּבָנָה
bâ-nû
‘in us’

There is no simple rule stating where primary stress is always on certain syllable in TH. Stress is often on the ultimate syllable and sometimes on the penultimate. Due to complicated morpho-phonological constraints in combination with phonological changes over time, word stress can be found on different syllables. Diachronically, this is the result of several sound changes during the development of Hebrew. Synchronically, it is possible to formulate a rule that helps identify the stressed syllable in a word:

Main stress in Hebrew is assigned to the word-final syllable if the word is consonant-final at the stage of the phonological derivation when main-stress assignment applies, but is assigned to the penultimate syllable if the word ends in an open (CVV) syllable at the relevant stage of the derivation.

Because the “relevant stage of the derivation” that Churchyard proposes is not the final stage of the derivational process, there are cases of what he calls “post-main-

71 Spencer (1996:241)
72 Blau (2010:143)
73 For a thorough overview cf. Blau (2010:143-155)
74 Churchyard (1999:11)
stress-assignment phonological processes.” In essence, this means certain processes, such as processes causing stress-shift and monophthongization of certain suffixes among other factors, cause opacity in main-stress assignment.

2.2.1 Word Stress and the ṭəʿāmīm

The ṭəʿāmīm are usually placed in such a way that they mark the main stress in the phonological word. This is one of the main functions of the ṭəʿāmīm and as seen in the discussion of TH word stress, is important in that it can differentiate between two otherwise identical words. In other cases, the position of the accent serves readers who are otherwise unfamiliar with the stress patterns of TH to be able to correctly place stress. In example 1 above (repeated here), contrastive stress is marked by the ṭəʿāmīm. The Genesis 11:5 example is marked with tīphāḇ on the second syllable while the Genesis 37:8 example is marked with ṣātnāḥ on the first syllable:

57 Genesis 11:5 עֲב

bānū ↑

‘they built’

58 Genesis 37:8 עֲב

bā- nū ↑

‘in us’

Another situation where the placement of word stress is important is the placement of the ṭəʿāmīm on the suffix-conjugation verb forms. The suffix-conjugation is generally considered to be perfective, denoting a completed action. In the HB, this

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75 Churchyard (1999:13)
most often denotes an event in the past. When the conjunction waw- is prefixed to a
verb in the suffix-conjugation, the results can be interpreted in two different ways:78

59 1 Samuel 17:35
   וְהִלְתָּלְתִי מֵפִי
   ‘And I rescued (the sheep) from its mouth.’

60 Exodus 6:6
   וְהִלְתָּלָלְתִי יָרֵכְם מִן-עֲדָהַתָּם
   ‘And I will rescue you from being slaves to them’

In the 1 Samuel text the accent is on the penultimate syllable of the verb and the
verb denotes the perfective aspect and here an event completed in the past. The
passage from Exodus, however, shows the accent on the ultimate syllable and the
verb now denotes an event in the future. This is not the place to enter into a
discussion on the tenses and aspects of the Hebrew verb, but it is important to note
that the ṭə́ā̂mīm are used to mark the location of stress on the ultimate syllable of
waw + suffix-conjugation forms in the first person singular and second person
masculine singular.79

There is normally80 no difference at the word level as it concerns which the ṭə́ā̂mīm
is used. The choice is rather related to the other levels of analysis that will be seen
later in this thesis. There is thus no difference as it concerns word stress between a
word marked with, for example, tiḥṭā and one marked with zāgēp qāṭān:

76 I use the terms suffix-conjugation and waw + suffix-conjugation to avoid labels which are not
relevant to this discussion.
78 This example is taken from Waltke and O’Connor (1990:520)
79 Other inflectional forms do not show that distinction because their main stress already falls on the
ultimate syllable.
80 However, for exceptions, see below §2.3 on vowel length.
Secondary stress in a word can also be represented in the Tiberian tradition. The 
\textit{ga'yă} symbol is a vertical line placed below a syllable and can show secondary stress 
or the lengthening of a non-main-stress vowel.\textsuperscript{81} This can occur within the same 
word, as in example 6 or on a clitic as in examples 7 and 8:

\begin{itemize}
\item \textbf{Genesis 1:1}\n\textit{haš-šamáyim} \textit{heaven’}
\item \textbf{Genesis 1:4}\n\textit{haš-šamáyim} \textit{heaven’}
\end{itemize}

\begin{itemize}
\item \textbf{Genesis 37:9}\n\textit{mishāhawīm} \textit{bowing down’}
\item \textbf{1 Samuel 9:20}\n\textit{ētt-libbēkā} \textit{your heart’}
\item \textbf{1 Chronicles 5:10}\n\textit{‘al-kāl-pānē} \textit{on the whole surface’}
\end{itemize}

The importance of marking the stressed syllable is also seen in some of the 
postpositive and prepositive accents mentioned in §1.4 which are “doubled” in many 
manuscripts, being written above the stressed syllable as well as the initial or final 
syllable.\textsuperscript{82} This is seen in the following example from Exodus 19:23 where the word 
is marked with postpositive \textit{paštā} which is repeated over the stressed (first) syllable:

\begin{itemize}
\item \textbf{Exodus 19:23}\n\textit{mōšēh‘ām} \textit{your messengers’}
\end{itemize}

\textsuperscript{81} Khan (1987:33)
\textsuperscript{82} Cf. Yeivin (1980:194-195)
The placement of the tryside is thus a guide to the placement of word stress. This provided readers with a tool for pronouncing the words correctly, maintaining the contrastive nature of stress and aiding in the interpretation of some verb forms.

Word stress in TB is closely related to another linguistic phenomenon, vowel length, to which I will now turn.

2.3 Vowel Length in TH

The issue of vowel length in TH is complex and a consensus among scholars has been difficult to reach. It is clear that TH is not a direct representation of the situation of BH phonology. As discussed in §1.2.4, TH has a different vowel system than that of BH. Whereas the PH vowel system almost certainly consisted of 3 vowel qualities and two vowel quantities:  (IPA: /i,iː,a,aː,u,uː/) the system in TH is comprised of 7 vowel qualities:  (IPA: /i,e,e,a,æ,o,u/). In BH, vowel length is phonemic, but in marking of  seems to only show non-phonemic differences in vowel length, though there are examples where vowel length is necessary to distinguish forms in TH. There are two related factors that influence the length of vowels in TH, syllable structure and word stress. In general, long vowels are either found in stressed syllables or in unstressed open syllables. Short

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83 Rendsburg (1997:76-79)
84 Khan (1997:91)
vowels are found in unstressed closed syllables. Said differently, open syllables always contain long vowels while closed syllables are long when stressed and short when not stressed. Thus we can speak of quantitative differences in the following forms:

67 Genesis 21:1 פָּקֵַ֥ד $pāqād$ ‘he noted’
68 Jeremiah 23:2 פְּקַדְתֵֶ֖ם $pēqaqtēm$ ‘you attended to…’

In addition to this, in TH there is a phenomenon of lengthening of certain words when they precede a pause or break in the text. The traditional terms for the different forms in Hebrew Grammar are *contextual forms* referring to the standard forms and *pausal forms* referring to the lengthened forms. There are several different changes that occur in pausal forms, retraction of primary stress, vowel lengthening and vowel change among them. Thus, when the position in the verse demands it, the realization is the pausal form, not the contextual form. In example 12 the first form is contextual and the second is pausal:

69 Deuteronomy 33:9 שָפַרְעִ $šāmrū$ ‘They watched over’

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86 Khan (1997:92) cf. Khan (1987:33) There are exceptions to these generalities but they do not pertain to the discussion at hand.
87 The transliteration used for this example does not follow the EHLL standard in order to show the length of the patah in the two words.
88 Joüon and Muraoka (2006:106)
89 Blau (2010:139)
Jeremiah 16:11

šāmārū
‘They watched over’

2.3.1 The ṭə́āmīm and Vowel Length

The ṭə́āmīm provide the primary means of discerning vowel length in the HB. The connection between word stress and vowel length is clear. The placement of the ṭə́āmīm indicates which syllable bears primary stress and by doing so, which closed syllables contain long vowels. In addition to indication primary stress, a gaʿyā̀ may be placed on another syllable earlier in the word to indicate secondary stress. Though it was more likely that secondary stress be placed on an open syllable, it was possible for secondary stress to be assigned to a closed syllable:

Exodus 1:10

nîḥakkāmā̀
‘let us deal shrewdly’

In the HB, contextual forms may occur when the word is marked with any of the accents. When, however, words that have undergone the lengthening described above are generally pointed with a strong disjunctive ṭaʿam, typically sillūq or ʾatnāh, although there are pausal forms marked with some of the lesser ṭə́āmīm. As noted above, word stress is determined based on a variety of factors, and the ṭə́āmīm are used to note where stress is placed. Thus, the forms in example 12, repeated here, are distinguished by the fact that the first form is marked with a paṣṭā̀, which is has

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90 Gesenius, Kautzsch and Cowley (1963:96-97)
a weak pausal value, while the second form is marked with a sillūq which has the strongest pausal value.

