The Current State of Masoretic Studies

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The foundation of the International Organization of Masoretic Studies (IOMS) in 1972 was a turning point in the studies on Masorah. Since then, Masoretic studies have undergone a true renaissance. The publications on Masoretic issues have proliferated, and the importance of the Masorah for the study of the text of the Hebrew Bible has been stressed in numerous reviews. This brief survey presents the evolution of Masoretic studies, the main research lines and achievements, and some of the most relevant works in the last forty years.

KEYWORDS: Masorah; Ketib-Qere; Grammar; Hebrew Bible Text.

ESTADO DE LA CUESTIÓN

Last year marked the 40th anniversary of the creation of the International Organization of Masoretic Studies (IOMS) by Prof. Harry Orlinsky bringing together all the modern “Masoretes” and enabling work in this field.

This work has been done within the frame of the research project titled “The Role of the Rabbinc Literature in the Textual Transmission of the Hebrew Bible II” (Ref: FFI2011-22888) within the I+D Program of the Spanish Ministry of Science and Innovation (MICINN). It is an extended version of a paper read at the Masorah section in the SBL 2012 Annual Meeting.

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Ever since it was created in 1972, Masoretic studies have undergone a veritable renaissance. Together with the twenty-five congresses that the organization held in conjunction with the congresses of the World Congress of Jewish Studies, Masoretic studies has a specific session in the congresses of the Society of Biblical Literature (SBL). Publications of Masoretic issues have proliferated, as may be seen in the Index of Articles on Jewish Studies (RAMBI), looking for “Bible: Text and Masora,” or any advanced search engine, and there are many reviews on the editions of the Biblical text noting the importance of the Masorah.

However, except for the brief notes by E. Fernández Tejero published during the 1970’s and 1980’s in the journal Sefarad that deal with Masoretic studies presented at various congresses and the publications sponsored by the IOMS within the “Masoretic Studies” series, there has been no state of affairs on these studies. So I am taking the creation of the IOMS as the point of departure for outlining how these studies have developed since the late 80s, highlighting the major lines of research. Obviously, due to the long period of time under review, this presentation cannot be exhaustive, nor is it intended to be.

The lines of work that have been followed within Masoretic studies are varied and, in some cases, continue the work begun in the past from perspectives that are still in force. I have divided the studies within seven groups, which will form the backbone of this study.

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2 An approach to the work done in the field of Masoretic studies from the early 20th century until 1989 may be found in N. M. WALDMAN, “The Masoretes,” in idem, The Recent Study of Hebrew: A Survey of the Literature with Selected Bibliography [= Bibliographica Judaica, 10] (Cincinnati, Winona Lake, Ind., 1989), 136-152. Recognizing the importance of the field of Masoretic studies in language issues, it includes the work of the Masoretes between the periods into which the author divides the linguistic study of Hebrew. This linguistic vision conditions his presentation and explains the absence of major works, which is why I am not using it as a starting point.

Finally, I must point out that the field of Masoretic studies has mainly focused on the Tiberian Masorah, i.e., the Masorah accompanying the texts written in the Tiberian vocalization system. The fact that this system eventually prevailed over the other, Palestinian and Babylonian vocalization systems, as well as the abundance of materials with Tiberian vocalization could explain this preference. This article focuses on the work and studies about the Tiberian Masorah, although included at the end is a brief review of the work on the Masorot accompanying other vocalization systems and those devoted to the Masorah that appears in the Targum Onkelos.

1. EDITIONS OF THE MASORAH

Due to the way Masorah is expressed (concise, elliptical and via abbreviations) and is represented (in small letters and, sometimes, ornamental letters), one of the first tasks to be undertaken in order to access the information contained in it is to edit it. Therefore, this has been and remains the main line of work.

This editing work has taken into account the two formats Masoretic information usually appears: along with the biblical text or alone. Also, to a lesser extent, works carried out after the end of the Masoretic period have been edited and studied.

1.1. Masorah Accompanying Biblical Text

Ever since the Masorah (Parva, Magna and Finalis) was first edited, along with the biblical text in the 16th century, in the second Rabbinic Bible of Jacob ben Hayyim, much of Masoretic studies has focused on the Masorot transmitted with biblical manuscripts, especially those whose superior vocalization is attributed to the Ben Asher family (Cairo, Aleppo and Leningrad), and on how to edit this Masorah along with the biblical text.

