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[T]o kill an error is as good a service as, and sometimes even better than, the establishing a new truth or fact.¹

Scholarly advance in the humanities often depends less upon sensational new discoveries than upon the questioning and re-evaluation of what had become unquestioned assumptions...²

Abstract: In this essay we summarize the status quaestionis of diachronic linguistic study of Biblical Hebrew as reflected principally in some major publications of the recent several years. We reflect critically on research objectives, perspectives on sources, documentation of variation and change, and periodization issues. We also include a detailed bibliography of relevant works published since our Historical Linguistics and Biblical Hebrew (November 2014).

Keywords: historical linguistics, linguistic dating, language variation and change, language periodization

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1. Introduction

Research on the linguistic history of ancient and Biblical Hebrew (BH) is a vibrant field that is currently undergoing dramatic changes thanks to advances in our appreciation of language variation and change, consideration of the history of the biblical writings in their literary and textual
dimensions, and the application of far more in-depth, data-driven, and methodologically sound methods of collecting and analyzing linguistic phenomena.³

In this essay we summarize the status quaeestionis as reflected principally in some major publications of the recent several years:⁴


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³ This contrasts with a more conventional piecemeal and intuitive approach, on which see also M. Ehrensvärd, R. Rezetko, and I. Young, “Counting and Weighing: On the Role of Intuition in Philology and Linguistics, with Some Thoughts on Linguistic Comments by R. E. Friedman in The Exodus,” B&I November 2017 (http://bibleinterp.com/articles/2017/12/ehr418003.shtml).

⁴ See our separate review of the recent book by Hendel and Joosten: “Can the Ages of Biblical Literature be Discerned Without Literary Analysis? Review-Essay of Ronald Hendel and Jan Joosten, How Old is the Hebrew Bible? A Linguistic, Textual, and Historical Study (AYBRL; New Haven/London: Yale University Press, 2018; xvi + 221),” B&I January 2019 (https://bibleinterp.arizona.edu/articles/can-ages-biblical-literature-be-discerned-without-literary-analysis). Despite their stated aims (ibid., x), they do not “gather the fruits of recent research on Biblical Hebrew” or engage in “scholarly dialogue” with recent research in our field.


Six of the authors of the thirty-four essays under review contributed to two or three of the volumes.

Following this introduction, we reflect critically on how the authors of these publications handle and progress—or fail to—the central matters of research objectives, perspectives on sources, documentation of variation and change, and periodization issues. On the whole, we see a significant progression in the application of historical linguistic theory and method as we move from the volumes edited by Garr and Fassberg and Gertz et al. which by and large reflect a conventional and somewhat dated stage of scholarship on language chronology, to the volume edited by Moshavi and Notarius, to the two journal issues which are the most up-to-date in their historical linguistic ideas and approaches. We also include a substantial bibliography of relevant works published (or forthcoming) since our Historical Linguistics and Biblical Hebrew (November 2014).
Fassberg’s organization of the history of research into three periods is neat and helpful, even if we believe that it requires some refinement of the third period.12 “The first period begins with the publication of Gesenius’ *Geschichte* in 181513 and continues until 1896, the year that the first Hebrew fragments of Ben-Sira (Ecclesiasticus or Sirach) were published.”14 Driver’s distinguished *Introduction* was also published in this period.15 “The second period of research...may be said to commence with the recognition that the language of the Hebrew Ben-Sira manuscripts from the Cairo Geniza as well as of the Damascus Document (published in 1910) reflect a Hebrew that is basically Classical Biblical Hebrew with Mishnaic Hebrew-like additions.”16 A notable publication during this period was Kropat’s *Syntax*.17 “The discovery of the Dead Sea Scrolls in 1947 and the publication of the first Scrolls a year later inaugurated the third period of research...”18 Some of the best known and most respected treatments published during this period


15 S. R. Driver, *An Introduction to the Literature of the Old Testament* (Edinburgh: T&T Clark, 1891; first publication date).


include those of Bendavid, Kutscher, Hurvitz, Polzin, and various students of Hurvitz and Polzin.

However, in contrast to Fassberg, who considers that the third period of research covers from 1948 to the present, we believe that a fourth period has emerged since the 2000s, although it was anticipated by several publications already in the early 1990s. Five major publications embody the ongoing debate and change in scholarship from the early 2000s until several years ago: Young’s edited volume *Biblical Hebrew: Studies in Chronology and Typology*, our co-authored *Linguistic Dating of Biblical Texts*, Miller-Naudé and Zevit’s edited volume *Diachrony in Biblical Hebrew*, Kim’s *Early Biblical Hebrew, Late Biblical Hebrew, and Linguistic Variability*, and our co-authored *Historical Linguistics and Biblical Hebrew*. These works cannot be regarded as aberrations or anomalies in a period of research from 1948 to the present but rather...
as embodiments of a new stage of research that began about fifteen years ago and continues to expand and mature. As will become clear, this new stage of research is evident far beyond our own publications; it is hardly a peculiarity of just a very small group of scholars consisting only of Young, Rezetko, and Ehrensvärd, or of “minimalists”—which we are not—as some scholars claim (erroneously).28

The dramatic changes that our field is currently undergoing are nicely articulated by Naudé and Miller-Naudé in their recent discussion of the state of the debate:

Contra the view of Kaufman (2014)29 (see also Gzella 201430) on Miller-Naudé and Zevit (2012)31 that the key point of the debate remains essentially without resolution and that it covers the same ground and repeats the same arguments that were presented elsewhere, the aim of this article is to demonstrate that there is advancement in our understanding of the diachrony of Biblical Hebrew and that the debate has indeed moved forward—not only by the response of Rezetko and Young (2014), but also by the 2015 session of the Linguistics and Biblical Hebrew Section. Specifically, these advancements concern the nature of language change in terms of periodisation, appropriate methodology in terms of qualitative and quantitative methods, the interpretation of data, and the role of scribal practice and text transmission. There is progress in the debate in that misunderstandings have been clarified and claims have become more nuanced.32

27 Rezetko and Young, Historical Linguistics and Biblical Hebrew, 594–596; I. Young, R. Rezetko, and M. Ehrensvärd, “Do We Really Think That Ancient Hebrew Had No Chronology?” (https://www.academia.edu/24578410/2016b_Young_Rezetko_Ehrensvärd_Do_We_Really_Think_That_Ancient_Hebrew_Had_No_Chronology); R. Rezetko, “Response to Steven E. Fassberg, ‘What is Late Biblical Hebrew?,’ ZAW 128 (2016): 1–15” (https://www.academia.edu/25884031/2016h_Rezetko_Response_to_Fassberg_What_is_Late_Biblical_Hebrew); and so on.


31 Miller-Naudé and Zevit, Diachrony in Biblical Hebrew.

32 Naudé and Miller-Naudé, “Historical Linguistics, Editorial Theory, and Biblical Hebrew,” 834. Note also the assessment of the overall situation by Hornkohl, even if he continues as something of a stalwart of a somewhat conventional approach: “While the aforementioned emphases [on pp. 1008–1009] can hardly be considered innovative from the perspective of some of the more circumspect discussions of
At the conclusion of their introductory essay to the journal issue, the Naudés again reiterate that the diachrony debate has made advances on several fronts, including:

- The kind of language change possible in BH and how to typify the diachronic development of BH;
- Statistical methods for the study of the diachrony of BH;
- The role of editorial theory (the so-called New Philology) in the study of BH and of BH texts.  

Relating to the Naudés’ “appropriate methodology in terms of qualitative...methods” and “how to typify...diachronic development,” specific reference should be made to ongoing recourse to cross-linguistic data, language typology, and diachronic typology, evident in some contributions to the Moshavi and Notarius, *JSem*, and *HS* volumes. As remarked above, this and the other advances mentioned are far less evident in the volumes edited by Garr and Fassberg and Gertz et al.

At the conclusion of the introductory essay to their edited volume, Moshavi and Notarius go over some main points as follows:

> In summary, the overview presented here, in combination with the contributions in this volume, demonstrates in our view that despite the numerous differences between current approaches to BHL [Biblical Hebrew Linguistics], there is a basic commonality of purpose and method among scholars in the field. It is widely agreed that a mutually beneficial relationship exists between Hebrew language study, general linguistics, philology and biblical studies. Less consensus exists regarding attitudes toward the nature of the biblical data, including approaches to textual criticism, the development of literacy, and BH periodization. With regard to linguistic methodology, there is broad agreement on the utility of the corpus-based approach and typological comparison, and an increasing tendency towards a nondogmatic use of concepts drawn from a variety of theoretical frameworks. 

This is a helpful statement of where things stand. Yet, while we agree there is less consensus on several issues (see section 3 and section 5), we also believe there is not yet “a basic commonality of purpose and method” nor “a mutually beneficial relationship between Hebrew language study...and biblical studies” if the latter is intended to encompass literary (including source and redaction) criticism (see section 2 and section 4).  

In the remainder of this essay we address ancient Hebrew diachrony, the field has arguably profited from the critique, which has led to both more cautious and refined argumentation as well as broader exposure” (Hornkohl, “Hebrew Diachrony and the Linguistic Periodisation of Biblical Texts,” 1009).

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35 In contrast, the recent contribution by Rooker is an unhelpful statement of the *status quaestionis* that is at least five years out of date (M. F. Rooker, “Recent Trends in the Linguistic Analysis of Biblical Hebrew,” in *The Unfolding of Your Words Gives Light: Studies on Biblical Hebrew in Honor of George L. Klein* [ed. E. C. Jones; University Park: PA: Eisenbrauns, 2018], 38–52.)
36 In essence, then, the assessments of the overall situation by Gesundheit and the Naudés are correct: “To conclude, we have seen that the field of historical dating is exceptionally thorny and *utterly lacking in*
these differences, and issues that have yet to be ironed out and work that remains to be done, together with the advances that have been made in recent years. We also comment on some specific responses to our own work.