72 Deuteronomy 33:9
šāmrū
‘They watched over’

73 Jeremiah 16:11
šāmarū
‘They watched over’

2.4 Conclusion

This discussion of word level issues related to the ṭəʿāmīm has served to show that the ṭəʿāmīm were placed with care to indicate specific features which are not directly apparent to non-native speakers of BH. Working a several hundred years after the language of the HB ceased to be spoken in daily life, the Masoretes placed the ṭəʿāmīm on words specifically to draw attention to the stressed syllable. This served two purposes. The first was to indicate word stress which, being phonemic, was important for the correct interpretation of the text. The second purpose was to distinguish the non-phonemic length of vowels. The use of the accents to indicate vowel length would aid the reader in rendering a correct recitation of the text. In the next chapter, I will move from the word level to the phrase level, discussing how the conjunctive accents are used to identify closely related words.
3 The ṭə́ʾāmīm and the Tiberian Hebrew Phrase

3.1 Introduction

Now that I have shown that the ṭə́ʾāmīm are used at the word level to mark primary (and in many cases secondary) stress and mark non-phonemic vowel length, I will move onto the next largest linguistic unit, the phrase. Phrases are units larger than words but smaller than clauses.91 The ṭə́ʾāmīm will be shown to be placed according to a specific understanding of the grammar of the phrase for two reasons. The first reason is the way the disjunctive ṭə́ʾāmīm divide the verse into its constituent parts, which will be touched on here, but discussed thoroughly in the next chapter. The second reason is because the division of the verse into parts is not limited to dividers, the disjunctive ṭə́ʾāmīm, but also connectors, the conjunctive ṭə́ʾāmīm. The placement of the conjunctive ṭə́ʾāmīm serves the purpose of connecting phonological words which then make up constituents in phrases.

I will begin by looking at what defines a phrase and a constituent (3.1.1) in order to establish the grammatical framework I am working with. I will also present the notational device that I will use here and onward in this thesis to graphically present the constituents of phrases, clauses and verses. Then I will look at the ṭə́ʾāmīm in

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91 In the tradition of Generative Linguistics this is not always the case, in that within the X-bar theory a word may project to the other levels of the phrase. I will not follow the generative tradition here as it overly complicates the situation. The Masoretes were not building a theory of syntax with projections and X-bars, so will work with surface level constituents only.
relation to the major types of phrases in TH, the Noun Phrase (3.2) and the Verb Phrase (3.3).

3.1.1 Phrases and Constituents

In order to continue the analysis of the ṭəˈämīm as they relate to the grammar of TH I want to define some basic concepts. In chapter 2, I defined words as the smallest unit which can take word stress. Words can also be combined with other words and operate within the clause connected to those words. These larger units are phrases. I will here define a phrase as “a group of words which form a constituent”\(^92\) where a constituent is defined as a word or “group of words which functions as a unit, especially with respect to word order.”\(^93\)

Without going into great detail, it is important to understand the difference between the word, the constituent and the phrase. In this thesis I have used the term word to mean the phonological word. A single word can make up a constituent in a phrase, and a phrase can make up a constituent in a clause. Thus, words and phrases are fixed terms referring to definable categories whereas a constituent is defined based on the nearest hierarchical level. Let us imagine words w and x make up phrase b, and words y and z make up phrase c. Phrases b and c make up a clause, clause a:

\(^92\) Kroeger (2005:35)
\(^93\) Kroeger (2005:343)
Thus we can say that words \( w \) and \( x \) are constituents of phrase \( b \), and words \( y \) and \( z \) are constituents of phrase \( c \). Further, phrases \( b \) and \( c \) are constituents of clause \( a \).

Clause \( a \) could in reality also be a constituent in a larger unit and so on. Each letter here \((a, b, c, w, x, y, z)\) represents a node. In the notation, each node represents a metalinguistic category and can be replaced with a symbol as in figure 4:

Phrases can be grouped together based on shared features of the head of the phrase. The head is the word which gives grammatical properties to the phrase and is the obligatory element in the phrase.\(^{94}\) That is why the phrases in (41) are NPs – the noun (N) is the head of the phrase. This representation is important, and plays a major role in the next chapter, on clause level issues and the \( \text{ṭ} \text{āmīm} \).

In the languages of the world, there are many different ways to form phrases, so I will not attempt to give a full overview here. Nor is it my intent to promote a certain analytical model of grammar. This manner of representing the constituents

\(^{94}\) Kroeger (2005:35-36)
of the phrase and the clause is a valid method today, but that is not why I take it in use. I use it for two reasons. First, it provides an easily interpreted visual representation of the structure of grammatical units and second, it is remarkably similar to the way in which the Masoretes marked the text of the HB over a thousand years ago. It is important to note that in TH certain constituents which are separate words in languages like English can be clitics or not expressed at all in TH. What I am looking at here is the way in which the smallest constituents of the Tiberian accentuation system, which is the phonological word, are marked in relation to one another. In this chapter I will only discuss at the way words are combined with the ṭəʾāmîm to show the constituents of phrases. In the next chapter I will look further at clause structure. Here, I will look at the two most important types of phrases, the Noun Phrase (NP) and the Verb Phrase (VP) in turn. First, a phonological feature connected to phrasing needs to be addressed, the spirantization of consonants over word boundaries.

3.1.2 Sandhi spirantization in conjunct phrases

One interesting aspect of the conjunctive accents is their relation to the realization of a cross word-boundary Sandhi phonological feature. When a word beginning with a b, g, d, k, p or t follows a word ending in a vowel, spirantization\(^95\) can occur. In ḫ, when the first word is marked by a conjunctive ṭaʾām spirantization occurs (76).

\(^{95}\)Spirantization is the traditional Hebraist term for the process whereby certain stops become fricatives when following a vowel. cf. Blau (2010:78), Yeivin (1980:287).
However, when the first word is marked with a disjunctive ṭaʿam, spirantization does not occur (77).

76 Genesis 1:2

hāytā tōhū

‘it was empty’

77 Exodus 15:14

yōšé pəlāšēt

‘the inhabitants of Palestine’

### 3.2 Noun Phrases

NPs in TH have two basic forms, one for the so-called *construct* phrases\(^{96}\) and one for all others.\(^{97}\) Non-construct NPs have a left-branching structure and the order of the constituents is:\(^{98}\) *Numeral – Noun – Genitive Phrase – Adjective Phrase – Determiner.*

A simple NP with only a noun and a demonstrative is seen in (78), while a more complex NP with an adjective is seen in (79).\(^{99}\)

78 Leviticus 23:30

\[ hay-yōm, haz-ze\]

‘This day’

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\(^{96}\) For an overview of the so-called construct state in BH cf. Waltke and O’Connor (1990:138-156)

\(^{97}\) This excludes relative clauses and numerals, cf. Aronoff (1985:42-43)

\(^{98}\) Aronoff (1985:42)

\(^{99}\) Aronoff (1985:43) The adjective here could be represented as a AdjP with its own level of analysis but I have chosen to reduce the levels for the sake of clarity
The constituency trees above are not only a key to the grammar of the NP, but they also provide the schema by which the NP is accented. In (78), the first word, a noun *hay-yōm*, is marked with a conjunctive (level 5) *ṭaʿam, mūnāḥ*. The conjunctive *ṭaʿam* shows the close relation between the two elements. The demonstrative then closes the NP and is marked with a stronger (level 1) disjunctive.

When we look at (79), where an adjective is found between the noun and the demonstrative, the accentuation is again the same as the structure. The first word, *has-sāʿar* is marked with a conjunctive *dargā*, showing the connection between it and the adjective which follows. The second word, *hag-gādol* is then marked with a disjunctive *ṭābir*, separating *has-sāʿar hag-gādol* from the following word(s) and making it a constituent. This is a case in point of the fact that closely related words are bound together by conjunctive *ṭāʿāmīm*. Based on this analysis, we can assume that where there are no intervening or otherwise intrusive elements, nouns will be marked with a conjunctive accent when occurring before an attributive adjective.