Although the change in the method of the biblical text editing, from eclectic to diplomatic, occurred in the first third of the 20th century, it was not applied completely to editing the Masorah until much later. After the attempts to edit the Masorah of the Leningrad B19 Codex (L) and its
resulting problems, in the 1980’s, the Hebrew Bible team at the CSIC (Spain) introduced a new approach in its edition of the Masorah of the El Cairo codex: to edit the biblical text and its Masorot, parva and magna, without any alteration or modification, resulting in a faithful reproduction of the manuscript. In it, the MP and MM are faithfully reproduced in the order of the biblical text, deciphered and with biblical references in parentheses in the second apparatus of notes. In addition, the editors add explanatory notes in footnotes in which they give additional information that is highly useful for understanding Masoretic notes.

This is the approach being followed in the three current projects to edit the biblical text and its Masorot.

The new edition of the Leningrad Codex, the Biblia Hebraica Quinta, reproduces the Masorah as it appears in the manuscript, without any standardization, and both Masorot are printed: the MP, in the side margin and the MM in the bottom margin. Each volume also includes explanatory notes to the difficult cases of MP, as well as the translation of the MM notes and comments on those that pose problems.

The two editions of the manuscript of Aleppo and its Masorot, The Hebrew University Bible (HUBP), and the Bar-Ilan University edition, Biblia Hebraica Stuttgartensia (BHS), it was agreed to reproduce both Masorot. Yet due to the editing decisions taken by G. E. Weil, what is offered is not really the Masorah contained in L but a version based on the set of indications of the MP of that manuscript. The same goes for the MM lists, edited in a separate volume, because all that is mentioned is the first time that they appear and the duplications and repetitions are not reproduced, even if they contain differences.

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4 The 3rd edition of the Hebrew Bible (BH3) only reproduced the Masorah Parva (MP), as it appears in L, and the Masorah Magna (MM) was not edited. In a later edition, Biblia Hebraica Stuttgartensia (BHS), it was agreed to reproduce both Masorot. Yet due to the editing decisions taken by G. E. Weil, what is offered is not really the Masorah contained in L but a version based on the set of indications of the MP of that manuscript. The same goes for the MM lists, edited in a separate volume, because all that is mentioned is the first time that they appear and the duplications and repetitions are not reproduced, even if they contain differences.


6 Biblia Hebraica Quinta: General (Stuttgart, 2002); D. Marcus, Biblia Hebraica Quinta: Ezra and Nehemiah (Stuttgart, 2006); C. McCarthy, Biblia Hebraica Quinta: Deuteronomy (Stuttgart, 2007); J. de Waard, Biblia Hebraica Quinta: Proverbs (Stuttgart, 2008); A. Gelston, Biblia Hebraica Quinta: The Twelve Minor Prophets (Stuttgart, 2010); N. Fernandez Marcos, Biblia Hebraica Quinta: Judges (Stuttgart, 2011).

Miqra’ot Gedolot ha-Keter, reproduce the MP and MM as they appear in the manuscript. In addition, in the Bar Ilan project, they have introduced an original, innovative apparatus called “En Ha-Masorah” in which they explain and expand the Masoretic notes, developing their abbreviations and identifying the simanim (‘catchwords’), in order to make it more understandable to those unfamiliar with it.

Once again, the Madrid team has introduced another major innovation in the edition of the Masorah accompanying the biblical text: editing only the Masorah of a manuscript, without biblical text. This is the approach it is taking in its current editing project, the Masorot of the Madrid Complutense University M1 manuscript. If one considers the discrepancies between the existing Masorah and the text that they comment on, it seems logical that the Masorah is important enough to edit it on its own. And within this logic, also for the first time, the team has taken into account all the Masoretic material that is at the end of each book, section or manuscript, editing and studying this material.

Last, the edition of the Masorot of other lesser known biblical manuscripts has begun or been completed.

Jeremiah: The Hebrew University Bible (Jerusalem, 1997); M. Goshen-Gottstein and S. Talmon (eds.), The Book of Ezekiel: The Hebrew University Bible (Jerusalem, 2004).


9 E. Fernández Tejero, Las masoras del libro de Génesis (Madrid, 2004); M. T. Ortega Monasterio, Las masoras del libro de Éxodo (Madrid, 2002); M. J. Azcárraga Servert, Las masoras del libro de Levítico (Madrid, 2004); M. J. Azcárraga Servert, Las masoras del libro de Números (Madrid, 2001); G. Sejas de los Ríos, Las masoras del libro de Deuteronomio (Madrid, 2002); E. Fernández Tejero, Las masoras del libro de Josué (Madrid, 2009).