2. Research Objectives

It is well known that we have argued time after time against the possibility of assigning dates of origin to the writings of the Hebrew Bible on the basis of their linguistic profiles. One facet of our argument has been that linguistic dating is a very eccentric discipline that is largely idiosyncratic to Hebraists and biblicists—it is highly unusual in historical linguistics—and consequently it would behoove our field to adopt the descriptive perspective of conventional historical linguistic theory and method. Fortunately, this change is happening, but unfortunately, there is still a significant chasm of purpose among scholars in the field due to the fact that the work by some continues to be inextricably entangled with linguistic dating. This is especially evident in the volume edited by Gertz et al. It is explicit in the title of part 3, “The Role of Historical Linguistics in the Dating of Biblical Texts,” and in the titles (and contents) of many of the contributions. Furthermore, while the title of the section gives the impression that linguistic dating is consensus. There are numerous methodological pitfalls, and there are problems surrounding various conclusions as well. We can only hope that increasing dialogue between scholars worldwide, as exemplified in the research group whose first fruits we are now seeing in this volume, will pave the way toward some clarity in this most important field of research” (Gesundheit, “The Strengths and Weaknesses of Linguistic Dating,” 302; emphasis added); “Important debates and developments further reflect the vitality of Biblical Hebrew linguistics in the twenty-first century. One important debate involves the challenge posed to traditional models for identifying and describing the diachronic character and phases of biblical and post-biblical Hebrew. New hypotheses and new models for identifying and understanding language variation and change have been proffered and no consensus has been reached thus far” (J. Naudé and C. Miller-Naudé, “The Evolution of Biblical Hebrew Linguistics in South Africa: The Last 60 Years,” OTE 31 [2018]: 12–41 [22]; emphasis added). Similarly, Blum emphasizes the need for cooperation due to the lack of consensus: “Beyond the ongoing dispute about methodological questions and textual details, both disciplines – historical exegesis and Hebrew linguistics – need to work in constant and tight cooperation. Such cooperation would be of immense benefit for both, especially in terms of method” (Blum, “The Linguistic Dating of Biblical Texts,” 325).

37 Background reading: Rezetko and Young, Historical Linguistics and Biblical Hebrew, 14–21; cf. 3–6, 594–598.

38 However, to repeat, we have never advocated a non-diachronic approach to the Hebrew Bible, including its language. See the references in n. 27 and n. 37.

39 See the references in n. 37.

subsidiary to historical linguistics, one has to look very hard to find anything in the volume that resembles conventional historical linguistic theory and method. The exception is Mizrahi’s essay which sits on the edge between the two approaches.  

Otherwise, the several passing references by others to “historical linguistics” and “historical sociolinguistics” in the conclusions to their essays appear only as rhetorical afterthoughts.

The volume edited by Garr and Fassberg aims to give a descriptive overview of the phases and sources of ancient Hebrew, thus its intention and scope are quite different to the volume edited by Gertz et al. Nonetheless, linguistic dating still makes several unexpected appearances in this volume, as well as in one essay in the volume edited by Moshavi and Notarius and in three essays in the JSem issue. It is clear that the few scholars who are digging in their heels to advocate for a fading linguistic dating approach are now the exception rather than the rule. Otherwise, the research objective has largely shifted to a descriptive one involving more sophisticated data mining and evaluation of the results (see section 4).

This advance is in line with others’ work besides our own. For example, linguistic dating is unmentioned in Moshavi and Notarius’ survey of current scholarship, and elsewhere Notarius explains well that “historical linguistics is not text-dating.” In contrast, in the volume edited by Notarius and Moshavi, Hornkohl alone explicitly links “those who accept the diachronic approach to BH and who attempt to date texts linguistically.” We have already indicated in another place that some of the contributors to Miller-Naudé and Zevit’s edited volume Diachrony in Biblical Hebrew manage to separate themselves from the conventional linguistic dating approach and “the validity of the use of linguistic features as indications for literary-historical periodization” (ibid., 431), that is, linguistic dating (cf. ibid., 428–431; Polak, “Storytelling and Redaction,” 449).

Mizrahi, “The Numeral 11 and the Linguistic Dating of P.” The purpose of Mizrahi’s essay is to highlight a “blind spot” that is inherent in Hurvitz’s linguistic dating method (ibid., 372).


Moshavi and Notarius, “Biblical Hebrew Linguistics.”


Hornkohl, “All Is Not Lost,” 69. It is clear that for him, diachronic or historical linguistics in Hebrew or biblical studies is linguistic dating. This is also evident in other publications by him.
The current large-scale Dutch research project, “Does Syntactic Variation reflect Language Change? Tracing Syntactic Diversity in Biblical Hebrew Texts,” also is descriptive rather than prescriptive (that is, it is not oriented toward linguistic dating as such). The ongoing change of focus in research from linguistic dating (of biblical texts) to historical linguistics (of language features) with its conventional theoretical and methodological properties is a welcome advance in the field, because it aligns it with mainstream scholarship on language variation and change and it sidelines the inconclusive results and highly problematic presuppositions and procedures of linguistic dating. This said, Klein remarks, “diachronic linguistics and textual dating are separate enterprises, even though the results of the first can be useful to the second,” and similarly, Notarius comments, “text-dating need not be the overarching goal of historical linguistics, but the results of the linguistic change analysis may be usefully integrated into the dating process alongside other historical and philological data as part of the hermeneutic circle.” We agree. However, researchers in our field are just beginning to document variation and change in ancient (and Biblical) Hebrew (see section 4) in a way that could possibly prove beneficial for establishing the linguistic periodization of biblical writings or for answering a question like “How old is the Hebrew Bible?” and its constituent parts. Our field is moving on, but there is still a long way to travel. Finally, we believe that the burden falls on the few scholars who are reticent to foray into historical linguistics (of language features) and abandon linguistic dating (of biblical texts) to offer a defense of their approach which is largely idiosyncratic to Hebraists and biblicists.

49 Rezetko and Young, *Historical Linguistics and Biblical Hebrew*, 20 n. 20 (contributions by Dresher, Naudé, J. A. Cook, Holmstedt, and Bar-Asher Siegal).
51 Klein, “Historical Linguistics and Biblical Hebrew,” 879 n. 16; cf. 872.
52 Notarius, “Historical Linguistics is Not Text-Dating,” 397; cf. 394–397.
53 We have discussed elsewhere that there have been occasional stabs at the linguistic dating of texts (i.e., autographa or original compositions), with respect to some non-biblical writings (Young, Rezetko, and Ehrensvärd, *Linguistic Dating of Biblical Texts*, 1:61–62; Rezetko and Young, *Historical Linguistics and Biblical Hebrew*, 18–20). However, on close inspection it becomes clear that these attempts have been executed on the basis of preconditions, usually the availability of adequate control corpora (i.e., sufficient quantity and quality of other dated and localized manuscripts), that do not hold for biblical writings. In particular, this assessment is relevant to the Egyptian texts that are treated in G. Moers, K. Widmaier, A. Giewekemeyer, A. Lümers, and R. Ernst (eds.), *Dating Egyptian Literary Texts* (Lingua Aegyptia, Studia Monographica, 11; Hamburg: Widmaier, 2013), esp. 161–281; A. Stauder, *Linguistic Dating of Middle Egyptian Literary Texts* (Lingua Aegyptia, Studia Monographica, 12; Hamburg: Widmaier, 2013).
3. Perspectives on Sources

Moshavi and Notarius remark in their summary of current BH linguistic scholarship that “[l]ess consensus exists regarding attitudes toward the nature of the biblical data, including approaches to textual criticism.” Their observation is correct. And it is a remarkable observation for two reasons, first, because among textual critics of the Hebrew Bible, there is broad consensus regarding the nature of the biblical data, including approaches to textual criticism, and second, because among historical linguists of other languages, there is substantial agreement on the pre-tasks for making use of written text specimens for diachronic linguistic research. Schendl, for example, comments:

The hypotheses of the historical linguist depend crucially on the interpretation of the data. It is not just a matter of the amount of data available but primarily of their quality. To evaluate the quality of old texts, we have to find out as much as possible about their extralinguistic context (such as the author, scribe, purpose, and location of a text, etc.), and about the textual tradition, including the original form and date of composition and copying. This is the task of the philologist, for whom auxiliary disciplines such as history and paleography, the study of ancient writing, are of major importance.

Only very few old texts are in the author’s own hand, and even these may show various kinds of textual errors. Mostly they are the result of multiple copying by different scribes in different regions and over a long period of time. Some texts are compilations by a specific author from linguistically divergent, possibly orally transmitted original sources, as with Homer’s Iliad and Odyssey, or the Rigveda, the oldest collection of religious texts written in Sanskrit. Such textual history may result in linguistically composite texts with a mixed language, full of scribal errors due to negligence or insufficient competence in the language(s) or varieties of the original. These different linguistic layers, whether dialectal or diachronic, must be disentangled and scribal errors detected before the text can be used as data for forming hypotheses about specific stages of a language.

So also, our pre-tasks as Hebraists and linguists should embrace the history of the biblical writings in their literary and textual dimensions, including fair-minded engagement with the methods and results of source criticism and redaction criticism.

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54 Background reading: Rezetko and Young, Historical Linguistics and Biblical Hebrew, 21–45, 59–210 (chapters 3–6).


56 See the thorough discussion in Rezetko and Young, Historical Linguistics and Biblical Hebrew, 59–116, and more recently, the discussions of the text-critical paradigm in Young, “Ancient Hebrew Without Authors”; idem, “Starting at the Beginning with Archaic Biblical Hebrew.”

57 H. Schendl, Historical Linguistics (Oxford Introductions to Language Study; Oxford: Oxford University Press, 2001), 14–15; cf. 11–15. For other pertinent discussions and quotes similar to this one, see the many references in Rezetko and Young, Historical Linguistics and Biblical Hebrew, 21–22 n. 21.
The absence of consensus is noticeable in the contributions to the five main publications we are discussing. The several dozen authors represent the entire scope of perspectives, from silence or dismissiveness to recognition or engagement with the last approach either supporting or challenging a particular viewpoint.