The main NP is closed by the demonstrative which is marked with a strong (level 2) disjunctive, which shows that it is superordinate to the disjunctive in the lower NP. This is an important feature in the phrase structure of the *ṭāʿāmīm*. When several
phrases combine within one larger phrase, the disjunctives will appear in the order, from lowest ranking (4) toward highest ranking (1).\textsuperscript{100} It is also possible for a rank to repeat itself within the phrase.

### 3.2.1 Construct Phrases

One area of Hebrew grammar that differs from this analysis is the so-called construct phrase. In Hebrew grammar, they are traditionally named \textit{smikut} from the verb meaning “to support.” A noun not in the construct state is considered to be in the \textit{absolute state}.\textsuperscript{101} A construct phrase is made up of a head and at least one other noun, its genitive. There are two interesting points from a grammatical perspective. The first is the fact that it is the head that undergoes morpho-phonological changes in the construct phrase, not the genitive.\textsuperscript{102} The other point is related to my representations here, construct phrases are right-branching, in opposition to the other types of NPs. Because a construct phrase may theoretically include any number of constituents, these right-branching phrases within the left-branching NP structure can be quite large. (80) shows a simple construct phrase while (81)\textsuperscript{103} shows a more complex embedded structure.

\textsuperscript{100} This is also the case in the analysis of the clause, cf. chapter 4, below.

\textsuperscript{101} Some scholars operate with other states such as the \textit{pronominal state} or the \textit{postconstruct state}. I will not include these matters here. For the pronominal state cf. Blau (2010:265) And for the postconstruct cf. Merwe, Naudé and Kroeze (1999:191-193)

\textsuperscript{102} cf. Joüon and Muraoka (2006:275-277)

\textsuperscript{103} Aronoff (1985:45)
80 Genesis 28:22

\[ \text{בֵַּ֣ית א לֹהִָּ֑ים} \]

‘The house of God’

81 Genesis 47:9

\[ \text{יְמֵיֶּ֙שָּנֵי חַיֵַ֣י א בַּּ֖י} \]

‘The days of the years of the lives of my fathers’

The accentuation here is important. In (80), we find the head marked with a conjunctive \(\text{ṭaʿam}\) connecting it to the genitive. In (81), the head is marked with a disjunctive (level 3) \(\text{ṭaʿam}\), and so is the first genitive. The next element is marked with a conjunctive \(\text{ṭaʿam}\) before the final genitive element. This creates the right-branching tree seen above, where the head is separated first, then the first genitive and so on. This is the norm for embedded genitive phrases.

In some cases the head is connected to the genitive by a \(\text{maqqep}\), especially if the head is monosyllabic and closely related to the genitive, as in (82). In such cases, discussed in chapter 2, the head is considered a clitic and is cliticized to the (first) genitive. The distribution of the \(\text{maqqep}\) is not well enough understood to give rules, but the accentuation of the phrase on the phonological word, not on the would-be constituents.
82 Genesis 2:9

כָּל־עֵץ

‘every tree’

When a constituent of a construct NP phrase is modified, the modifier must follow the entire phrase. Adjectives and demonstratives must agree with the noun which they modify.\(^\text{104}\) This means that there are two possible structures for the modified construct NP.\(^\text{105}\)

83 Deuteronomy 28:61

בְּסֵפֶר הַתּוֹרָה הַזָּאת

\[b\text{-}סֶפֶר_{2} \text{hat-tôr}_{5} \text{haz-zôt}_{1}\]

‘in the book of this Torah’

84 Deuteronomy 29:20

בְּסֵפֶר הַתּוֹרָה הַזָּה׃

\[b\text{-}סֶפֶר_{5} \text{hat-tôr}_{3} \text{haz-zê}_{1}\]

‘in this book of the Torah’

The accentuation here follows that analysis as expected. In (83), \(b\text{-}סֶפֶר\) is marked with a level 2 disjunctive while \(\text{hat-tôr}\) is connected to the modifier, \(\text{haz-zôt}\), with a conjunctive. The modifier here agrees with \(\text{hat-tôr}\). In (84), however, the modifier agrees with \(b\text{-}סֶפֶר\). Here, \(b\text{-}סֶפֶר\) is marked with a conjunctive while \(\text{hat-tôr}\) is separated from the modifier by a level 2 disjunctive. Note that in this example the

\(^{104}\) Waltke and O’Connor (1990:258-259)

\(^{105}\) Aronoff (1985:46)
consonant text shows that the modifier agrees with a different constituent of the
construct phrase in the two examples. This shows that the accentuation reflects the
understanding of the syntax of the phrase here, and is not an invention of the
Masoretes.

The analysis of the genitive NP is also important for the discussion of the ʿṭəʿāmīm
because when head of the genitive NP is itself a construct phrase, there is a different
analysis, as in (85).\textsuperscript{106}

\begin{align*}
\text{85} & \quad \text{Isaiah 28:1} \\
\text{ʿatārēt gēʿūt} & \quad \text{šikkořē ṭēpāyīm} \\
\end{align*}

‘The garland of pride of the drunkards of Ephraim.’

The difference between the structure in (85) and that of (81) is an important one.
Both phrases are made up of four nouns, three in the construct state with the final
noun in the absolute state. This is important for the understanding of the motivation
for the placement and distribution of the ʿṭəʿāmīm:

\begin{quote}
The mere existence of such examples, however, is good evidence for the position that
the essential purpose of the Masoretic accents was syntactic, rather than musical-since such
differences in accent make little sense unless we assume them to have been motivated by a
desire to bring out the proper relationships among the words, i.e. the syntax.\textsuperscript{107}
\end{quote}

\textsuperscript{106} Aronoff (1985:45)
\textsuperscript{107} Aronoff (1985:46)


## 3.2.2 Nominal Clauses

Before moving on to Verb Phrases there is one more type of nominal construction that needs to be dealt with, the nominal clause. A nominal (or verbless) clause is a clause in which the predicate is noun, or acts as a nominal. Nominal clauses normally have the subject first, followed by the predicate, but there is a great deal of variation and the phenomena is not completely understood. It is not surprising, then that nominal clauses are not marked in a consistent manner by the $\text{ṭəâmīm}$. In some cases, however, a disjunctive $\text{ṭə'am}$ on the initial subject can serve to distinguish a nominal clause from an NP consisting of a noun and an attributive adjective as in (86).

### 86 Deutonomy 26:5

\[ אֶרֶם יָאַבְד אָבָי \]

‘An Aramean was seeking to destroy my father’

## 3.3 Verb Phrases

The marking of VPs is somewhat different than that of NPs in that the VP may be modified in a number of ways, creating a more complex phrase. The rules which govern this will be looked at in the next chapter along with more complex VPs and

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109 Aronoff (1985:41-42)
110 Groom (2003:25)
clauses. The normal structure of a VP in TH is VS(O). In TH, finite verbs are marked for aspect/tense/mood, person, gender and number. These markers are part of a complex system of affixing and non-concatenative morphology that needs not be examined in detail here. The S can also be fronted or topicalized to the beginning of the phrase creating a SV(O) structure. This is also the case for the subject pronouns, which are not obligatory. Here, in 3.3.1 I will look at the normal accentuation of VS and VSO and in the 3.3.2 I will look at simple topicalized SV structure.

3.3.1 VS Phrases

The most common VP structure in HB narratives is the VS(O). The structure is as in (87) (VS) and (88) (VSO):

87 Genesis 50:26

\[\text{way-ŷmaṭ₂ ŷosep₂}\]

‘Joseph died’

111 Waltke and O'Connor (1990:336)
112 Merwe, Naudé and Kroeze (1999:67-68)
113 The most common verb form in BH narratives has the form wayyiqtol, and can be called the waw + prefix-conjugation. The waw, which normally is the combining conjunction and, is not necessarily to be analyzed as a true conjunction here, but likely as a grammaticalized element which marks the form as being past tense (preterite).
(87) shows the typical relationship between the V and S where they are connected by a conjunctive accent (mūnah) on the verb. In (88) this is also the case. The V way-yištōm is marked with a conjunctive, connecting it to the S, ‘ēšāw. The VS phrase is marked with a level 3 disjunctive (paštā), separating it from the O, ‘et-yaʾaqōb. The whole VSO phrase is marked with a level 2 disjunctive, zāqēḇ.