10 E. Martín Contreras, Apéndices Masoréticos (Madrid, 2004); Eadem, “M1’s Masoretic Appendices: A New Description,” JNSL 32 (2006), 65-81.

1.2. Masorah in Independent Treatises

The Masoretic notes that were compiled in independent works and that were published without accompanying biblical text have also been edited, albeit to a lesser extent. The edition and study of some of the most important Tiberian treatises have helped to assess and bring to light another part of the work of the Masoretes.

The most widely edited treatise has been the *Sefer Oḵlah we-Oḵlah*, the most extensive Masoretic compilation. More than one hundred years after its first edition, F. Díaz Esteban published the edition of the first part of the Halle manuscript (Y b Qu. 10 the library of Halle University), which is more precise and contains more lists than the Paris manuscript. This edition also includes fragments of the Cairo Genizah kept at Cambridge and Oxford. The introductory studies placed before the edition of the text are of great value for acquiring in-depth information about the nature and transmission of the *Sefer Oḵlah*.

The second part of this manuscript, which Díaz Esteban left unedited as he considered it a collection of Masoretic notes that did not belong to the *Sefer Oḵlah*, was subsequently published by B. Ognibeni, which, as he explained in the introduction to the edition, are regarded as part of the treatise. A major innovation is the scanned reproduction of the manuscript’s lists, instead of their transcription. Also very useful is the inclusion of references to published Masoretic parallel texts for each list.

The Masoretic-grammatical treatise, *Horayat ha-Qore*, originally written in Arabic in the first half of the 11th century, has been studied and published by I. Eldar who has also published a shorter version of the tre-

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13 F. DÍAZ ESTEBAN, *Sefer ’Oḵlah w’-’Oḵlah. Colección de listas de palabras destinadas a conservar la integridad del texto hebreo de la Biblia entre los judíos de la Edad Media* (Madrid, 1975).


atise discovered in the Cairo Geniza collection. The Hebrew version of this work has been edited partially and translated into Italian by G. Busi.

Additionally, some fragments of manuscripts from the Cairo Geniza collection, that contain independent Masoretic lists, have been published.

1.3. Postmasoretic Treatises

Following the end of the Masoretic period sensu stricto, around the year 950, the studies on the Masorah and the preservation of the textual tradition continued. Some of the treatises produced in the following centuries contain very valuable information that some studies and editions have made accessible.

The Or Torah treatise written by Menahem de Lonzano, at the end of the 16th century, which discusses the vowels and accents of the Torah in the order of the biblical text, has been studied by Mª. T. Ortega Monasterio.

In the last twenty years, work has focused primarily on a single work, on the edition and study of the enormous work Minhat Shay written by Solomon Raphael ben Abraham de Norzi in 1626, which is considered one of the most important Masoretic treatises with notes on all of the biblical text. There is still no complete edition of the

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19 Mª T. ORTEGA MONASTERIO, Texto hebreo bíblico de Sefarad en el Or Torah de Menahem di Lonzano (Madrid, 1980).
work, but some parts of it have been published. Mª J. Azcárraga Servert published the translation and critical annotation of the comments on the Minor Prophets, with an introduction and critical commentary, and of the comments on the Book of Isaiah. Z. Betzer published the critical edition of the appendices and Y. Ofer edited the critical edition of the Pentateuch with the commentaries and notes Bezer had made before his death.

Other parts of Minḥat Shay have been studied by Fernández Tejero and several specific aspects have been addressed by Bezer and Ofer.

2. DESCRIPTION AND STUDY OF THE MASORAH

The specificity of Masoretic studies, which have their own terminology, and in which one has to have some prior knowledge and to be acquainted with a methodology that is not usually taught at universities, is one of the main problems that has arisen and continues to arise in this field. In response to this problem, since the 19th century several studies have sought to explain what the Masorah is and to give researchers the knowledge they need to interpret it correctly. Some of these works, despite their age, remain essential references for anyone who wants to learn Masorah. Other studies

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21 Z. BETZER, Jedidiah Soloman Raphael Norzi, the Addenda to Minḥat Shay (heb., Jerusalem, 1997).


25 This is the case of the introduction written by Ginsburg in 1897 and reissued in 1966, with a foreword by Orlinsky, in which Ginsburg deals with all aspects to
conducted in the 1970s have been reprinted and updated recently given their usefulness: the article “Masorah” by A. Dotan for the Encyclopedia Judaica and a new version of the Introduction to the Tiberian Masorah by I. Yeivin, which features new bibliography and pictures in each chapter and expands the section on the Babylonian Masorah.