Much silence about literary and/or textual matters is understandable when considering the contexts or objectives of the contributions. Jacobs, and Naaijer and Roorda, for example, are interested in illustrating new tools for describing the distribution of particular linguistic features in the Masoretic Text (MT). Joosten, while acknowledging the issues, summarily dismisses them in order “to rehabilitate” the conventional linguistic dating approach (see section 2, and further below in this section). Others are more circumspect in their recognition of the seriousness of the issues even if they do not seek to deal with them themselves. For example, concerning problems of composition and trustworthiness of sources, Klein comments:

All of these make it abundantly clear that a text once circulated within a community was re-worked over and over again by different editors, and copied by different scribes, with no attempt to produce a cohesive text, almost certainly over a considerable period of time and most likely in different places...Over and above these considerations stands the issue of trustworthiness of sources. There can be no doubt about the care with which the Masoretic text was treated from a certain point forward; however, its origin is centuries removed from

60 In addition to what follows, these comments are other examples: Epigraphic Hebrew’s “importance lies in revealing biblical-period Hebrew as written, and sometimes spoken, without the intervention of subsequent editors and copyists [as in the Hebrew Bible]” (Aḥituv, Garr, and Fassberg, “Epigraphic Hebrew,” 55–56); “There is no doubt that in some instances, nonstandard features in the language of the biblical books were eliminated by ancient copyists who replaced them with more standard features...No definite answer to this question can be given, which illustrates the difficulty of applying historical-linguistic analysis to a literary text [= the Hebrew Bible] copied and recopied through generations” (Bloch, “Aramaic Influence and Inner Diachronic Development in Hebrew Inscriptions of the Iron Age,” 85 n. 5); “When discussing the corpus [of Late Biblical Hebrew], we must take into consideration the nature of our textual witnesses. For the most part, we are dependent on textual witnesses of the Masoretic version of the Hebrew Bible for our corpus. Since the Masoretic Text is the outcome of many years of transmission of both the written text and its reading tradition, there is some doubt regarding the extent to which it reflects the Hebrew of the LBH [Late Biblical Hebrew] period...” (Morgenstern, “Late Biblical Hebrew,” 45; cf. 45–46); “Given what is known about scribal practices during the biblical period of the history of the biblical texts, hopes of recovering composition dates using linguistic information seem misguided” (Forbes, “The Diachrony Debate: A Tutorial On Methods,” 895). Regarding the book of Ben Sira, “[a]t times, it seems that the extant Hebrew witnesses reflect the language of later scribes rather than that of the original author....Although various non-biblical linguistic elements...probably entered the text during its transmission...” (Van Peursen, “Ben Sira,” 69–70; cf. 69–71).
the composition of its constituents, bearing witness to a time of consolidation of religious practice far removed from the days when ‘īš hay-yāšār bē- eynāyw ya ăśeh.61

In a similar way, Gesundheit comments: “Most of Hurvitz’s analyses over the years have been of lexical items. This decision has its shortcomings, however, as lexemes, though prime examples of rapidly evolving linguistic features, are also particularly prone to editorial updating, as apparent from even a superficial comparison of the various textual witnesses of the Bible.”62 And the same author also remarks: “Revision – both literary and textual – is a major concern for both camps, as several scholars have noted. Textual adaptation can pollute the well by making early works look late, and conversely, it can make late features seem early.”63 The other authors of the introductory essays also highlight the non-linguistic issues,64 and it is refreshing that they are receiving the prominence they deserve even if in some instances the respective remarks are ill-conceived.

In the remainder of this section we look at how various contributors to the publications under review deal with some specific issues related to literary criticism and textual criticism.

3.1. Linguistic Analysis as a Support or Corrective to Textual Criticism

Moshavi and Notarius, referring to three previous essays by Holmstedt and Joosten,65 and citing as examples the essays (discussed below) by Hornkohl and Mizrahi in their own volume, say: “Although textual concerns can at times pose a challenge for linguistic research, they also present an opportunity for BHL to demonstrate that it can make valuable contributions to the field of textual criticism. The scientific methods of linguistic analysis enrich our knowledge of the BH language system and can lead to the solution to many difficult textual problems.”66 While there may be cases where (historical) linguistic analysis could aid in solving a particular text-critical problem, as a rule such an approach puts the cart before the horse in that it violates the normal,

61 Klein, “Historical Linguistics and Biblical Hebrew,” 875–876. Klein’s remark that “few if any scholars of BH would make such a claim” about the “pristine form” or “the ipstissima verba” of (MT) biblical writings (ibid., 875) is, sadly, untrue (cf. Rezetko and Young, Historical Linguistics and Biblical Hebrew, 59–60, 68–71, 83–110, etc.).


63 Ibid., 302. However, even as Gesundheit’s accompanying footnote 28 illustrates, it is untrue that revision “is a major concern for both camps” if one of those camps is supposed to be the one represented by Hurvitz et al. and the conventional linguistic dating approach.


65 We discuss in detail the text-critical views of Holmstedt and Joosten, and in particular their three essays cited by Moshavi and Notarius, in Rezetko and Young, Historical Linguistics and Biblical Hebrew, 9–10, 29–31, 89–96.

and judicious, procedure of historical linguistics. This is eminently clear and hardly debatable. Furthermore, the suggested approach fails to grasp the low-density (infrequent, etc.) and non-categoricality (sporadic, etc.) of the ancient Hebrew linguistic data that more often than not is involved in such text-critical problems. As a consequence, it is very doubtful that in a particular instance one can confidently make a textual emendation or decide between two or more textual variants on the basis of highly fluid and fluctuating linguistic variants of a particular linguistic variable. Finally, the suggested approach reflects a pre-Qumran understanding of the “original” text and of the objective of textual criticism of the Hebrew Bible. This brings us to the next issue.

3.2. Notion of the “Original” Text or Composition

Some of our authors speak about the “original” text in a laissez-faire manner that gives us pause about their views on the history of the biblical text and the MT in particular. For example, Moshavi and Notarius comment: “Since the canonical biblical texts have been transmitted by tradition through many generations, scholars investigating the linguistic properties of these texts must consider whether and how to engage with the field of biblical textual criticism, which seeks to reconstruct a text as close as possible to the original.”

With all due respect—and from our per-

67 See Schendl’s statement above and the additional sources referred to in n. 57.

68 Rezetko and Young, Historical Linguistics and Biblical Hebrew, passim; R. Rezetko and M. Naaijer, “An Alternative Approach to the Lexicon of Late Biblical Hebrew,” JHS 16 (2016) (http://www.jhsonline.org/Articles/article_213.pdf). This is discussed more below in this section and in the next section.

69 See the discussion of evaluating linguistic variants in Rezetko and Young, Historical Linguistics and Biblical Hebrew, 77–79, and many illustrations are given in the chapters on parallel passages and Samuel manuscripts (ibid., 145–210, 413–591). Another helpful contribution on the text of Samuel is J. K. Driesbach, 4QSamuel and the Text of Samuel (VTSup, 171; Leiden: Brill, 2016), which also includes a chapter on “linguistic exegesis” (ibid., 102–131) which “includes changes that have been motivated by grammatical or syntactical difficulties in the Hebrew text or by linguistic updating” (ibid., 52). However, his treatment of linguistic variants in this chapter and elsewhere is far from exhaustive, and very often his judgments are debatable because they rely indiscriminately on very general statements about this or that development of the Hebrew language.


71 Moshavi and Notarius, “Biblical Hebrew Linguistics,” 3. Some other awkward references to the “original” text include: “the original wording” (Hornkohl, “All Is Not Lost,” 58; quoting Hurvitz favorably); “an original” reading (ibid., 70); “the original text” (Joosten, “Diachronic Linguistics and the Date of the Pentateuch,” 338); “the originality of individual readings” (Mizrahi, “Linguistic Change through the Prism of Textual Transmission,” 34); “the language of the original texts” (ibid., 47); “the original language of the authors of the biblical texts” (Samet, “The Validity of the Masoretic Text as a Basis for Diachronic Linguistic Analysis of Biblical Texts,” 1065); “the text’s original wording” (ibid., 1065); “originality” (ibid., 1065); “the original language of the text” (ibid., 1067); “its original style” (ibid., 1067); “an original tradition...at the time when the book was authored” (ibid., 1072); “an original tradition, which goes back to the time of authorship of the relevant books” (ibid., 1073); “the original language of a given
spective as authors who have published plenty on the textual criticism of the Hebrew Bible\textsuperscript{72}—such words strike us as being rather close to what we and other contemporary textual critics re-

gard as “a vain quest for a holy grail which one can never hope to find.” However, we will not ask the reader to take our word for it; a few statements by several leading textual critics will make the point for us.

There is no evidence for the existence of the model of an original text because of the late date of our manuscripts, even the ones from the Judean Desert...In these cases, the textual evidence does not point to a single “original” text, but a series of subsequent authoritative texts produced by the same or different authors. Each of these stages may be considered a type of original text...However, now more than ever it seems that there never was an “archetype” or “original text” of most Scripture books....For most biblical books, scholars assume editorial changes over the course of many generations or even centuries. If this assumption is correct, there never was a single text that may be considered the original text for textual criticism; rather, we have to assume compositional stages, each of which was meant to be authoritative when completed.

In the case of the Hebrew Bible it is difficult to define what the “original” means, since each book is the product of a complicated and often unrecoverable history of composition and redaction. The “original text” that lies somewhere behind the archetype is usually not the product of a single author, but a collective production, sometimes constructed over centuries, perhaps comparable to the construction of a medieval cathedral or the composite walls of an old city.

All one needs to do is to think about the long and complicated editorial histories of the biblical books to recognize that the texts of our biblical books are very far from the traditionally envisioned “Moses and the Prophets and the Sages,” and to realize that the quest for the “original text” is naive in the extreme. The books grew organically and dynamically over the centuries, in what we can call new and expanded editions or revised literary editions.


74 For many other expert opinions on the text-critical situation of the Hebrew Bible, see Rezetko and Young, *Historical Linguistics and Biblical Hebrew*, 71–77.

75 Tov, *Textual Criticism of the Hebrew Bible*, 166, 167, 364 (emphasis original).


Therefore, we would like to ask Moshavi and Notarius and the others to answer questions such as these: Which “original” text or which in “a series of determinative (original) texts” do they have in mind when they talk about the “original” text of the Hebrew Bible? When do they date that “original” text or at least the data that is transmitted in it? Does that “original” text reflect literary, textual, and linguistic phenomena of the First Temple period or Second Temple period or both? And so on. In reality, the evidence available to us, which is from the later stages of textual transmission, indicates that the language of both earlier and later compositional stages in biblical books will not reflect the details of the language used at the time of their first composition. And also, in reality, due to the complex composition and transmission history of the Hebrew Bible, questions about compositional history have no hope of being answered apart from source-critical and redaction-critical research. With this we come to another issue.

3.3. Linguistic Analysis as a Support or Corrective to Literary Criticism

Our discussion of this issue has two parts, first, avoidance versus inclusion of literary criticism, and second, the notion of pre-exilic redaction mainly or only versus post-exilic writing in Classical Biblical Hebrew (CBH). We discuss these issues in turn.