### 3.3.2 Topicalized Phrases

Constituents may be fronted and precede the verb of a VP, in many cases these constituents are topicalized. Here I will look at the basic constituents of the VP that may be topicalized, the S and O. Topicalization in the clause and sentence will be dealt with in chapter 4. Subject pronouns normally occur before the verb when they are used, and can be considered topicalized or not. This is evident in the placement of the tāʾāmīm. Here I will look at four different examples of topicalized VPs – (89) shows a fronted proper noun in SVO, (90) shows a topicalized pronoun SV, (91) a non-topicalized fronted pronoun SV and (92) shows a topicalized object in an OVS:

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115 Wickes (1887:45) cf. Aronoff (1985:41)
Genesis 6:8

In this example, the S, *wə-nōaḥ*, is topicalized and marked with a level 2 disjunctive. This shows the strong emphasis placed on the topicalized element. The verb, *māša*, is then connected with a conjunctive to the DO, *ḥēn*. The whole VP is separated from the following with a level 2 disjunctive.

Genesis 46:4

In (90), like (89), we find a topicalized element, only this time it is a pronoun, not a proper noun. The pronoun is marked with a disjunctive, showing it receives force. In

Judges 6:18

In (90), like (89), we find a topicalized element, only this time it is a pronoun, not a proper noun. The pronoun is marked with a disjunctive, showing it receives force. In
(91), however, the subject pronoun is not analyzed as a topicalized. The S pronoun is connected directly to the verb by a conjunctive.

Exodus 20:24

מִזְבַַּ֣ח א דָמָה֮ תַּע שׂ ה

‘An alter made from earth you shall make…’

Here, the O is fronted and topicalized. The O itself is a construct NP, so the head is marked with a conjunctive while the whole NP is marked with a level three disjunctive. The phrase is thus marked and is separated from the other elements of the VP. The entire VP is marked with a level 2 disjunctive.

3.4 Conclusion

This discussion of phrases has served two purposes. First, it has shown the structure of the phrase as well as a visual representation of the phrase, which will be useful in relation to clause structure in the next chapter. Second, this chapter has again shown that there is more to the Masoretic accentuation system than simply melodies. I have shown that at the phrase level, the ʾṭəʿāmīm are placed in such a way as to represent the phrase structure. Examples 83 – 85 showed strong evidence for the syntactic bases of the distribution of the ʾṭəʿāmīm. The Masoretes divided phrases which would be equal in terms of phonology and prosody in such a way that

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116 Aronoff (1985:41)
they show the underlying structure and make the correct interpretation obvious. VPs as well show signs of being purposefully marked to show relation. In the normal VSO phrase, the V and S are linked by conjunctives while in topicalized SVO and OVS, the topicalized elements are separated from the structure by means of a disjunctive. This shows attention to the fact that these syntactic models expressed something different than the normal VSO order. In the next chapter, we investigate how the Masoretes divided the entire verse in order and the rules which help make sense of these divisions.
4 The ṭəʾāmīm and the Verse

4.1 Introduction

One of the most intriguing facts about the ṭəʾāmīm is that the limits of the system are not based on a set linguistic unit, i.e. one complete clause. As a matter of fact, they are based on the verse divisions of the HB. The verse divisions were known already by the time of the writing of the Talmud (completed by 500 CE)\(^{117}\) though it is unknown at what point they were written down. In any case, the verse divisions were established before the Masoretes began the work of placing the ṭəʾāmīm. This fact leads to a situation where there is, in some cases, considerable skewing between a grammatical sentence and the phonological unit which is the basis of the Masoretic analysis.\(^{118}\)

There are two basic tenets that govern the distribution of ṭəʾāmīm at the verse level. On the one hand are the rules for placement that were discussed in chapter one. For each ṭaʾam, there are certain circumstances where it may or may not be used. These rules provide the choices within the division into levels. The second tenet is what Aronoff calls The Masoretic Parsing Principle (MPP) which states:

> Given a constituent \(X\) of Category \(X\), divide it into two continuous subconstituents such that one of them is the maximal continuous constituent of the same category \(X\) within \(X\).\(^{119}\)

\(^{117}\) Yeivin (1980:42)

\(^{118}\) Lode (1994:158-159)

\(^{119}\) Aronoff (1985:53)
Aronoff’s principle is a continuation of the work of Wickes, who saw that division of the verse was binary according to a *law of the continuous dichotomy*. The major difference is that where Wickes saw the division being “where the main logical pause of the clause or the rules for syntactical division require it” Aronoff sees the division based the goal of keeping the largest constituents together.

This principle has already been shown in the analyses of NPs in chapter 3. In order to find the maximal continues constituent, a non-construct NP with an adjective and a demonstrative following the noun will be analyzed as N A/DEM not, N/A DEM. In addition, in construct NPs the head will be separated from the genitives.

The ordering of the *ṭəˈāmīm* is also important here. As noted in section 1.4 above, the domain of an accent may only be divided (disjoined) by an accent of the same level, or exactly one level higher. This does not include the level 5, conjunctive *ṭəˈāmīm*. In the visual representation that I am using for this analysis this means that the final word will be marked with a subscript 1, which on the final word is always *sillūq*. The domain for *sillūq* is the second half of the verse. The closest disjunctive *təˈam* to *sillūq* will always be either the level 1 disjunctive, *ʿaṭnāḥ*, or a level 2 *təˈam*. The domain of a level 2 (if divided) will always be divided by either another level 2 or a level 3. A level 3 (if divided) will always be divided by either another level 3 or a level 4. A level 4 may be divided by another 4.

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120 Wickes (1887:29)
121 Wickes (1887:31)
122 Aronoff (1985:53)
123 cf. Aronoff (1985:57)
The analysis begins at the level of the verse and moves toward the level of the constituent. As long as there are constituents remaining within each new level of analysis that have not been analyzed, the process must continue. I will here show how this analysis works beginning with the application of the MPP on verses with varying structures to show the basis of the analysis (4.2). From there, I will look at three specific constructions that vary from the normal sentence structure: direct discourse (4.3), relative clauses (4.4) and topicalization and coordination (4.5).

4.2 Sentence and Verse Structure

There are several different situations that can occur in the analysis of a single verse in the HB as the verse divisions do not always match up with syntactic analysis. Thus a verse may be one and only one sentence (93), more than one sentence (94) or a verse may end in middle of a sentence (95).

93 Genesis 8:18
way-yésē-nōāh ū-bānāw wa-ʾištō ū-nāšē-bānāw ʾitt-ō
’So Noah went out with his sons and his wife and his sons’ wives.’

94 Genesis 1:28
way-bārek ʾōtām ʾēlōhîm way-yōmer lāhēm ʾēlōhîm pərū ū-rūh ū-milʾū ʾet-hā-ʾāres
wa-kibšūhā ū-rūdā bi-dgāt hay-yām ū-b-ʾṓp haš-šāmâyim ū-b-kāl-ḥayyā hā-rōmēset ʾal-hā-ʾāres
‘God blessed them, and God said to them, “Be fruitful and multiply, and fill the earth and subdue it; and have dominion over the fish of the sea and over the birds of the air and over every living thing that moves upon the earth.’
These are the generations of the heavens and the earth when they were created. In the day that the LORD God made the earth and the heavens,'

The latter is very rare and need not be dealt with here. In addition, each sentence may be made up of one or more clauses. Thus, the analysis of a verse may include the analysis of anything from a simple clause to several independent sentences. Here I will look at examples of different types of verses, ranging from simple to complex.

### 4.2.1 Verses with one Sentence

In Genesis 16:7 (96), the major break comes after the first complement to the main clause which is made up of two PPs, where the second complement is an explanation of the first and is also made up of two PPs. This keeps intact a complete VSOX structure (the O is suffixed to the V) and maximizing the VP of the sentence. The domain governed by sillūq is made up of two PPs which are separated by a level 2 disjunctive. The domain governed by ʿatnāḥ is a VP with a two complement PPs. The second complement PP is separated from the VP and first complement PP by a level 2 ʿaʿām, maximizing the VP. The first PP is separated from the VP by a level 3 ʿaʿām, again maximizing the VP. Within the VP, the V is separated from the S which is a construct NP with two parts by a level 4 ʿaʿām.
The angel of the LORD found her by a spring of water in the wilderness, the spring on the way to Shur.

(97) shows a verse that is so short that it has been analyzed as a simple VSOX structure with no major break before the end of the verse. In this case the parsing principle still holds true, as it is the maximal realization of the sentence.