Another way to facilitate the interpretation and understanding of the Masorah has been to try to explain the Masorah of a particular manuscript, normally the Leningrad one. Dotan was the first to start a project to explain the notes of Masorah parva and magna of L. Unfortunately, to date, only the book of Genesis has been published.

Subsequently, three books appeared whose common goal was to make accessible to the uninitiated the Masorah that is printed in the BHS: 1) The Masorah of Biblia Hebraica Stuttgartensia by Page H. Kelly, D. S. Mynatt and T. G. Crawford, whose goal, as stated in its preface is, “to help students understand the significance of the study of the Masorah, to acquaint them with the tools necessary for such a study, and to demonstrate the use of these tools in deciphering a wide range of Masoretic notes taken from the Hebrew Bible”; 2) El Manual da Bíblia Hebraica published in Portuguese by Edson de Faria Francisco, expanded and revised in a second and third edition; 3) and T. Heggs’ An Introduction to the Masorah of the Hebrew Bible. The three studies are very clear, didactic and easily achieve the objective for which they were produced, be taken into account in studying the Masorah, C. D. Ginsburg, Introduction to the Massoretico-Critical Edition of the Hebrew Bible (London, 1987; repr. New York, 1996). Or the articles by H. Hyvvernat that offer the first glossary of the commonest Masoretic terms and the only in-depth study to date on the language in which the Masorah is written; H. Hyvvernat, “Petite Introduction à l’Étude de la Massore,” RB 11 (1902), 551-563; 12 (1903), 529-542; 13 (1904), 521-546; 14 (1905), 203-234, 515-542.


but as the focus is on the BHS Masorah, they are not useful for a further study of the Masorah.

Also, and in addition to the Masorah edited in the BHS, it is worth noting the work of D. S. Mynatt on the Pentateuch cases where, in the BHS, one finds the note “MP sub loco”. By comparing the MP of BHS with the MP of L, Mynatt endeavours to explain the difficulty in each case.

Recently, E. Martín Contreras and G. Seijas de los Ríos have proposed an alternative model to facilitate understanding and knowledge of the Masorah: to explain the Masorot in their original formats (the biblical manuscripts and the independent Masoretic treatises) and not those of a single manuscript in its edited version. In their study they use the main Tiberian codices together with the Madrid Complutense University M1 manuscript. Another new feature is that they offer a protocol setting out the steps to be followed to interpret a Masoretic note, and a description and the use of the materials needed to work with it. Their ultimate intention is to enable anyone interested in the Masorah to learn to interpret any Masoretic notes themselves.

Also, the difficulty posed by some of the works on Masorah has led to the publication of studies that makes it easier to consult those works that are really valuable. Thus, C. D. Ginsburg’s classic Masoretic compilation became more useful thanks to Dotan’s edition of it, in which he identified the sources and the parallels that Ginsburg had used in volumes two and three, and offered a partial table of contents with the main Masoretic topics, terms and categories. The Oqlah we-Oqlah edited by S. Frensdorff is more accessible now thanks to the index of Bible verses prepared by Ognibeni, which also includes a French translation of the preface and of the index of Masorot of Frensdorff’s edition.

31 D. S. Mynatt, The Sub Loco Notes in the Torah of Biblia Hebraica Stuttgartensia (Lousville, Kentucky, 1994).

32 Weil added this note whenever he regarded there to be a difficulty that he planned to explain in a companion volume to his Masorah Gedolah. Unfortunately, he died before completing his project.

33 Martín Contreras –Seijas de los Ríos, Masora.


35 B. Ognibeni, Index Biblique à la Ochlah w’Ochlah de S. Frensdorff, Henoc 5 (Torino, 1992).
Similarly, the additional work that the Madrid team carried out on its edition of the Cairo codex of Prophets, with the analytical index of the MP, that of the MM and the let cases, as well as the indexes that accompany all the volumes of its current edition of the ms M1, represent a breakthrough in accessibility to work on the Masorah.

Last of all, worth noting are the studies that seek to explain the Masorah’s usefulness in studying the biblical text and the exegesis.

3. MASORAH AND GRAMMAR

The Masoretes are not only credited with the notes that form the Masorah, but also with the invention of the graphical vocalization and accentuation systems. Many Masoretic notes contain information about vowels and accents thus have led it to be one of the issues addressed in the field of Masoretic studies. In turn, the complexity of the Hebrew accent system has led to a string of studies on Masoretic accents and their use, and which at present is one of the main objects of study in the Masorah, especially in Israel.