3.3.1. Avoidance Versus Inclusion of Literary Criticism

The fact of the matter is that only a handful of contributors to the five main publications we are discussing enter into conversation here. In many cases, as already noted above, this really is not a problem given the contents and objectives of their contributions; however, it is relevant to many of the authors whose work we have discussed in the preceding sections. We already mentioned one author who summarily dismisses the literary issue in order “to rehabilitate” the conventional linguistic dating approach. Another author acknowledges the issue but likewise shelves it as “speculation” and “conjectural assumption.” Still another author briefly discusses the issue, even affirming that his view of both early and late literary strata in P is different from the view of this source as a more or less unified document that is held by some other Hebraists, but otherwise the issue does not figure appreciably in his essay either. Somewhat ironically, it is several “biblicists” rather than the self-labeled “linguists” who tackle this issue and whose approach stands nearest to what historical linguists of other languages, like Schendl (quoted above), think, say, and do. In particular, they adopt a philological approach that considers the full range of critical scholarship on written documents, including both their composition and transmission aspects as well as their linguistic characterics. Most notably, Blum argues that while “[l]inguistic anal-

78 Tov, Textual Criticism of the Hebrew Bible, 161, 163, 165, 167, etc.
79 For a discussion of what the “original” text of a biblical writing could mean, see Rezetko and Young, Historical Linguistics and Biblical Hebrew, 60–61.
80 Joosten, “Diachronic Linguistics and the Date of the Pentateuch,” 328.
yses are of fundamental significance for biblical exegesis. *Inter alia* they provide an indispensable tool for the dating of biblical texts,” simultaneously, “[o]nly a comprehensive analysis that includes all data available to historical philology has the potential to provide solid results.”

Therefore, following trenchant remarks on various flaws of linguistic dating, he “deal[s] with some interconnected texts in Genesis [ch. 24 and chs. 15, 22, 26] in order to indicate what is meant by a ‘comprehensive approach’ that includes linguistic data as part of exegetical dating.”

One may or may not agree with the results of Blum’s analysis of these texts, but there is no getting around the fact that his comprehensive approach is the only correct and viable one from the perspective of conventional historical linguistics. One more point is worth making here. Blum comments: “There is simply no ‘neutral/objective position’ in such issues, because refraining from diachronic [exegetical or literary-historical] analysis would itself inevitably involve a diachronic assessment,” namely in essence an assumption of non-diachronicity, or of synchronic unity (when in reality the situation is manifestly one of diachronic complexity). Finally, any who oppose this approach because they regard it as speculative or conjectural (see above) will have to accept—if they are committed to conventional historical linguistic theory and method—that this does not mean that the approach can be ditched in favor of the conventional linguistic dating approach, but that their/historical linguistic analysis is all the more unsure to the extent that the results of the philological approach itself are uncertain. To repeat: “The hypotheses of the historical linguist depend crucially on the interpretation of the data. It is not just a matter of the

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84 Blum, “The Linguistic Dating of Biblical Texts,” 303. “Moreover, for methodological reasons, linguistic arguments should be part of a much more comprehensive historical-philological endeavor” (ibid., 305). In a recent publication Schmid also advocates for a comprehensive approach that combines linguistic and alternative approaches to dating biblical writings, but his treatment is somewhat out of date since it does not consider the last five years of language discussions and remains oriented toward linguistic dating rather than historical linguistics (K. Schmid, “How to Date the Book of Jeremiah: Combining and Modifying Linguistic- and Profile-based Approaches,” *VT* 68 [2018]: 1–19).

85 Ibid., 303–314.

86 Ibid., 315–325 (quote from p. 315).

87 However, as observed above in section 2, Blum’s essay, like the others in the same volume, is oriented toward linguistic (or exegetical) dating rather than historical linguistics. Note also the contribution of Römer which briefly discusses linguistic evidence as part of a global theory/view about the formation of the Pentateuch (Römer, “How to Date Pentateuchal Texts,” 361–363), and the contribution of Wöhrle which, while not discussing linguistic issues per se (which is somewhat surprising given the context of his essay), seeks to show the literary complexity—both source and redaction—of the Priestly stratum of the Pentateuch (Wöhrle, “There’s No Master Key!”), and this is an essential part of a global approach and a necessary pre-task for making use of this written text specimen for diachronic linguistic research.

88 Blum, “The Linguistic Dating of Biblical Texts,” 308. Note our previous assessment along this same line: “It is arguable that many of these scholars employ a crypto-synchronic or quasi-diachronic approach since they purport to discuss diachronic developments in BH language, yet for all intents and purposes, that is, in their actual method, they negate diachronic developments in the literary and textual realms of the Hebrew Bible. Many scholars working on the history of the Hebrew Bible’s language are far less historically oriented than they seem” (Rezetko and Young, *Historical Linguistics and Biblical Hebrew*, 83 n. 118).
amount of data available but primarily of their quality. To evaluate the quality of old texts, we have to find out as much as possible about their extralinguistic context (such as the author, scribe, purpose, and location of a text, etc.), and about the textual tradition, including the original form and date of composition and copying.\textsuperscript{89} This is our reality even if to some it may seem “demanding” or “time-consuming” or “utopian” or “too complex.”\textsuperscript{90}

3.3.2. Notion of Pre-Exilic Redaction Mainly or Only Versus Post-Exilic Writing in CBH

Hebraists seldom if ever engage literary-critical study of the biblical writings and so as a matter of course they date books like Genesis through Kings in their entirety to the pre-exilic period because they do not believe it was possible to write Hebrew in a late(r) period without producing so-called Transitional Biblical Hebrew (TBH) or Late Biblical Hebrew (LBH). We begin with Hurvitz, because several contributors to the publications under review simply inherited his approach. Hurvitz’s argument is straightforward: late (post-exilic) writings inevitably have some degree (allowing for differences of consistency and frequency) of late language, hence writings without late language are dated early (pre-exilic). Furthermore, this explanation applies to the entire production history of biblical writings, including their “original” composition and subsequent editing and copying. In his own words, he “deal[s] exclusively with biblical texts in the way in which they have crystallized and in the form in which they now stand—regardless of textual alterations, literary developments and editorial activities which they may or may not have undergone during their long transmission.”\textsuperscript{91} Hurvitz has no regard for such matters because, he believes, “they lie in areas about which we have no direct information or actual facts,” and consequently, “[o]nly after the linguistic analysis of the actual texts has been completed without interference is there room to proceed and consider the findings…in a broader, non-linguistic

\textsuperscript{89} Schendl, \textit{Historical Linguistics}, 14.

\textsuperscript{90} See the words of Kabatek and Nevalainen and Raumolin-Brunberg in Rezetko and Young, \textit{Historical Linguistics and Biblical Hebrew}, 9 and 120 n. 8, respectively. For integrated diachronic literary, textual, and linguistic discussions of various texts in Judges, Samuel, Kings, and Jeremiah, see the publications of Rezetko cited in n. 72 and also Rezetko, “Biblical Hebrew Changed, but How?,” \textit{B&I} September 2016 (https://www.bibleinterp.com/articles/2016/09/rez408007.shtml), and Rezetko and Young, \textit{Historical Linguistics and Biblical Hebrew}, 302. Rezetko hopes to eventually complete a book on the Saul-David Stories in 1 Sam 9–2 Sam 1 that integrates (historical) linguistic analysis with historical, artifactual, literary, and textual criteria. Otherwise, there is very little else published in our field that combines these various approaches. In addition to Blum’s essay, see also Baruch Halpern, \textit{David’s Secret Demons: Messiah, Murderer, Traitor, King} (Bible in Its World; Grand Rapids: Eerdmans, 2001), especially 57–72 (“Dating 2 Samuel”), but since this author disregards the text-critical phenomena and embraces the conventional linguistic dating approach, his results are not satisfactory. The recent volume by Hendel and Joosten (\textit{How Old is the Hebrew Bible? A Linguistic, Textual, and Historical Study}) also omits serious engagement with literary criticism. See our separate review-essay of this volume (Young and Rezetko, “Can the Ages of Biblical Literature be Discerned Without Literary Analysis?”).

\textsuperscript{91} Hurvitz, \textit{A Linguistic Study of the Relationship between the Priestly Source and the Book of Ezekiel}, 21.
framework.” Similarly and more recently, in a chapter on the terminology of genealogical records in Genesis–Joshua, Hurvitz says:

In conclusion: Whatever editorial activities and literary modifications the Priestly genealogy-related accounts and records in Genesis–Joshua may have undergone during the process of their transmission, all these textual developments must have come to an end prior to the emergence of the distinctive LBH corpus as laid before us in its presently extant version. Or, in a slightly different formulation, the linguistic formation and consolidation of the Priestly genealogical and other similar material preserved in the books of the Pentateuch and Joshua predate the time period that shaped our LBH corpus as found in the MT. The language of this material should therefore be categorized typologically as Classical Biblical Hebrew and assigned historically to the preexilic period.

In other publications, Hurvitz extends this specific remark on genealogical material to the language of P en bloc.

When we turn to our authors, we find that several of them closely follow Hurvitz’s line of reasoning. In his essay on diachronic linguistics and the date of the Pentateuch, Joosten argues that the Pentateuch on the whole is a writing of the monarchical period because it is largely barren of LBH language. As an illustration he discusses the story of Abram and Sarai in Egypt, about which he concludes:

The three features enumerated [הִנֵּה-נָא, temporal כִּי, passive qal] show that Gen 12:10–20 is written in CBH. The nature of the usages virtually excludes the possibility that a later author would have been able to imitate them. In light of what was said before, this would suggest that the story was created, more or less in the form we have it, during the time of the monar-

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92 Ibid., 153.
95 In addition to the following authors, this may also be Samet’s view. She argues that the distribution of qittālōn vs. qitlōn nouns in BH “indicate[s] that there existed a difference between two pronunciations, one common in First Temple times, and the other in the Second Temple period. By no means does this identification of the forms’ date rule out complicated processes of editing and reshaping; it only locates them within limits of dialect and time” (Samet, “The Validity of the Masoretic Text as a Basis for Diachronic Linguistic Analysis of Biblical Texts,” 1073). In other words, if First Temple writings had been edited and reshaped in the Second Temple period, qitlōn would have (sometimes? often? always?) replaced qittālōn.
chy. In a pinch, it might be dated soon after the fall of Jerusalem. Taking it down to 450 BCE, or later, seems completely impossible.  

Regarding some objections to his linguistic dating approach he further comments:

- **Archaizing:** “Perhaps in other late passages the archaizing was more successful. But the available evidence does not confirm this possibility. There are late writings – certainly dating to the Persian period or beyond – that evince an effort to write Classical Hebrew. But to the best of my knowledge there are no late writings where this effort was consistently successful.”  