Abraham bowed before the people of the land’

4.2.2 Verses with Multiple Sentences

In verses with multiple sentences, the first division comes at the syntactic or logical break in the sentence. In a verse with two simple clauses, such as Genesis 31:45 in (98), the break comes after the first clause, marked by ‘aṭnāḥ:
Jacob took a stone and he set it up as a pillar.

In a more complex verse with several sentences, the major division (marked with `ʾatnāh`) is also placed at a major logical or syntactic break. In the case of Genesis 2:19 it is clear that the domain following `ʾatnāh` is the logical result of the first half of the verse:

[D I D II D III D IV]

way-yiqqāḥ, yaʿaqób, ʿāben, wa-yrimēhā, massēbā,

way-yiqqāḥ, yaʿaqób, ʿāben, wa-yrimēhā, massēbā,
‘So out of the ground the LORD God formed every animal of the field and every bird of the air, and brought them to the man to see what he would call them; and whatever the man called every living creature, that was its name.’

### 4.2.3 Discrepancies

It is not always the case that a modern analysis of the syntax of a verse will give the same divisions as the Masoretes. These discrepancies, however, are generally the result of the application of the MPP.\(^{124}\) An example\(^{125}\) of this is Genesis 17:8 where the modern analysis would be as in (100) but the Masoretic marking gives the analysis in (101):

100 And I give you and to your descendants after you /  
    the land of your sojourn, all the land of Canaan.
101 And I give you and to your descendants after you the land of your sojourn /  
    all the land of Canaan.

Further, at the next level a modern analysis would give (102) while the Masoretic analysis yields (103):

102 And I give /  
    to you and to your descendants after you
103 And I give to you /  
    and to your descendants after you

The analysis of this verse is clearly not in line with a modern analysis, but it is clearly the result of the MPP. Each level of analysis seeks out the largest constituent part, which is then separated from the others. These examples show that the MPP is

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\(^{124}\) Aronoff (1985:55)

\(^{125}\) The following builds on Aronoff (1985:54-55)
the governing principle behind the analysis of the Masoretes. By following this principle, we can see how the Masoretes viewed certain types of clauses, the following sections will look at two specific constructions: direct discourse (4.3) and relative clauses (4.4).

### 4.3 Direct Discourse

Direct discourse is a common feature of the HB. There are a range of dialogues and direct speech plays a major role in narrative sections of the HB. In the HB direct speech is usually accompanied by an introductory phrase (i.e. So says the LORD). This construction has not been given a lot of attention in modern syntactic theory but Aronoff points out that the punctuation of English shows an analysis where the direct speech is subordinate to the introductory Phrase.\(^{126}\) This, however, does fit with the way the introductory phrase behaves within the sentence. It can be moved to certain syntactic positions in the same way as a Sentence Adverb.\(^{127}\) Thus, it stands to reason the introductory phrase should be treated as such. This is also the way the Masoretic analysis of the verse treats the introductory phrase.\(^{128}\) The introductory phrase is normally subordinate in the same was as adverbials, and do not necessarily make the main division in a verse. It is possible, however, that the adverbial will be analyzed as the maximal constituent, causing the main division to come after the introductory phrase. In (104), from a narrative passage in Exodus 6:2, the main division comes after the first clause which says “And God spoke to

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\(^{126}\) Aronoff (1985:50)

\(^{127}\) Aronoff (1985:51)


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Moses.” The introductory phrase “he said” is subordinated the direct discourse in the second half of the verse:

104 Exodus 6:2

4.4 Relative Clauses

Another case where the MPP makes sense of seemingly difficult analysis is with relative clauses. In the final position, a relative clause can be separated from its head by a major break, which means that two very closely related words can be separated. This however, makes sense when seen from the perspective of the MPP. In (105), from Deuteronomy 8:1, the major division in the verse comes after the object of the VP. The object, however is the head of the relative clause, which follows the major division:

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129 For a detailed overview of relative clauses in BH c.f. Waltke and O’Connor (1990:330-340)  
130 Aronoff (1985:54)  
131 Aronoff (1985:54) Only the final section of the verse is given here.
4.5 Topicalized Sentences and Coordination

In his analysis of the ָֽאַ֣מִּים, Aronoff sees only two constructions that are not readily analyzable based on the MPP, topicalization and coordination. I will look at each construction in turn.

4.5.1 Topicalized Sentences

I have already looked at the topicalization of elements within the phrase in 3.3.2 above. There, it was shown that a topicalized S or O was separated with a strong disjunctive from the VP in order to maximize the VP. The same is true at the level of the verse. Topicalized sentences are often analyzed in such a way that the main division of the verse comes just after the topicalized element. This can cause situations where the division does not follow the idea of the maximum constituent. However, as Aronoff points out, this can easily be dealt with if we assume that MPP is based on the most common construction, the VSOX. If that is so, then analyses

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Aronoff (1985:54)
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like that of 106, which is the most common analysis of a topicalized sentence, are maximizing what remains of the normal VSOX construction:

106 Exodus 16:35

The Israelites ate manna forty years, until they came to a habitable land;

4.5.2 Coordination

Coordination is the other construction that is difficult to explain with an amendment to the MPP. The accentuation of conjuncts can be summarized by a rule given by Aronoff:\textsuperscript{134}

\textsc{Masoretic Conjunction Rule: } X \rightarrow X \textit{conj} X

Condition: expand from left to right at each level of analysis.

This analysis is valid for all types of conjuncts, from the word level to the clause level. To accommodate this in the MPP, Aronoff adds the simple phrase:\textsuperscript{135}

\begin{quote}
Given a constituent of the category X, divide it in two in such a manner as to maximize its continuous subconstituent(s) of the category X.
\end{quote}

(107) shows the Masoretic analysis of a string of 8 conjuncts in Genesis 24:35:\textsuperscript{136}

\textsuperscript{134} Aronoff (1985:47)

\textsuperscript{135} Aronoff (1985:54)
4.6 Conclusion

This chapter has shown two important elements of the Masoretic accentuation system. On the one hand, the guiding principle behind the placement of the ṭəʿāmim, the Masoretic Parsing Principle has been shown to operate at all levels of the verse. This simple principle explains the divisions of the verse into constituents which are in turn divided until there remain no unanalyzed constituents. The MPP is an elegant way of describing what is in reality a very difficult task. The fact that verses are constructed from a varying number of clauses and phrases makes a normal verse difficult to define. By using the MPP we have seen that the accentuation of the HB is done in an orderly and specific manner.

The other important element of the system of the ṭəʿāmim that has been shown in this chapter is the syntactic bases for the analysis at the highest level. There is no a

\[\text{\textsuperscript{136}}\text{Aronoff (1985:49)}\]
priori reason for the analysis of constructions such as the conjuncts and relative sentences based on phonology or prosody. The fact that they are systematically treated shows once again that the Masoretes used a specific syntactic model for the placement of the ṭə‘āmîm.

In the next chapter, I will look at the verse and further toward the paragraph by looking at prosodic and discourse analyses of the ṭə‘āmîm. This will help shed light on the relationship between syntax and phonology.
5 The ṭəʾāmīm, Prosody and Discourse

5.1 Introduction

In this chapter, I will be looking at two types of analysis of the ṭəʾāmīm that are based on features above the level of syntax in the verse. Up to this point, I have been working with models that look at the relationship between words (syntax) as the best way of understanding the system of the ṭəʾāmīm. This chapter looks beyond this at the way the two areas of prosody and discourse linguistics.

We do not have to stretch our imaginations to understand why the study of prosody and the study of the ṭəʾāmīm have been connected.

The first section (5.2) is devoted to a discussion of prosody and the way in which the ṭəʾāmīm can be seen as marking the prosodic structure in the verse. The second section (5.3) is concerned with discourse features of the ṭəʾāmīm.

5.2 The Prosodic Basis of the ṭəʾāmīm

The term *prosody* generally refers to aspects such as rhythm and intonation in language. One of the features of prosody is that it “divide[s] up the stream of speech into chunks or phrases of one sort or another.”