As for the general studies on accents in the Tiberian system, worth pointing out is the concordance of accents of the Hebrew Bible as they appear in the Leningrad manuscript edited by G. E. Weil and his team.

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38 These issues have also been addressed and subject to several studies from other fields (linguistics, musicology, etc.). However, here I will highlight, almost exclusively, the work done in the field of Masoretic studies.
who pioneered the use of computers to study the Masorah\(^{39}\). This work analysed the hierarchy of disjunctive and conjunctive accents and their distribution in the Bible, revealing the system of rules that accents follow. Similarly, Yeivin’s extensive section devoted to accents in his introduction to the Masorah\(^{40}\) providing the updated version of the classic work of Wickes together with material for their interpretation. Finally, James Price’s work describes the use of accents, their syntactic function in the books of prose and poetry and offers a review of the work of W. Wickes and Yeivin’s introduction to accents.\(^{41}\)

Studies have also been conducted, albeit to a lesser extent, of accents in other systems. R. Shosany’s work\(^{42}\) on accents in the Babylonian system and their relationship to accents in the Tiberian system provide a novel key for interpreting and resolving some of the difficult aspects of the latter system. Accents in the Palestinian system have been addressed by E. J. Revell.\(^{43}\)

Another part of the research has focused on issues that had remained unresolved. The chronology and evolution of accents and, in part, that of the vowels, was addressed in the 1970’s and 1980’s, mainly by Revell, Dotan and Mordechai Breuer.\(^{44}\) Compared to the assumption

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that vowels and accents were introduced sometime in the 6th and 7th centuries, it was suggested that they were not introduced at the same time, but instead that accents preceded vowels in the three systems. Some researchers have also resorted to post-Masorah literature to find some additional information about when accents were established. None of the arguments and evidence can be regarded as conclusive and the question remains open.

The difficulty of establishing the function and use of accents has prompted individualized studies of some of the accents: their names, chronology, exceptional uses, etc. Worth mentioning, among others, are Revell’s studies of the nesiga and the dehi, I. Ben David’s studies on disjunctive accents, R. Masiah’s studies of the Telisha qatan and gadel accents, or N. Reach’s more recent study of the Salshelet. Attention has also been paid to the paseq, to its use and function. Although


50 P. Riviere and M. Serfaty, “Etude critique des paseq des livres en prose à la lumière des nouvelles théories sur les chaînes de la cantillation,” in Estudios Masoréticos (V congreso de la IOMS), ed. E. Fernández Tejero (Madrid, 1983), 87-122; L. Himelfarb,
not an accent, the *paseq* is indeed a special sign that forms part of the accent system.

The aforementioned need to take into account the study of the function of accents in the interpretation and exegesis of biblical text,\(^51\) has been revived in recent years resulting in the publication of several papers on the topic.\(^52\)

As for vocalization signs in the three systems, very few studies have been conducted, just a few general studies and some on the evolution of these signs.\(^53\) The information on the use of vowels to be found within the Masoretic material has hardly been studied at all,\(^54\) although Dotan recognizes that the vowel theory to be seen in the Masorah is very complex and hard to understand at present.\(^55\)

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Finally, the information on vocalization, accentuation, prepositional regimes, as well as the (semantic or morphological) sorting criteria followed in Masoretic lists suggests a certain relationship between Masorah and grammar that has been analysed, especially by Dotan. For decades, he has studied the role of the Masorah and the Masoretic period at the beginnings of Hebrew grammar and presented a conclusive study on this role in his latest monograph. As compared to the accepted view that Jewish wise men adopted from their Arab colleagues everything to do with grammar, the study of the alphabetical lists of “two with two meanings” has enabled him to prove that the Masorah already contained a “primitive” grammar that is not influenced by the Arabs.

The grammatical nature of the Masorah has also been studied by Fernández Tejero and Ofer.

5. Comparative Studies

In the 1980’s and 1990’s, especially in Spain, a series of comparative studies were conducted which represented the beginning of a new line of very valuable research to better understand the nature and process of formation of the Masorah. These works consisted in comparing the information in different manuscripts, especially the Tiberian and Sephardic.
ones and, within them, the way they were used in the Hebrew column of the Complutense Polyglot Bible. The benefits and importance of the comparative studies were also identified and applied in the “Bomberg” project, conducted in France by P. Zanettacci and M. Serfaty. However, these types of studies were discontinued.