- **Stratified nature of the Pentateuch:** “If some of the strata were added in the postexilic period, one would expect those strata to reflect postclassical Hebrew. If no LBH elements can be located, this indicates that all the strata were composed during the period when CBH was in use. The monarchical era is a very long one. There is no problem of principle in postulating multiple rewritings before the cut-off point of 550 BCE or so.”  

- **Modernizations:** “The answer to this objection is as before: perhaps modernization did happen, but if so, it must have happened over the period when CBH was in use. The MT of the Pentateuch shows very few signs of modernization during the postexilic period.”  

Hornkohl is another scholar who follows Hurvitz’s line of reasoning. At numerous points he talks about textual, text-critical, scribal, transmission, copyists, and so on, and literary, exegetical, editorial, revision, editors, and so on, mainly in response to our work, but a close reading of his publications indicates that he has very little to say about literary development, despite acknowledging its reality, and despite calling for the “evidence of textual and/or literary development, on the one hand, and of linguistic development, on the other [to] be integrated in a mutually beneficial fashion towards the resolution of textual cruces and diachronic puzzles.”  

Rather, his comments relate almost entirely to textual matters, and then to textual and/or literary “cruces”/“cruxes”/“knots”/“suspicion” rather than the larger compositional and redactional issues. Furthermore, despite the subtitle of one of his essays, “Periodization in the Face of Textual and Literary Pluriformity,” the relevant section on “Linguistic Periodization, Textual Cruces, and Literary Development: Examples of Integration” contains only a brief discussion of “Literary

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96 Joosten, “Diachronic Linguistics and the Date of the Pentateuch,” 338; cf. 336–338. He also mentions the illustrations of Genesis 15 and 24 (ibid., 338 n. 38), although he is willing to date Num 36:1–12 to the Persian period or later because it contains a single “late” expression (“to speak before”) (ibid., 339–340), and he is also willing to allow occasional late editorial changes, for example, in Exod 36:10 (ibid., 341–342), Deut 33:2 (ibid., 343), and elsewhere (ibid., 343 n. 49).

97 Ibid., 342; cf. 340–342.

98 Ibid., 342.

99 Ibid., 343.


102 Hornkohl, “All Is Not Lost.”

103 Ibid., 68–75.
Criticism" which merely cites some publications by Paul on Isaiah and Joosten and Hornkohl on Jeremiah as examples of linguistic evidence tallying with non-linguistic evidence for the identification of secondary material in these books. Unfortunately, however, as pointed out already, Hornkohl regards linguistic analysis as a support or corrective to textual criticism and literary criticism, the latter because, he believes, it involves “speculation” and “conjunctural assumption.” Consequently, his default posture is the same as Hurvitz’s: biblical writings are innocent until proven guilty, or early unless proven late, by the presence of adequate LBH elements, and literary-critical arguments that biblical writings or parts of them without LBH elements are late are specious. In his own words: there is a “conspicuous lack of unambiguous evidence...that late writers could successfully imitate classical style,” and, “the assumption that late writers could indeed reproduce flawless CBH is theory-driven. No text securely datable to the Second Temple Period on nonlinguistic grounds fails to exhibit a conspicuous concentration of distinctive postclassical linguistic features.” This is also the reason why Hornkohl is compelled to date the bulk of (proto-)MT Jeremiah to the sixth century BCE, against the conclusion of most

104 Ibid., 74–75.
107 Hornkohl, “All Is Not Lost,” 55. Likewise, he says: “The sort of evidence required would consist of copious amounts (not just an example or two) of non-linguistically datable post-classical compositions (not just copies of earlier material) employing pure CBH. It is not merely that the quantity of such evidence is meager; it is non-existent. No text securely datable on non-linguistic grounds to the Second Temple Period fails to exhibit a conspicuous accumulation of distinctive post-classical linguistic features” (A. D. Hornkohl, “Diachronic Exceptions in the Comparison of Tiberian and Qumran Hebrew: The Preservation of Early Linguistic Features in Dead Sea Scrolls Biblical Hebrew,” in The Reconfiguration of Hebrew in the Hellenistic Period: Proceedings of the Seventh International Symposium on the Hebrew of the Dead Sea Scrolls and Ben Sira at Strasbourg University, June 2014 [ed. J. Joosten, D. Machiela, and J.-S. Rey; STDJ, 124; Leiden: Brill, 2018], 61–92 [70]); cf. Schniedewind’s remark that “claims of substantive SBH writing in the late Persian and Hellenistic periods are not supported by what we know from historical sociolinguistics or from the evidence of texts like Chronicles, Ezra–Nehemiah, Esther, Daniel, Jubilees, 1QIsaiah, or other Qumran texts” (Schniedewind, “Linguistic Dating, Writing Systems, and the Pentateuchal Sources,” 356). It is unclear what Schniedewind might “know from historical sociolinguistics” that buttresses his perspective.
biblical scholars and textual critics that the revisions exhibited in the MT date to the Persian and/or Hellenistic period.\(^{109}\)

There are substantial difficulties with the approach of these scholars and their view that writings in CBH (i.e., [almost] without LBH elements) must be early/pre-exilic and late/post-exilic writers could not write in CBH (i.e., without using [some] LBH elements).

First, their approach is out of step with the conventional historical linguistic approach that we have described above. They put the cart before the horse. Linguistic analysis as a support or corrective to literary criticism and/or textual criticism is generally untenable. Analysis of the language in its historical dimension is contingent on the analysis of the sources (of linguistic data) in their literary and textual dimensions.

Second, their approach is circular because the biblical books and their constituent parts (including those written in CBH) are not independently and undisputedly dated before the diachronic linguistic analysis is executed and conclusions about language periodization are reached. Here we encounter the issue of literary-linguistic circularity that we have talked about before,\(^{110}\) and the critique is repeated by some of our present authors and others. Thus, Gesundheit comments:

> It is worth dwelling on Hurvitz’s suggestion that a linguistic item must be found in incontrovertibly late contexts to permit “room to doubt [its] antiquity.” It is difficult to escape the impression that we are dealing here with a philosophy according to which all biblical texts are early until proven late. This and other similar statements indicate that, according to Hurvitz, every work has a default status, and that status is preexilic. Every ostensible stringency is a leniency, as well. To be stringent about determining that a text is late is to be lenient in assuming the text’s antiquity.\(^{111}\)

And Blum remarks:

> The doubt, however, that linguistic analyses can prove that a biblical text was composed in preexilic times is even stronger. Naturally, such a proof would be based on the absence of LBH features in the respective text or corpus. But the “absence of evidence” could be decisive only if a late author would unavoidably have produced sufficient LBH features, even if he tried to write in classical language. In fact, that is what proponents of this approach in the field of Hebrew linguistics do assert. The problem of such an allegation, however, lies in its a priori nature, for no one will ever be able to prove or to disprove such a general statement.


\(^{111}\) Gesundheit, “The Strengths and Weaknesses of Linguistic Dating,” 298 (emphasis original).
Though repeated “slip-ups” in comparison to the classical language were possible, they were by no means necessary.\(^\text{112}\)

So too Schmid comments:

A third argument by Hebraists for an early (that is, preexilic) dating of CBH texts is the idea that it should be impossible to reproduce real CBH in later times without slip-ups. The problem with this argument is a fundamental methodological one: It is \textit{a priori} and therefore not falsifiable. If a biblical text is written in clear and flawless CBH, then it is \textit{by definition} preexilic because otherwise it would not be in correct CBH. In such an argument, the possibility of a late text in correct CBH is excluded as impossible \textit{from the outset}. Determining CBH as copy-safe is therefore begging the question. Of course, languages evolve over time, but in a learned elite idiom like CBH, a certain degree of inertness is likely as well.\(^\text{113}\)

Finally, Klein says:

Rezetko and Young...freely admit in the case of many characters that there is some tendency toward late usage. What they deny is not the fact of late usage but rather the inverse conclusion that books not showing such usage are necessarily early, a point with which I wholeheartedly concur. Variation analysis is very helpful in making sense out of characters that are of fluctuating occurrence within a textual tradition, but it has nothing to say about evidence that is not there, particularly in a corpus where editorial and scribal intervention have produced massive fluidity in the form of individual books.\(^\text{114}\)

In short, the idea, stated somewhat simplistically, that CBH = early and LBH = late, rests on literary-linguistic circularity and problematic assumptions and reasoning.

Third, working from within the conventional linguistic dating approach, we have argued that the linguistic dating principle of accumulation or concentration of late linguistic elements in a given text is far from airtight because there is sometimes an accumulation of “late” language in some presumably early writings (both biblical and epigraphic) and there is sometimes a non-accumulation of “late” language in some undisputed late writings.\(^\text{115}\) In addition, all biblical writings have some degree of LBH or “late” language. (We address the criticisms by Forbes and Hornkohl of our discussions of accumulation in section 4.10.)

Fourth, it is well documented in historical sociolinguistic research that there can be early, middle, and late adopters of linguistic innovations, such that even contemporary speakers or writers

\(^{112}\) Blum, “The Linguistic Dating of Biblical Texts,” 311–312 (emphasis original).


\(^{114}\) Klein, “Historical Linguistics and Biblical Hebrew,” 879 n. 16.

may display nearly opposite trends in their use of old and new variants.116 So, for instance, whereas one (a leader or progressive) might display one/several late (absolute or relative) linguistic element(s), it/they might be completely absent from the language of another (a laggard or conservative) who lived in the same period of time.

Fifth, supposing the conventional dates of biblical writings held to be correct by many Hebraists, we have argued that the continuity of early language in late writings is the norm rather than the exception. This is true to such a degree that what is generally called “late” language is a sporadic and idiosyncratic part of the language of the corpus of late books, and furthermore these books show very different tendencies in their use (including non-use) of late variants.117 This reveals that the central assumption of Hurvitz and his followers, as outlined above, that the linguistic profile of the post-exilic books of Esther–Chronicles provides the measure and definition of “late” Hebrew, seems to be an unexamined presupposition.

Sixth, empirical textual data corroborates the long production history of biblical writings, demonstrating that even those written in CBH did not stop developing until late in the Second Temple period,118 thus undercutting these scholars’ conjectural explanation of the linguistic data and their claim that late/post-exilic writers could not write in CBH.