These phrases (prosodic phrases, ProsPs), however, do not always correspond with syntactic or semantic units in the text. In fact, a major difficulty in prosodic linguistic analysis has

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137 Ladd (2008:288)
traditionally been derived from “…the twin assumptions that (a) the division of sentences into ProsPs in some way reflects syntactic, semantic, or discourse constituency, but that (b) prosodic structure is somehow fundamentally simpler than syntactic structure.”¹³⁸

The connection here between prosodic analysis the ṭəʾāmīm is not difficult to grasp. This relationship has been examined in detail by Dresher¹³⁹ and Churchyard,¹⁴⁰ who both look the system of ṭəʾāmīm as a prosodic parsing of the HB. Dresher’s goal is to show that prosody, rather than syntax, is the basis for entire system of accentuation. Churchyard, after discussion prosody and the ṭəʾāmīm is interested in the relationship of the ṭəʾāmīm and the pausal forms. I will begin by looking Dresher’s work.

The ṭəʾāmīm do not always follow the syntactic or semantic divisions of the text of the HB. In chapter 4, I discussed Aronoff’s approach to this problem, which was the Masoretic Parsing Principle. Dresher does not agree that Aronoff’s explanation is sufficient or necessary as he claims that “to the extent that the Masoretic Parsing Principle is descriptively adequate, it is because it is part of a general theory of prosodic structure.”¹⁴¹ Instead, Dresher sees that “the hierarchical structures indicated by the Tiberian accents have striking points of contact with some

¹³⁸ Ladd (2008:288)
¹³⁹ Dresher (1994)
¹⁴⁰ Churchyard (1999:221-696)
¹⁴¹ Dresher (1994:28 n31)
contemporary research into hierarchical prosodic structures." His basis here is two comparisons 1) between the Phonological phrase of modern prosody the Conjunctive phrase of מ which is signaled by the conjunctive ṭə́ʿāmim and 2) between the utterance of modern prosody and the verse of מ. There is no comparison, however, for the important hierarchical layer of the intonational phrase. Having found the points of comparison, Dresher works to show that the system of the ṭə́ʿāmim “deviate from syntax in ways that are typical of prosodic representation.”

5.2.1 The Prosodic Phrase

At the level of the prosodic phrase, Dresher sees the deviations of the system of the ṭə́ʿāmim to reflect two tenets of prosodic theory, edges and geometry. I will look at each in turn.

The term edges refers to the boundaries between prosodic units, and Dresher’s analysis takes disjunctive ṭə́ʿāmim to be edges in terms of the Masoretic prosodic system. Following an abstract end parameter which states that only one end of a prosodic unit is able to form a prosodic phrase (for TH the right end), Dresher proposes that the phrasing of (X[Y and –Z], X governs [Y and –Z]) depends on the semantic relationship between Y and –Z, as the complement may be analyzed with

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142 Dresher (1994:28)
143 Dresher (1994:8)
144 Dresher (1994:13)
145 Dresher (1994:16)
146 C.f. for example Ladd (2008:44-47) on edge tones.
147 Dresher (1994:17)
148 Dresher uses the traditional terminology which terms right and left for the location of constituents in the sentence. Thus, the right end is in TH the final end, not the beginning.
the head or with the other complement. Thus we find both (108) and (109). On the other hand, in phrases of the shape \([Y \text{ and } -Z] \ X\), \(X\) governs \([Y \text{ and } -Z]\), \(Y\) and \(-Z\) must be phrased together as in (110). This is because the right end is maxed out before the head.

108 Genesis 3:5

\[
yōḏé₂ \ tōb₃ \ wā-rā'₁
\]
‘knowers of good and evil’

109 Deuteronomy 5:15

\[
kabbēd₅ \ ṭē-āḇîkā₃ \ wē-ēt-îmmēkā₂
\]
‘Honor your father and your mother’

110 Isaiah 7:22

\[
kl-ḥemá₂ \ ū-dḥāš₃ \ yōkēl₂
\]
‘For (everyone) shall eat curds and honey.’

Based on this analysis, Dresher sees the phrase structure of the \(tə’āmîm\) as being better represented by a prosodic structure than a syntactic one.\(^{149}\)

\(^{149}\) Dresher (1994:19)
The other area in prosodic theory Dresher cites as being relevant is geometry. In prosodic theory, *geometry* refers to the way in which nodes branch in the prosodic representation. In the system of the *tə'āmîm*, the normal prosodic phrase is two words, thus what would be syntactically analyzed as two phrases can be one prosodic phrase, as in 111\(^\text{150}\) or conversely, a phrase consisting of three units may be divided in different ways as in 108 and 109 above.

111 Genesis 3:14 יִתְּפַלְּךְ נְכַלֶּה

‘al-gəhōnkāš tēlēk₂

‘On your belly you shall crawl’

Though Dresher goes into further detail on this issue, it will suffice to say that his understanding is that the branching restrictions in \(\mathfrak{M}\) are right in line with a modern prosodic representation.

5.2.2 The Utterance

The *utterance* is the largest unit dealt with in prosodic theory. Dresher relates this to the Masoretic verse. Within traditional prosodic representation, grouping of ProsPs into larger phrases called Intonational phrases, which are grouped together to form an utterance, causing an *x*-nary structure, not necessarily the binary structure seen in \(\mathfrak{M}\). The reason for this is that all breaks at a certain level of the hierarchy are located at edges of a phrase at the lower level and are thus of equal value, according to what

\(^{150}\)Dresher (1994:21)
is known as the *Strict Layer Hypothesis* (SLH)

151 Dresher cites research into the pause duration

152 which analyzes prosodic structure in a way very similar to the *ṭəʿāmim*, allowing for nodes at more levels on the hierarchy. I will not go into detail here on Dresher’s analysis, as it seems to me that the representation of the verse as utterance in this way is at the same time a useless comparison and an obvious extraction. On the one hand, the verse is only at times one and only one utterance. Many verses are forced to fit the accentuation principles even though they are made up of only part

153 of an utterance or more than one utterance. Thus the fact that all verses end with the same melody does not make them a prosodic unit in modern term. On the other hand, it is completely obvious that the *ṭəʿāmim* provide a prosodic parsing of the verse – that is the musical argument. But it does not seem that the parsing of the *ṭəʿāmim* and a modern representation are reconcilable. As Henry Churchyard puts it:

Contrary to Dresher 1994, there is little support for a prosodic interpretation of the accentual parse that would obey the strict layering convention of recent generative prosodic phonological theory, that requires each constituent in the hierarchy of Utterance, Intonational Phrase, Prosodic Phrase, Clitic Group, etc. to be always exhaustively parsed by constituents of the next lower level only.

153

Churchyard, however, does see that prosody plays a role in placement of the *ṭəʿāmim*. He sees the rules outlined by Aronoff as resembling syntax-to-prosody mapping rules.

154 In general, the fact that the structure of the *ṭəʿāmim* is so appealing from a prosodic standpoint has to do with the phonological/prosodic structure of Hebrew. Hebrew phrases in almost all cases show prominence on the last word of a

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152 Dresher (1994:23-24)
153 Churchyard (1999:224)
154 Churchyard (1999:243)
phrase. Thus, the embedding of phrases will mean that the last phrase will be the most prominent. To show that the ṭəʿāmīm indeed to correspond to a prosodic analysis of the HB, Churchyard compares them to the pausal forms, another area of the text that is well known to be prosodic in nature. The background for this comparison is the fact that not all pausal forms occur on level 1 ṭəʿāmīm, those with the greatest pausal value and conversely, some pausal forms even occur on conjunctive accents. By using a statistical comparison of verses where both pausal and contextual forms occur, he examines how the hierarchy of the ṭəʿāmīm corresponds to the pausal forms. His conclusion on the statistical analysis is that “the absolute scale as a whole usually doesn’t rank very high in overall degree of pausal/accentual correlation” and that

...basic disjunctive phrases will not be given a fixed prosodic significance within a single Biblical verse; and neither the Biblical verse as a whole, nor the basic disjunctive phrase level, will be assigned a fixed prosodic significance across verses (contrary to Dresher 1994).

Churchyard does, however, develop a method of discerning the relative strengths of the ṭəʿāmīm, which I will not go into here, but which offers a closer correspondence between the pausal forms and the ṭəʿāmīm. Despite this closer correspondence, it is clear that “they cannot always be fully reconciled as variant orthographic manifestations of a single type of linguistic/prosodic constituency.” This means

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155 Churchyard (1999:262-263)
156 C.f. section 2.3 above
158 Churchyard (1999:466)
159 Churchyard (1999:468)
160 Churchyard (1999:597)
that while the ṭəʿāmīm do give prosodic information, they do not correspond entirely with the other prosodically motivated system found in Mī.