Fortunately, several recent papers have taken up this line again. The comparative study of the Masorot of the book of Deuteronomy in the Leningrad and M1 manuscripts, by C. McCarthy, confirms the usefulness of these studies by moving one step further and presenting cases in which the Masorah included in M1 helps to decipher the obscure cases of the Masorah of L. Also, Fernández Tejero has used these two manuscripts, the text and the Masorot of L (in the BHS edition) and the text and Masor-
rot of M1, to analyse the different formulation of the masoretic notes for the same item, the consistency between one text and its Masorah and possible discrepancies between the sources. The same author has conducted a study of the phenomenon of the *sebirim* collating the cases that appear in the book of Joshua with the *Masorot* of C, A, L, M1, and the Rabbinic Bible of Jacob Ben Hayyîm. Lastly, the study of the *qere we la ketib* phenomenon in the three main Tiberian codices (C, L and A), conducted by Martín-Contreras, has revealed a new case heretofore unidentified.

6. **MASORETIC/TEXTUAL PHENOMENA**

Some textual phenomena present in the biblical text and addressed in the Masorah have received special attention from researchers.

The lack of agreement on the origin and function of the *ketib-qere* phenomenon has meant that it is one of the most closely studied phenomena. Several proposals made since the 1980s have modified, extended or completed the two traditional theories given to explain this phenomenon (that of correction and that of textual collation).

J. Barr proposed a new approach: change the starting point by looking at the reading tradition instead of the manuscript tradition. According to him, the origin of the *ketib-qere* did not lie in the problems of the manuscript tradition but in the relationship between the manuscript and the way in which the Bible was read liturgically. The *qere* would represent the oral tradition of reading, while the *ketib* would represent the consonant graphic tradition. The essential role of the *qere* would be to confirm the *ketib* when it differs from the *qere*, as correct and, therefore, preserve the biblical text. W. S. Morrow and G. Clarke came to the same conclusion as Barr about the origin of the

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qere after analysing the cases of ketib-qere present in the Aramaic portions of the books of Daniel and Ezra, but consider that the function of the qere is not only to protect the ketib, but also to avoid the ketib being contaminated by the qere and vice versa. According to M. Graves, none of these explanations would be sufficient to assess the origins of this phenomenon. He proposes to consider the traditional theories separately and to make what he calls “basic questions” but he fails in showing the benefits of his approach. He merely provides a few examples of qere-ketib cases to support his answers to those basic questions and to conclude that “perhaps the immediate origin of the Ketiv-Qere system was the need to record both an authoritative written text and a separate reading tradition, but the ultimate source of the reading tradition was a popular manuscript recension.”

In a recent study of the cases of ketib-qere marked in A. M. Cohen also puts the origin of this phenomenon at the time in which oral components of the biblical text were written down; however, he believes that the differences between ketib and qere come from two different linguistic traditions and not from textual changes. The ketib would represent literary language and the qere would reflect the vernacular of the time when it was recorded.

Alongside these reformulations, a new methodological approach to the study of ketib-qere has also been proposed. Morrow and Clarke were the first to point out the methodological problems of previous studies, which were based on lists of ketib-qere drawn up on the basis of different manuscripts and editions. Therefore, in their study they only analysed the ketib-qere present in a single manuscript, Leningrad. This is the method used since then in studies of this phenomenon.

Due to the change in methodology, numerous articles have been published on the behaviour of the ketib-qere in a given manuscript, in a biblical book, etc.

70 Ph. Cassuto, “Qere-Ketiv et Massora Magna dans le manuscript B19a,” Textus 15 (1990), 84-119; idem, “Qere-Ketiv et linéarité du texte biblique aux vues des méthodes
Furthermore, several classifications of the ketib-qere have been proposed as an alternative to the different approaches –historical (oldest qere versus later qere), grammatical, syntactic, phonetic, semantic– followed by Gordis.\textsuperscript{71} J. Barr proposed five categories based on “what of sort of difference is made by the transition from ketib to qere”\textsuperscript{72} and Morrow and Clarke, who did not agree with these categories but were inspired by Barr’s work, proposed just two categories: orthographic and morphological.\textsuperscript{73} Finally, Ph. Cassuto proposed a classification based solely on formal criteria: textual unit on the note (verses, word, letter), position (beginning, middle, end) and mater lectionis compared to other characters.\textsuperscript{74}

Another of the phenomena studied has been the so-called tiqqune soferim, ‘corrections of the scribes’. Recent decades have seen the publication of several studies that, based like E. Barnes\textsuperscript{75} on an analysis of the sources, seek to understand and explain the number, order, lo-


\textsuperscript{72} J. Barr, «A New Look», 28.