Seventh, there are empirical comparative examples of various literary languages that show relatively minor internal evolution over a substantial period of time or, conversely stated, sometimes writers who wrote in a late(r) period could produce literary works in a nearly flawless earlier (“classical”) style. Some examples cited in recent literature include Standard Babylonian, Late

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116 We document this, citing documented examples, in Rezetko and Young, Historical Linguistics and Biblical Hebrew, 52, 223–228, 237, 402–403, etc.


Middle Egyptian, Ancient Greek, Classical Sanskrit, Classical Arabic, and Classical Armenian.\footnote{Gesundheit, “The Strengths and Weaknesses of Linguistic Dating,” 298–299 (Ancient Greek, Late Middle Egyptian, Classical Sanskrit; citing Dicke} and Gass); Klein, “Historical Linguistics and Biblical Hebrew,” 867–868 (Classical Armenian, Ancient Greek, Classical Sanskrit); N. J. C. Kouwenberg, “Diachrony in Akkadian and the Dating of Literary Texts,” in Diachrony in Biblical Hebrew (ed. C. Miller-Naudé and Z. Zevit; LSAWS, 8; Winona Lake, IN: Eisenbrauns, 2012), 433–451 (437–438, 448; Standard Babylonian); Young, Rezetko, and Ehrensvärd, Linguistic Dating of Biblical Texts, 1:47–48 (Classical Arabic; citing Blau). Polak challenges the validity of several of these examples (Polak, “Storytelling and Redaction,” 449–454). Hornkohl acknowledges the possibility of late imitation of classical language but disputes that the situation in BH is comparable to Classical Arabic since “there exists classically formulated Arabic material that can be securely dated to the late period on the basis of non-linguistic evidence..., but no classically formulated Hebrew material securely dateable to the late period on non-linguistic grounds” (Hornkohl, Ancient Hebrew Periodization and the Language of the Book of Jeremiah, 30 n. 88). Hornkohl’s argument, however, is circular since any examples of it happening according to biblical scholars are reinterpreted and reclassified as early by Hornkohl and other Hebraists but without any discussion of the empirical textual data mentioned above. So also the occurrence of small amounts of “late” language is dismissed in compositions like Samuel that are “known” to be early, but is treated as evidence of late composition in works that can be comfortably considered late, such as Qumran compositions.

Finally, we should underline again that when scholars argue that the sources or books of the Pentateuch, for example, are pre-exilic compositions because they are written in CBH,\footnote{For example, L. Petersson, “The Linguistic Profile of the Priestly Narrative of the Pentateuch,” in Paradigm Change in Pentateuchal Research (ed. M. Armgardt, B. Kilchör, and M. Zehnder; BZAR, 22; Wiesbaden: Harrassowitz, 2019), 243–264; cf. Joosten, “Diachronic Linguistics and the Date of the Pentateuch”; Schniedewind, “Linguistic Dating, Writing Systems, and the Pentateuchal Sources”; etc. In other words, the language of Genesis–Deuteronomy is unmistakably CBH, but this is not an argument that these books are “unmistakably pre-exilic” (contra J. A. Berman, Inconsistency in the Torah: Ancient Literary Convention and the Limits of Source Criticism [Oxford: Oxford University Press, 2017], 278).} they are actually misunderstanding the real question, which is whether biblical writings in CBH can only be pre-exilic and not also post-exilic.

3.4. Defense of the MT

Mostly in response to our discussions (sometimes misunderstood or misrepresented) of linguistic variants in biblical manuscripts, some of our authors have as an objective the defense of the MT’s “accuracy,” “authenticity,” “genuineness,” “reliability,” “trustworthiness,” “validity,” “value,” “antiquity,” “originality,” and so on (their words).

Samet looks at three sets of linguistic items in Qoheleth: the assimilation of third aleph with third he participles, the use of the abstract nominal pattern qitlôn vs. qittālôn, and the feminine demonstrative זֹה vs. זֹאת.\footnote{Samet, “The Validity of the Masoretic Text as a Basis for Diachronic Linguistic Analysis of Biblical Texts.”} “The case studies show that the Masoretes had preserved the differ-
ence between CBH and LBH pronunciations, although they were probably unaware of the historical nature of these different pronunciations and of their diachronic dimension. These findings testify to a strong and stable oral Masoretic tradition which accompanied the written one. According to Hornkohl, if vocalisation turns out to reflect original traditions, then the system’s more stable components, as manifested in the consonantal text, are even more likely to testify to the language of the biblical text in the period when it was authored and edited. Hornkohl contends that when the MT and the biblical and non-biblical Dead Sea Scrolls (DSS) differ with regard to (what he regards as) diachronically meaningful linguistic features, more often than not the MT preserves the characteristically classical (pre-exilic, First Temple) feature whereas the DSS present a typically post-classical (post-exilic, Second Temple) one. In one essay he examines various examples related to spelling and pronunciation and in more detail the morphology of 3mp suffixes on plurals in בָּר–, בָּרְבּ– vs. בָּר–; he also discusses four textual errors in the MT where a classical feature was replaced by a non-classical one or vice versa. In another essay he compares the language of the MT Pentateuch and two quasi-biblical DSS works, 4QCommentary Genesis and 4QRevised Pentateuch (4QRP, 4Q158 and 4Q364–367). He includes case studies on twenty linguistic issues in the realms of orthography, phonetic realization and phonology (4), morphology (2), syntax (6), lexicon and phraseology (5), and grammatical levelling of non-standard language (2). Regarding the issue at hand, the nature of the MT, he concludes that this manuscript tradition is adequately faithful to permit a correlation between a work’s linguistic character and its date of composition in either the pre-exilic or post-exilic period.

Similarly, while not all-out defenses of the MT, the case studies of several others may lend support to the fidelity of the MT as a witness to ancient Hebrew. Mizrahi argues that MT’s hapax legomenon נא (“raw”) in Exod 12:9 is earlier/older/(more) original than 4Q11’s נ which was substituted later in an attempt to disambiguate the homonymous form from the common BH particle נא (“please”) for the scribe’s contemporary, Second Temple audience. Notarius analyzes two lexical isoglosses of so-called Archaic Biblical Hebrew (ABH), פְּלִילִים in Deut 32:31 and כֵּן in Judg 5:15. She argues that while these words continued in use in later BH, they attest different meanings in the pre-classical stage. Consequently, because the words remained in the MT and were not altered or updated, she concludes that “the archaic language of the old songs was transmitted with a relatively high level of accuracy due to the prestigious liter-

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122 Ibid., 1064.
123 Ibid., 1075.
124 Hornkohl, “All Is Not Lost.”
126 Mizrahi, “The Numeral 11 and the Linguistic Dating of P.”
ary status of these compositions.” In another essay she argues that תִדְּרְּכִי in MT Judg 5:21 is a unique, authentic, and archaic use of the second person jussive in a non-negative sentence, and although she does not say so explicitly, she would probably view the form as support for the fidelity of the MT as a witness to ancient Hebrew.

Polak, citing his analysis of the object suffix attached to the finite verb (e.g., וּוַיַנִחֵּה) as opposed to the object particle with suffix (e.g., אֹתָם), argues that “the vagaries of textual transmission do not obliterate the systematic contrast between the different syntactic-stylistic profiles of the various corpora” in the MT.

Schniedewind argues that there were older words and constructions, such as the asseverative lamed, that had gone out of use during the monarchical period, so that they were no longer understood by later post-exilic scribes, but nevertheless they were often preserved in the textual record (MT).

Before making some general observations here on the contributions summarized above, we should point briefly to three authors in the publications under review who offer a different perspective on the MT.

Dean argues that “many features which have historically been identified as Aramaisms were not stable during the transmission of the Hebrew Bible, as the presence or absence of Aramaic elements varies between the Masoretic Text and the biblical Dead Sea Scrolls. It is thus argued that the presence of Aramaisms is not a reliable criterion for linguistic dating as Aramaisms could often reflect Aramaic influence during a stage of the text’s transmission, rather than the time of its composition.”

Forbes distinguishes composition date and crystallization date or the composition and redaction channel of the biblical period versus the transmission channel of the Masoretic era.

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131 Dean, “Aramaism,” 1080; cf. 1100–1101: “While utilising a criterion such as accumulation might insulate one from the risk of using isolated Aramaisms in an argument for late dating, 1QIsa demonstrates that a text can even have a high concentration of Aramaic forms which are likely not representative of the ‘original’ language of the text.”
133 Ibid., 881–882.
concedes: “Given what is known about scribal practices during the biblical period of the history of the biblical texts, hopes of recovering composition dates using linguistic information seem misguided. Recovery of relative ‘crystallisation dates’ may be another matter.” Therefore in his essay he wants “to infer when the careful copying process began. For each text portion, we ask: What was its (absolute, relative, or cluster-based) crystallisation date?” Forbes’ separation of linguistic information from the date of composition distinguishes him from the authors discussed above who are interested precisely in using the MT to establish time of composition.

Young, building on our previous work, argues that the language of biblical writings, especially distinctive (less common) linguistic features or linguistic peculiarities—such as the archaisms of the ABH poems that scholars have used to create a linguistic profile of these writings and their authors—was highly fluid in textual transmission, thus demonstrating that it was not copied precisely or carefully or with a high degree of accuracy.

Taking into account the above arguments and conclusions, we would like to offer three postulates about the MT that are part correctives and part recommendations for future research.

First, the MT should not be an object of bias and the objective should be neither to attack nor defend it. Rather, it should be highly regarded as one of the extremely few but very important and most extensive sources for ancient Hebrew, alongside the Samaritan Pentateuch (SP), biblical and non-biblical DSS, Wisdom of Ben Sira, and Hebrew inscriptions. Practically, the MT cannot be dismissed or discarded, and theoretically, it should not be. It is a valid basis for the diachronic study of ancient Hebrew, but it is not the only one, and it should not be privileged.