5.2.3 Conclusions on Prosody

These sections have been somewhat different from the preceding chapters in that they have been more concerned with theoretical questions and less with the actual parsing of the text. This is in fact the main reason why a purely prosodic understanding of the ṭəʿāmīm fails to make sense in modern terms. As I said above, there is no doubt that it is a prosodic guide, the question is merely what the basis for the parsing is. In this way, abstract theories of prosody don’t seem to account for the system of the ṭəʿāmīm. I will come back to this discussion below, in chapter 6. As for the correlation between the pausal forms and the ṭəʿāmīm, it seems to me that the evidence for the pausal forms reflecting a much older tradition is too strong to allow for the ṭəʿāmīm needing to reflect it. One fact that I have not seen included in the discussions of the pausal forms and the ṭəʿāmīm is the fact that the so-called primae nun verbs (verb with roots beginning in the letter nun) do not show assimilation in the pause.\textsuperscript{161} If this is the case, then the consonant text, which is accepted as older than the vocalization and accentuation, shows traces of the pausal forms. That would mean that the reading tradition passed down already knew of the pausal forms and the vocalization was done in accordance with this tradition. The fact that

\textsuperscript{161} C.f. Gesenius, Kautzsch and Cowley (1963:174 = §166.f) and Joüion and Muraoka (2006:108 = §132.g and 186 = 172.b) For an alternative explanation c.f. Rössler (1977)
the accentuation does not match up rather shows that the accentuation was not meant to show the same hierarchy as the pausal forms.

5.3 The ṭəʾāmīm as Discourse Markers

An alternative to the prosodic analysis above, but still at the super-segmental level is that of Lars Lode\textsuperscript{162} which interprets the ṭəʾāmīm in light of discourse linguistics. Lode’s analysis divides the intonational system of the ṭəʾāmīm into six levels: “period, sentence, descent, clause, phrase, and word.”\textsuperscript{163}

5.3.1 The Phonological Hierarchy of the ṭəʾāmīm

The most interesting finding in Lode’s analysis is that he finds the levels to be marked in different ways, and the ṭəʾāmīm to have different importance depending on the level.\textsuperscript{164} At the lowest levels, this analysis corresponds to what we have seen above: the phonological word is marked with any accent and the phonological phrase is marked by the disjunctive accents. At the higher levels, only certain ṭəʾāmīm may be used. Thus the clause can only be marked by ṭəʾāmīm, ṭəʾāmīm, ṭəʾāmīm, ṭəʾāmīm, ṭəʾāmīm, and sillūq. The descent is marked by the descending pitch levels of clauses. The sentence is marked by sillūq.\textsuperscript{165}

This analysis of the ṭəʾāmīm means that only certain of them are neutral, meaning for punctuation purposes only. I will quote Lode in full here:

\textsuperscript{162} Lode (1994)
\textsuperscript{163} Lode (1994:158)
\textsuperscript{164} Lode (1994:166)
Only the intonations Silluq, Atnach, Tifcha, Little Zaqef, and Pashta are neutral. They may be used in any type of context. They mark syntactic breaks and indicate progression in the text, but they carry no further overtones. The other disjunctive accents represent intonations that indicate overtones of focus or emphasis in addition to their value as syntactic markers.¹⁶⁵

The neutral ṭə'amīm function together in verses like (112)

**Exodus 2:25**

> way-yār₂ ʾēlōhīm₁ ʾēt-bone₂ yiśrāʾēl₁, way-yēda₂ ʾēlōhīm₁,

‘And God saw the Israelites, and God understood.’

Lode finds that the other ṭə’amīm, then, have discourse functions beyond marking the constituent boundaries.¹⁶⁶ Seğoltā sentences introduce climax or complication with “emotional overtones.”¹⁶⁷

**Genesis 3:3**

> ū-mip-pair₂ ḥā-ʾēṣ₃ ḫāʾēṣ₅ be-tōk-hag-gān₂ ʾāmār₂ ʾēlōhīm₃ ṭōklū₃ mimmēnnū₂ wa-lō₅ tīggaʾū₇ b-ō₁,

‘but from the tree that is in the middle of the garden, said the LORD, you shall not eat, nor shall you touch it,’

Zāqēḇ gāḏōl marks strong emotions, as in (114)

**Genesis 8:3**

> way-yahsorū₂ ḥam-māyim₂ mi-qṣé₂ hāmiṣṣēm₅ ū-mʿāt₇ yōm₁,

‘At the end of one hundred fifty days the waters had abated’

Ṭābir also marks prominence, but to a lesser degree, and is often associated with weak emotions, as in (115)

¹⁶⁵ Lode (1994)
¹⁶⁶ Lode (1994)
¹⁶⁷ All the following examples are taken from Lode (1994:167-171)
and Abel for his part brought of the firstlings of his flock, their fat portions.

Gērēš, təlišā and pāzēr indicate “a fairly sharp prominence”168 and occur initially in a
descent, as in (116):

So the enemy took all the goods of Sodom and Gomorrah, and all their provisions,
and went their way

Rəḥiāʿ is considered in between, marking neither strong, weak nor sharp
prominence, but rather indicates that the following section is more important than
the preceding, as in (117)

Then the LORD said to him, “Not so! Whoever kills Cain will suffer a sevenfold
vengeance.”

Each of the pəʾāmīm is thus analyzed as either being neutral or having discourse
function. The examples here are obviously only to demonstrate an instance of the
phenomenon. Lode169 includes lists from Genesis with details about the nuances of
each text. It seems that a more detailed study of all genres and different books is
needed, but Lode’s preliminary results show an interesting connection between the
most common neutral pəʾāmīm and the less common discourse pəʾāmīm.

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168 Lode (1994:165)
5.4 Conclusion

This chapter has looked at two different levels of supra-segmental analysis, prosody and discourse linguistics. The objections to a purely syntactic reading that led to the prosodic analyses discussed in 5.2 are interesting. It seems that as long as prosody and syntax are in line, there are no issues. When syntax and prosody are not in agreement, complications arise and a syntactic model must find answers. That the prosody of the verse is relevant here, is not in question. I think prosody does at some level help the analysis. The trouble is finding a representation or a theory to explain it. Up to now, the best theory for explaining why the prosodic structure is how it is is not Drescher's modern prosodic representation, but rather the accent-syntactic analyses à la Jacobsen\textsuperscript{170} and Price.\textsuperscript{171} That is to say that finding a prosodic analysis that is both independent of the individual verse and not based on a resetting of the relative weight of the $\text{ṭ}^\text{ā}mîm$ at the end of each verse is not possible. All of this does, however, suggest that when a syntactic analysis of the $\text{ṭ}^\text{ā}mîm$ does not make sense, prosodic considerations are likely to aid in understanding. Churchyard’s observation is quite important to understanding the relationship between prosody and the $\text{ṭ}^\text{ā}mîm$:

The Tiberian Masoretes probably found it feasible to develop such an orthographic notation which can be interpreted as a hierarchical constituent parse because of a special property of the Hebrew language – that phrasal constituents always have prominence on their last subconstituent (i.e. are prosodically right-headed). This means that the more prominent (in phrasal terms) the main-stress on a word is, the higher the level of the prosodic constituency break that occurs immediately following that word; therefore, by creating a set

\textsuperscript{170} Jacobson (2002)
\textsuperscript{171} Price (1990)
of graphemes to denote word-stresses of lesser and greater degrees of phrasal prosodic prominence, a linear sequence of such main-stress graphemes (or “accents”) can be read off as a nested phrasal constituency parse, under the assumption of phrase-final prominence.¹⁷²

The second section of this chapter, on discourse linguistics, poses an interesting question, but needs more research to be a viable hypothesis. The analysis presented makes a clear case for certain ṭə̀āmîm being interpreted as marking intonational difference that is relevant for discourse. The problem, however, is finding the whether or not the so-called neutral ṭə̀āmîm never cause such intonation. In other words, it is interesting that patterns emerge connected to the deeply embedded ṭə̀āmîm, but are shorter verses that follow the normal VSOX pattern analyzed differently based on the discourse features found within verse? A second question is what this means for other genres, such as legal texts, prophecy, etc. The structure of a narrative is after all quite different from a legal text or prophecy, but the ṭə̀āmîm are used in all genres. These matters aside, the discourse linguistic approach offers an interesting addition to the discussion on the linguistic basis of the ṭə̀āmîm.