\textsuperscript{73} Morrow - Clarke, «The Kethib/Qere in the Aramaic», 411.

\textsuperscript{74} Ph. Cassuto, \textit{Qeré-Ketib et Listes Massorétiques dans le Manuscrit B19a} (Frankfurt a. M., 1989).

calization and terminology discrepancies reflected in the sources and the implications of this phenomenon. The comprehensive and extensive work done by C. McCarthy concluded that only three cases could be considered a correction and the rest, not even euphemisms. Therefore she proposed circumscribing the phenomenon to the scope of the exegesis rather than to that of textual criticism. She also championed the distinction between the two terms used kinnâ and tiqqûn, with slightly different meanings, although they represent the same phenomenon. It is on this dual terminology that M. A. Zipor bases his proposal. According to him, one must distinguish between the cases that are called tiqqun and those that are called kinna, because the list is a combination of two different phenomena, corrections and euphemisms, respectively. So, the roots of this tradition, despite its textual implications, could lie in a literary phenomenon.

Another issue that has been studied is how this phenomenon is treated in the Targum tradition and the position that medieval and modern commentators take towards it.

To a lesser extent, studies have been conducted of the irregularities affecting the written form of the biblical text, also attributed to the soferim.


7. THE OTHER MASOROT

As I mentioned at the start of this article, the studies devoted to Masorah in the other Palestinian and Babylonian vocalization systems, and to the Masorah that appears in the Targum of Onkelos, are quite scarce. After the initial interest sparked by the discovery of Hebrew manuscripts containing such Masorot in the late 19th and early 20th centuries, their study fell into obscurity until, from the 1970s onwards, several scholars began studying them once more.

The new fragments of Babylonian magna Masorah published mainly by Weil in the 1960s renewed interest in this Masorah. Yeivin published the fragments with Babylonian vocalization and Masorah from the Genizah together with similar materials of different origin. Yet it has been Ofer who, in addition to a few partial studies, has presented an in-depth study on the principles and methods of this Masorah in the Pentateuch.

The first editions of the Masorah to Targum Onkelos, published in the 19th century, did not use all the known manuscripts of this Targum, sometimes because they did not have access to them, or only partially, and other times because they were discovered later. From the 1980s onwards these absences disappeared with the inclusion of new findings and greater access to documents in further studies on this Masorah. Díez Merino was the first to edit the Targum Masorah to be found in the margins of the manuscript Vatican Ebr. 448. Although its vowels and Masorah are predominantly of Tiberian tradition, this manuscript contains traces of a Babylonian origin.

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81 I. YEIVIN, Geniza Bible Fragments with Babylonian Massorah and Vocalization: Including Additional Bible Fragments with Babylonian Massorah and Vocalization. Together with a Description of the Manuscripts and Indices (Jerusalem, 1973), 5 vols.
However, one third of its Masoretic notes were left unedited. This led M. L. Klein to publish a new critical edition of the Masorah to Targum Onkelos with commentary based on the manuscripts Vatican 448, the Angelica Or. 7, the Genizah fragments and the sources used in the first two editions published by Berliner and Landau in the 19th century, which also includes an extensive bibliography of the works of this type and the reproduction of some of the author’s articles on this topic. 85

The fact that not many biblical texts with Palestinian vocalization have been found and that those that exist are characterized by not having many Masoretic notes, explains why there are almost no studies on this Masorah. 86

8. ELECTRONIC RESOURCES RELEVANT TO MASORETIC STUDIES

Technology opens up a wide range of possibilities for study Masorah, making rare but indispensable books and manuscripts more accessible, and providing tools to make work on Masoretic material simpler and more efficient. In addition, it enables students to work in ways with which they are already familiar.

Digitized material that is free and available on-line as well as commercial software packages are a great step forward in improving and extending the area of Masoretic studies.

8.1. Search Engines for Biblical Studies

Most computer programs developed in the area of Biblical Studies contain electronic versions of printed editions of two of the oldest existing codices: A (The HaQeter software from Bar-Ilan) and L (Bible Works, Accordance, Logos, etc.). These programs allow for complex searches


of all words in the text and to produce concordances. This last feature in particular both accelerates and eases the work of deciphering Masoretic notes. For example, a task such as the identification of the simanim, which has traditionally been considered to be especially painstaking, is turned into something that is quick and accessible.