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134 Ibid., 895.
135 Ibid., 899.
136 However, Forbes’ tactic, while commendable, is also problematic, since textual critics of the Hebrew Bible generally agree that in practice it is virtually impossible to distinguish sharply between the composition, redaction, and transmission stages of the biblical writings, or between authors, editors, and scribes, for the reason that the writings were still in the process of development as they were being copied. “A major complication for any theory [of an original text] is the assumption that the textual transmission was operative before the completion of the final literary stage...” (Tov, Textual Criticism of the Hebrew Bible, 166).
137 On texts in the MT versus other textual traditions, especially the DSS, Samaritan Pentateuch, and Septuagint (Pentateuch poetry, Judges, Samuel, Isaiah, Jeremiah, Song of Songs, Daniel), and on parallel texts within the MT (Samuel//Psalms, Samuel//Chronicles, Kings//Isaiah, Kings//Jeremiah, Kings//Chronicles). For references, see n. 72.
138 Young, “Ancient Hebrew Without Authors”; idem, “Starting at the Beginning with Archaic Biblical Hebrew.”
139 According to Samet, Rezetko’s and Young’s “attitude” toward the MT includes “arguing against the use of the Masoretic Text as a basis for the linguistic discussion” (Samet, “The Validity of the Masoretic Text as a Basis for Diachronic Linguistic Analysis of Biblical Texts,” 1064), “mak[ing] the MT inadmissible as evidence in a linguistic discussion” (ibid., 1065), “denial of the validity of the MT as a basis for a diachronic discussion” (ibid., 1066), believing “the MT is too corrupt to tell us anything about the original language of the text” (ibid., 1067), asserting “the uselessness of the MT in representing the original lan-
Furthermore, just as “it should not be postulated that [MT] better or more frequently reflects the original text of the biblical books than any other text,”\textsuperscript{140} so also it should not be postulated that the language of the MT better or more frequently reflects the original language of the biblical authors than any other text.

Second, the careful and precise transmission of the MT is a later development that should not be retrojected back to earlier periods. While there is evidence of texts relatively close to the MT in some books in the last centuries BCE, these are only a minority in the attested pluriformity of the biblical books in the BCE period.\textsuperscript{141} This applies even more to the period before c. 250 BCE, when the text must have been much more fluid, which means also that any jump from the transmission of the MT to the time of composition of the biblical writings by authors and editors is unsubstantiated, and it is doubtful that it can be corroborated. What is true for the MT and proto-MT is probably not true for earlier stages of the literary and textual development of the Hebrew Bible.\textsuperscript{142} In other words, the “accuracy” of the MT does not correspond a priori to the “accuracy” or “antiquity” or “originality” of its words as representations of the words of the biblical writings in the earlier times of their authoring, editing, and copying. Literary and textual critics cannot affirm on the basis of any actual documentation prior to the earliest Qumran scrolls from the third century BCE that the linguistic profiles and especially the linguistic details of the surviving texts are those of original authors whether they be from the earlier Second Temple or much earlier First Temple periods. Finally, what is argued, or even demonstrated, to be true for the Pentecostal language of a given text” (ibid., 1074 n. 28), and having “a theoretical premise as to the unreliable nature of the MT” (ibid., 1076). Her perspective—shared by some others—on our work does not reflect our actual beliefs or published words. See, for example, our explicit statement in Rezetko and Young, \textit{Historical Linguistics and Biblical Hebrew}, 116 n. 266.

\textsuperscript{140} Tov, \textit{Textual Criticism of the Hebrew Bible}, 11–12.

\textsuperscript{141} On the relative proportion of MT-related scrolls at Qumran, see the discussion in Young, “The Biblical Scrolls from Qumran and the Masoretic Text,” 123–125.

\textsuperscript{142} “The textual diversity visible in the Qumran evidence from the 3rd century BCE onwards is probably not representative of the textual situation in earlier periods, when the text must have been much more fluid” (Tov, \textit{Textual Criticism of the Hebrew Bible}, 166 n. 24). See especially Tov, \textit{Textual Criticism of the Hebrew Bible}, 26–27 (cf. 26–39), 184–186 (cf. 181–190). Carr summarizes the contemporary view: “So also, in Jewish tradition, recent studies in the history of the development of the biblical text have highlighted an increasing trend toward precision of copying. Largely thanks to the Dead Sea Scrolls and new analysis of the LXX [Septuagint] tradition, we now know that early biblical textual traditions tended to be more fluid, manifesting more of the kinds of semantic shifts surveyed in this chapter (among other sorts of changes). Later, however, there was an increasing emphasis on precise copying of the consonantal text, still later, a codifying and standardization of textual vocalization, and finally the accentuation of the text was fixed. Thus, both the Mesopotamian and Jewish cases show an increasing emphasis on precision in reproduction of the tradition...” (D. M. Carr, \textit{The Formation of the Hebrew Bible: A New Reconstruction} [Oxford: Oxford University Press, 2011], 35); “Given the breadth and depth of this evidence, the burden of proof lies not on someone who sees such changes as typical of the scribal process more generally, but on one who would posit something radically different for earlier stages of development (likely even more fluid!) that are not documented” (ibid., 134).
teuch does not automatically apply to other individual books and groups of books since they were processed differently: “differently copied and preserved...transmitted...composed and edited...translated...quoted...ordered...interpreted...authorized.”

Third, the witnesses to the text of the Hebrew Bible substantiate both the stability and instability of language in textual transmission. Accordingly, Mizrahi, Samet, Hornkohl, Notarius, Schniedewind, and Polak, as discussed above, are entirely correct that the MT represents a conservative and stable tradition that accurately preserves and transmits many aspects of biblical language—even archaisms—from the period when the writings were authored and edited. However, at the same time, these scholars commit the fallacy of inferring something about a whole class of things on the basis of some instances of that thing, that is, the fallacy of insufficient evidence or sample. Instances, or even many instances, of transmission stability do not erase the very many instances of transmission instability or fluidity that are clearly evidenced—not abstractly or theoretically but practically—within the MT and between the MT and other textual traditions. While the authors just mentioned offer evidence for stability, they do not engage the extensive data that supports fluidity.

Two questions are relevant: How fluid was the text? What was fluid? We will again attempt to answer these questions to the extent possible on the basis of the surviving Hebrew evidence, also emphasizing again that the text must have been much more fluid prior to the 3rd century BCE.

How fluid was the text? Comparison of the MT and biblical DSS (and SP and Septuagint [LXX]) demonstrates that the text of the Hebrew Bible was highly fluid in the late Second Temple period. But what does “highly fluid” mean? It does not mean “unlimited fluidity.” One way of

143 As for example in Hornkohl, “Hebrew Diachrony and the Linguistic Periodisation of Biblical Texts”; Joosten, “Diachronic Linguistics and the Date of the Pentateuch.”


145 See n. 137.

146 See n. 142.

147 Hornkohl, citing Hurvitz, seems to think we believe in the “unlimited ‘fluidity’ of the textual tradition underlying the MT” (Hornkohl, “Hebrew Diachrony and the Linguistic Periodisation of Biblical Texts,” 1016 n. 18), but we have never used the word “unlimited”; rather, we have said: “extremely” or “highly” or “quite” or “very” fluid or “massive” or “substantial” or “a great degree of” or “a high degree of” fluidity.
quantifying the rate of variation is to focus on individual non-orthographic variants, which may in themselves cover a number of graphic units, or in some few cases, a large number of graphic units. This approach has been studied in detail from the point of view of comparison of the MT with the Qumran biblical scrolls.\(^{148}\) In this approach, the largest groupings of manuscripts fall between 5 and 25 words per variant, with the largest, the 10–15 words per variant group. The mean falls at the low end of the 15–20 range. Thus, a “normal” Qumran biblical scroll varies from the MT about once every 15 words by this measure. Note, however, that even with this approach, around a quarter of the manuscripts have less than 10 words per variant. Another way of viewing the data is to count variant graphic units, rather than variants which can often encompass more than one graphic unit. What is at issue in this method is how many individual words are variant between different manuscripts. Comprehensive statistics are not yet available for this approach, but it brings out what proportion of the individual elements that make up a text are variant. For comparison, while the highly variant 4QSam\(^{a}\) has a variant approximately every 6 words, when variant graphic units are taken into account, this increases to each variant word occurring on average once every 4 words or less. 4QSam\(^{b}\) has a variant every 7 words, but focusing on graphic units this increases to 1 every 5.5 words. 4QSam\(^{c}\) has a variant every 7.5 words, which increases to about 1 in 6 when the focus is variant graphic units. 1QSam gives an example of the effect of individual large-scale variants on the statistics. By the first counting method, when multi-word variants are counted as one, it has a ratio of 1 variant every 11 words. However, when graphic units are the measure, the ratio changes to 1 variant every 4.5 words, due to a large minus involving multiple graphic units in 2 Sam 20.\(^{149}\) When we and other textual critics speak about the “high fluidity” of the biblical text, we are therefore usually talking about a non-orthographic variation rate between individual manuscripts somewhere in the range of 5–25% on average.\(^{150}\) Looking at this situation from the opposite direction, the “high fluidity” of the bibl-


\(^{150}\) Note that this is only an average and it focuses only on the comparison of individual Qumran manuscripts with the MT. Accumulating the witnesses of multiple manuscripts, including those in other languages such as Greek, can lead to a situation in some verses where more than half the graphic units have attested variants (see, e.g., Young, “The Dead Sea Scrolls and the Bible,” 22–23). Further, the variation rate of course fluctuates a great deal depending on the book and manuscript, and there are outliers in both
cal text in the most common situations is really somewhere in the range of 75–95% continuity or stability.\textsuperscript{151}

What was fluid? The answer to this question has various related facets. (1) Language was fluid, in all of its dimensions, lexical, morphological, syntactical, and so on. However, the categorization of variant readings often proves difficult or subjective, especially distinguishing linguistic variants from orthographic and content variants, and almost any variant may potentially have linguistic significance.\textsuperscript{152} In general, linguistic variants are morphological and syntactic variants, the kinds of phenomena discussed in grammars. Such variants in biblical manuscripts are predominantly (2) sporadic and often involve (3) less common but (4) diachronically meaningful linguistic features. We look at these last three issues in section 4. (5) Finally, in terms of language, variation rates between the MT and biblical DSS are similar to or greater than the frequency of “late” language features in LBH writings compared to CBH writings in the MT.\textsuperscript{153}

directions. On the one hand, some few scrolls are close to identical to the MT. On the other, there is evidence of extremely variant texts. For example, if the Old Greek version of Daniel 5 reflects fairly directly a Semitic Vorlage, only about 15% of the words of the MT are directly paralleled in the Old Greek, or there is about 85% fluidity (see I. Young, “The Original Problem: The Old Greek and the Masoretic Text of Daniel 5,” in Empirical Models Challenging Biblical Criticism [ed. R. F. Person, Jr. and R. Rezetko; AIL, 25; Atlanta: SBL Press, 2016], 271–301).