¹⁷² Churchyard (1999:221-222)
6 The Linguistic Basis of the ṭəˈāmīm

The starting point of this thesis was to investigate the linguistic basis of the ṭəˈāmīm, at as many levels as possible. It has been shown that at every level of linguistic inquiry, from the word to the discourse, that there are linguistic motivations for the use and placement of the ṭəˈāmīm. In this final chapter, I will review the major arguments for each of the linguistic levels (6.1) and present a few examples where the linguistic basis aids in the understanding and interpretation of a text (6.2). In the closing section I will discuss what the sum of the arguments and analyses given above mean for my understanding of the ṭəˈāmīm.

6.1 The Arguments

The investigation began by looking at word-level matter, where there are two important arguments for the linguistic motivation of the ṭəˈāmīm. First, the placement of the ṭəˈāmīm on the syllable bearing primary stress, and the additional marking of secondary stress by the gaˈyād serves to distinguish between forms that were otherwise identical. In addition to this, the rules governing stress-retraction would not be intuitive to non-native speakers trying to read the text. The placement of the accents secured the proper reading. Second, this placement of word stress is important for readers by marking where vowels are long in closed syllables. In these ways the placement of the ṭəˈāmīm is linguistically motivated at the word level.

At the phrase level, it was shown that the Masoretes were concerned with phonological phenomena in the way they allowed sandhi spirantization to take place
when using conjunctive IENTY but not disjunctive. At the syntactic level, the
analysis of construct phrases shows the IENTY can distinguish cases that are only
relevant from a syntactic point of view. In addition, the consistency with which
phrases are analyzed shows a focus on the structure of the text.

At the level of the verse, the syntactic basis of the analysis seen at the phrase level
was expanded. A variety of examples show that the placement of the IENTY was
done with care to reflect the Masoretic understanding of the text. The Masoretic
Parsing Principle was shown to be implemented on a variety of syntactic structures
that diverge from the normal VSOX structure of TH. These examples show that even
when difficult syntactic issues arise, there is a method to the distribution of the
IENTY.

At the prosodic level, it was shown that prosody may play a role in the
determination of the accents. Especially the fact that TH has been shown to have
right edge restrictions explains the fact that the IENTY could function in the way
they do. Prosody most likely complements the role of syntax in the distribution of
the IENTY.

At the discourse level, a theory was presented that places the IENTY into two
groups, the neutral IENTY and the discourse IENTY. The neutral IENTY are
placed according to a syntactic analysis but the distribution of the discourse IENTY
is dependent on an understanding of the flow of the narrative. The evidence points
to this being a possible interpretation in the narratives of Genesis, but more research
is needed in other genres to make a stronger case.
On top of all of this, it is certain that there were musical/melodic considerations in choosing certain $\text{ṭəʿāmim}$. I discussed at length in chapter 1 the combinations of the $\text{ṭəʿāmim}$ and which ones would be substituted for another under certain circumstances, which is surely the result of the melodies of the individual $\text{ṭəʿāmim}$.

### 6.2 The Importance of the Syntactic Analysis

The importance of the syntactic analysis given by the $\text{ṭəʿāmim}$ can be seen in numerous texts that would otherwise be ambiguous. I will look at several examples here where the interpretation of the text is dependent on the location of the $\text{ṭəʿāmim}$.

#### 6.2.1 Domain of a sentence adverbial

118 Exodus 17:9

וַיָּאָמְר מְשֻׁלָּשֵׁנִי בֵּית-יְהוֹשֵׁעַ אֶל-יהוּדָּה בֵּית לַעֲנֵי אַנְאָה נָשִׂיא הַלָּחֶם מַחְרֵי אָנֵכי נִצָּב עַל-רֹאשְׁהִן הַגִּיבּוֹן מִזְמֹר עַל-יְהוֹה׃

D1 D2 D3 D4

way-yómer $mōšē$ ‘el-yəḥōšú’a $bəḥar-lānū $ānāšū’m

$wə-ṣē$

hillāḥēm $bə-’āmālēq$

$māḥār$

‘ānōki $nīssāb$

‘al-rōṣ $hag-gib’ā$

ū-mattê $hā-’ēlōhū’m

$bə-yaḏī$

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173 Tov (2001:68)
There are two possible interpretations, depending on the location of the ʾaṯnāḥ.

Following the Tiberian reading we read:

‘Moses said to Joshua, “Choose some men for us and go out, fight with Amalek. Tomorrow I will stand on the top of the hill with the staff of God in my hand.”’

However, had the ʾaṯnāḥ been on the following word, thus connecting the sentence adverbial to the first half of the verse, not the second, the reading would be:

‘Moses said to Joshua, “Tomorrow, choose some men for us and go out, fight with Amalek. I will stand on the top of the hill with the staff of God in my hand.”’

6.2.2 Domain of an adverbial complement

In this case, the ṭəʾāmām show an analysis at odds with the Greek Septuagint, the Greek reading shows a closer connection between qōrē ‘calling out’ and b-am-miḏbār ‘in the desert’ giving:

‘A voice in the desert calling out “prepare the way of the LORD, make straight in the desert a highway for our God.”’

The Tiberian pointing, however, reads:

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174 Edzard (manuscript)
‘A voice calling out “In the desert prepare the way of the LORD, make straight in the desert a highway for our God.”’

### 6.2.3 Plural subject with singular verb

120 Genesis 7:7

הָבָ א נ הָבָ א נ הָבָ א נ הָבָ א נ הָבָ א נ הָבָ א נ הָבָ א נ הָבָ א נ הָבָ א ن

D₁ D₁ D₁ D₁ D₁

way-yăḇō₅ nōah₃

秏-bānāw₄

וּ-יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַو יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁטַו יְשֹׁtight

Here, a seeming anomaly in Hebrew grammar is explained by the placement of the ta’amim. The verb, way-hī, is singular, but there are several subjects. The ta’amim, however, show that nōah is to be seen as the subject, and the others involved are separated from the verb by a major break (’ṣānāḥ). Thus, the verse should be read:

‘And Noah went into the ark, with his sons and his wife and his sons’ wives, to escape the waters of the flood.’

### 6.2.4 Noun Phrase structure

121 Deuteronomy 6:4


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121 Deuteronomy 6:4
This example shows a notorious problem in interpreting a string of nouns. They could be seen as being in construct to one another, in apposition or as being nominal phrases. The conjunctive ṭəʿāmîm on YHWH and the strong disjunctive on ‘êlôhênû make the most likely analysis of the second half of the verse a string of two nominal phrases in apposition to one another:

‘Hear, O Israel! The LORD is our God, the LORD is one.’

6.3 Conclusion

These examples show the importance of the placement of the ṭəʿāmîm for the interpretation of the Biblical text. And this was, of course, the primary concern of the Masoretes. We must not forget that in addition to the vowels and ṭəʿāmîm, the Masoretes annotated the entire text, counting minute details and noting how often certain phenomena occur (including the use of the ṭəʿāmîm!) Their singular goal was to transmit the text of the HB as they had received and assure that later generations would be able to use the HB properly. The ṭəʿāmîm are thus a part of a much larger system which was meant to protect the integrity of the text.

With this in mind, let us revisit the points above. Surely the placement of the ṭəʿāmîm on the main stress of the word fits this description of the goals of the Masoretes. At the level of syntax, I believe it is clear that the primary concern of the Masoretes was to avoid misunderstanding and misinterpretations of the text. The examples above show that the accentuation protects certain readings and makes others invalid — according to the Masoretic understanding of the text they had
received. In addition, the use of certain ṯə́ʾāmīm in certain situations may reflect discourse features, giving a rising intonation to increase the excitement of a text, or a decline to show the resolution of a situation. At all of these levels, the placement of the ṯə́ʾāmīm is linguistically motivated. Where the analyses don’t seem to match up with syntax, I propose a very simple solution – in certain situations, where the syntax was otherwise clear, the Masoretes could choose a prosodically more accurate reading instead of the consistent syntactic parsing. As was pointed out above, the syntactic and prosodic structure of TH makes this analysis possible. More often than not, syntax and prosody agree on the parsing. Where they do not, if no misunderstandings were possible, a break may be moved to protect the melody. But, in difficult situations where the accentuation could change the meaning, the analysis was syntactic. Again, in addition to all this is the melody. Wherever the received pronunciation and recitation of the text required it, the Masoretes followed those – even marking in the text that they had done so.

I do not believe that a single theory of syntax, prosody, melody or any other feature will be able to take entirely explain the distribution of the ṯə́ʾāmīm. In the end, I believe it was precisely the desire to pass on their understandings of grammar and music, of syntax and prosody that led the Masoretes to mark the text with the ṯə́ʾāmīm.
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