However, Masorah is almost entirely missing from these programs. The only program currently designed for work on the Masorah is The HaQeter software, the CD-ROM accompanying the printed edition of Miqra’ot Gedolot ha-Keter. This program is the only one which includes the entire Masorah (both Parva and Magna) of one manuscript and allows for making searches in Masoretic notes. Moreover, the apparatus “Ein Ha-Masorah” enables the identification of the simanim placed in A.

The Masorah Magna and Parva of L, according to the BHQ edition (except for the volumes on Twelve Minor Prophets, Proverbs and Judges), are included in Accordance 10 and in Logos 5. In Accordance, the Notes on the Masorah (in the printed edition these are placed separately) are combined in order to eliminate the user’s need to alternate back and forth between references. But it is not possible to search in the corpus of the Masorah.

Logos 5 also offers as complementary tools: a) the MM of BHS, published by G. E. Weil in a separate volume; b) the electronic version of Kelly, Mynatt and Crawford’s book.

There thus remains much progress to be made in order to reap all of the potential benefits of the use of these technologies in the study of Masorah.

8.2. Manuscripts, Resources and Tools Online

To work on a Masoretic note does not require simply reading and understanding the text but also verifying it and contrasting it with related texts. To achieve this, it is necessary to make use of manuscripts, editions and reference works. Fortunately, some of the most important of these resources are available online or in digitized form.

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88 KELLY, MYNATT and CRAWFORD, The Masorah of Biblia Hebraica.
89 For reasons of space links to digitized articles and books have not been included in this section.
90 MARTÍN CONTRERAS –SEIJAS DE LOS RÍOS, Masora, 75-97.
a) Main Tiberian codices:

- The Aleppo codex can be read online, in high resolution and with the option of zooming in on the images (http://www.aleppocodex.org/new-site/index.html);
- It is also possible to download scanned colour photos of the manuscript in high resolution (http://www.seforimonline.org/seforimdb/index.php?table_name=seforim_database&function=details&where_field=id&where_value=263);
- The Leningrad codex can be read online and downloaded in PDF form (http://archive.org/details/Leningrad_Codex);
- The facsimile edition of The Cairo Codex of the Prophets published by D. S. Loewinger can be consulted online (http://www.seforimonline.org/seforimdb/pdf/266.pdf).

b) Reference works:

- The monumental four volume Masoretic compilation produced by Ginsburg can be downloaded (http://www.seforimonline.org/seforim3.html);
- The four volumes of the second edition of the Rabbinic Bible edited by Ben Hayyim can be read online and downloaded (http://archive.org/details/The_Second_Rabbinic_Bible_Vol_1;http://archive.org/details/The_Second_Rabbinic_Bible_Vol_2;http://archive.org/details/The_Second_Rabbinic_Bible_Vol_3;http://archive.org/details/The_Second_Rabbinic_Bible_Vol_4);
- The edition of the Sefer Oklah we Oklah published by Frensdorff based on the Paris manuscript can be read online and downloaded (http://hebrewbooks.org/36175).

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91 D. S. LOEWINGER (ed.), Codex Cairensis of the Bible from the Karaite Synagogue at Abbasiya (Jerusalem, 1971).

92 GINSBURG, The Massorah Compiled.

93 Biblia Rabinica, repr. of the 1525 Venice edition by Jacob ben Hayim Ibn Adoniya, 4 vols. (Jerusalem 1972). At the end of volume IV, the text presents the Masora Finalis, which contains over 5000 masoretic lists arranged alphabetically, and cross-references the lists in the edition. Following the presentation of this Masorah, it also includes the variants between various Masoretic schools, namely between ben Asher and ben Naftali, as well as the variants between Eastern and Western traditions.
CONCLUSION

The truth is that there are innumerable studies on the Masorah. Besides those already mentioned throughout this article, there are studies of specific phenomena such as the differences between the Eastern and Western Masorites and the differences between Ben Asher and Ben Naftali; on the divisions of the Masoretic text; on specific lists or on terms; on specific aspects of the Masorah of L; or the Masorah in connection with Rashi or Rabbinic literature, and much more.


Despite this large body of work and that editing the Masorah has been and remains the main line of research, there is still much unedited material, which affects general knowledge of the content and nature of the Masorah. Thus, over forty years later, the words of Weil remain true: “an elaborate study of what falls under the very general name of Masorah compels us to realize that in this area we have not gotten beyond the very first stages.”

Recibido: 13/02/2013
Aceptado: 17/06/2013

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