\textsuperscript{151} We emphasize that in this paragraph we have been talking about the relationships between individual extant witnesses of biblical texts. Our remarks on fluidity should not be construed to apply to earlier undocumented stages of textual transmission or to putative original texts. Again, we concur with Tov: “The textual diversity visible in the Qumran evidence from the 3rd century BCE onwards is probably not representative of the textual situation in earlier periods, when the text must have been much more fluid” (Tov, Textual Criticism of the Hebrew Bible, 166 n. 24). Also, note that Hornkohl, responding in particular to our studies of Judges and Samuel (cf. n. 148), emphasizes the preservation of (authentic and diachronically meaningful) linguistic details (Hornkohl, “Hebrew Diachrony and the Linguistic Periodisation of Biblical Texts,” 114–115, etc.), but he does not deal with the significance of the variation rate in the context of the CBH versus LBH discussion. Samet’s response also overlooks this point (cf. n. 139).

\textsuperscript{152} Hobson, Transforming Literature into Scripture, 8–28 (esp. 21–23); Young, “Textual Stability in Gilgamesh and the Dead Sea Scrolls” 177–180; cf. Rezetko and Young, Historical Linguistics and Biblical Hebrew, 142.

\textsuperscript{153} For example, on the basis of the data presented in Young, Rezetko, and Ehrensvärd, Linguistic Dating of Biblical Texts, 1:132–134; cf. 353–358: Qoh 1:1–2:9; 6:1–12 has 15 unique LBH features and 25 total occurrences or 1 every 20 words. Esth 5:1–6:13a has 17 unique LBH features and 32 total occurrences or 1 every 16 words. Dan 1:1–20; 11:44–12:13 has 24 unique LBH features and 64 total occurrences or 1 every 8 words. Ezra 1:1–11; 9:1–10:2a has 25 unique LBH features and 65 total occurrences or 1 every 8 words. Neh 1:1–2:17 has 20 unique LBH features and 48 total occurrences or 1 every 10 words. 1 Chr 13:5–14; 15:25–16:3; 16:43–17:12 (synoptic) has 12 unique LBH features and 17 total occurrences or 1 every 29 words. 2 Chr 18:5–34 (synoptic) has 7 unique LBH features and 14 total occurrences or 1 every 36 words. 2 Chr 30:1–31:3 (non-synoptic) has 22 unique LBH features and 41 total occurrences or 1 every 12 words. In other samples of synoptic material in Samuel–Kings and Chronicles, Young discovered one linguistic variant every 23 words and one LBH linguistic variant every 48–50 words (Young, “Biblical Texts Cannot be Dated Linguistically,” 349; cf. 349–351; idem, “Textual Stability in Gilgamesh and
other words, the linguistic differences between CBH and LBH writings are often very subtle, more subtle than the linguistic differences between the MT and biblical DSS. Consequently, a suggestion like Carr’s, that the “late” linguistic profiles of (originally early) books like Song of Songs and Qoheleth could be the result of the fluidity of language in textual transmission rather than original authorship, is well within the realm of possibility. Nevertheless, whether or not one accepts that a linguistic variation rate of 5–20% between the MT and biblical DSS constitutes “high fluidity,” it remains the case that the different linguistic profiles of CBH and LBH writings in terms of “late” language involves a similar or even lower rate of variation or fluidity.

In conclusion, the nature of the sources of BH has profound relevance and impact on the current debate on the historical linguistics and linguistic dating of the Hebrew Bible. It is remarkable and unfortunate that BH linguistic scholarship, where “[l]ess consensus exists regarding attitudes toward the nature of the biblical data, including approaches to textual criticism,” trails so far behind.

4. Documentation of Variation and Change

Moshavi and Notarius remark in their summary of current BH linguistic scholarship that “there is a basic commonality of purpose and method among scholars in the field,” and, “[w]ith regard to linguistic methodology, there is broad agreement on the utility of the corpus-based approach and typological comparison, and an increasing tendency towards a nondogmatic use of concepts drawn from a variety of theoretical frameworks.” It is true that some recent publications do display the application of far more in-depth, data-driven, and methodologically-sound methods of collecting and analyzing linguistic phenomena, but others continue to use methods that are unsuitable for answering the questions asked and/or disregard established historical (socio)linguistic concepts. Our comments in this section, although directed toward a lengthy series of specific issues, are general in scope.

The study of ancient Hebrew is largely the study of the language of the Hebrew Bible (MT, SP, biblical DSS) since it comprises about 80% of the ancient Hebrew or pre-Mishnaic Hebrew.

the Dead Sea Scrolls,” 182). The linguistic differences between CBH and LBH writings are reduced further when it is taken into consideration that all CBH writings also have LBH features (Young, Rezetko, and Ehrensvärd, *Linguistic Dating of Biblical Texts*, 1:134–141). The relative infrequency of “late” language in LBH writings compared to CBH writings is substantiated further by variation studies that document linguistic change and continuity between these groups of writings (Rezetko and Naaijer, “An Alternative Approach to the Lexicon of Late Biblical Hebrew”).


156 Background reading: Rezetko and Young, *Historical Linguistics and Biblical Hebrew*, 45–49, 211–403 (chapters 7–9).

(MH) corpus. Consequentially, by itself—and also in combination with the several other sources—it is fitting to take a corpus-based approach to language variation and change in ancient Hebrew, as recognized by Moshavi and Notarius. One issue to remember is that “corpus-linguistic analyses are always based on the evaluation of some kind of frequencies,” involving occurrence, also non-occurrence (i.e., absence), and co-occurrence. Another issue to keep in mind is that corpus-linguistic analyses always involve the search for consistent patterns (whether or not they exist) in the use of two or more variants (e.g., ממלכה, מלכות, מלך,ملכה) of a variable (“kingdom”). It is here in these areas that many problems quickly come into sight in the publications under review. If they are taken as indicators of the current state of BH linguistic scholarship, then it is clear there is no “broad agreement on the utility of the corpus-based approach.” Many illustrations, whether one-off examples or full-blown case studies, are problematic and unpersuasive because in one way or another they fail to correspond to the linguistic facts of the corpus; they fall short of descriptive linguistics as exhibited in other contemporary corpus-based research.

4.1. Complete Versus Incomplete Documentation

We mentioned above the fallacy of insufficient evidence or sample. A recurrent problem in research on diachrony in BH is the construction of linguistic arguments on the basis of incomplete evidence. It is common in the publications under review for the authors to generalize about language usage in entire books and groups of books and even purported language stages and historical periods (e.g., CBH, TBH, LBH, Qumran Hebrew [QH]) when they just cite—and often, it seems, only examined—a small part of the relevant linguistic data. Such an approach amounts to little more than prooftexting. At this stage of scholarship, and in the framework of the corpus-based approach, what is needed is complete and accurate documentation of all variants of a linguistic variable, or complete accounts of “distribution” and “opposition” in the wording of the conventional (Hurvitzian) linguistic dating approach to BH. Again, however, as we have documented previously in numerous places, the principle of accountability continues to be neglect-

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158 The other pre-Mishnaic Hebrew sources are the non-biblical DSS (15.9%), the Wisdom of Ben Sira (2.6%), and Hebrew inscriptions (1.3%). For the percentages see DCH 8:9; cf. Rezetko and Young, Historical Linguistics and Biblical Hebrew, 63.


160 “Accountability requires that all the relevant forms in the subsystem of grammar that you have targeted for investigation, not simply the variant of interest, are included in the analysis. The idea is that the analyst cannot gain access to how a variant functions in the grammar without considering it in the context of the subsystem of which it is a part. Then, each use of the variant under investigation can be reported as a proportion of the total number of relevant constructions, i.e. the total number of times the function (i.e. the same meaning) occurred in the data...” (S. A. Tagliamonte, Variationist Sociolinguistics: Change, Observation, Interpretation [Language in Society 40; Chichester: Wiley-Blackwell, 2012], 10; cf. 9–11, 19–21); “principle of accountability[:] a methodological axiom; all contexts of a variable must be taken into account, including all contexts in which the variants occurred, as well as those in which they could
ed, and routinely so. It remains the norm to cite partial linguistic data (most scholars), a few cite no linguistic data at all (Römer, Wöhrle), and only some (aim to) cite complete linguistic data (Hornkohl, Jacobs, Mizrahi, Naaijer and Roorda). Thorough linguistic data mining of ancient Hebrew is still largely in its infancy.

4.2. Sporadic Versus Systematic Variation

According to some contributors there are “unmistakable constellations of late linguistic features” in LBH and QH\(^{161}\) or “systemic differences” or “systemic changes” between CBH and LBH and QH.\(^{162}\) However, the linguistic data cited fail to support such assertions since either the documentation is incomplete or consistent patterns in the use of two or more variants of a particular variable are unsubstantiated. In actual fact, scholars have documented few if any systematic (or systemic) differences between the language of CBH writings like Genesis–Kings and the language of LBH writings like Esther–Chronicles. Almost all the examples cited are sporadic variants of different variables which occur infrequently within any particular writing and across different writings that are customarily dated similarly.\(^{163}\) In other words, the examples cited are


\(163\) Rezetko, “The (Dis)Connection between Textual and Linguistic Developments in the Book of Jeremiah”; idem, “The Qumran Scrolls of the Book of Judges”; Rezetko and Naaijer, “An Alternative Approach to the Lexicon of Late Biblical Hebrew”; Rezetko and Young, Historical Linguistics and Biblical Hebrew, 117–210, 245–403 (chapters 4–6, 8–9); Young, “Loose’ Language in 1QIsa”; idem, “Patterns of Linguistic Forms in the Masoretic Text”; idem, “Starting at the Beginning with Archaic Biblical Hebrew”; Young, Rezetko, and Ehrensvärd, Linguistic Dating of Biblical Texts, 1:83–90, 111–119. In particular, we have shown repeatedly and conclusively that the incidence of “late” language in late biblical writings is sporadic and idiosyncratic. The outstanding (near) exception is the plene spelling of “David” as דָוִד rather than דוד in Ezra–Chronicles, but even in this case some other undisputed late sources show
marginal phenomena. A similar situation of non-systematic (or non-systemic) variation generally holds for textual variants between different textual traditions and manuscripts (MT, SP, biblical DSS) of individual biblical writings.\footnote{See the references in the preceding n. 163. Hornkohl contests this as well, but his analysis of parallel material in the MT Pentateuch and several quasi-biblical DSS works (4QComGen, 4QRP) actually shows that as far as different linguistic variables are concerned, there is no “array” or “pattern” of late for classical variation (or “replacement”) but only periodic variation (or “replacement”), and also, since he does not clearly display the data of individual manuscripts, it is very difficult even to judge rates of variation (or “replacement”) (Hornkohl, “Hebrew Diachrony and the Linguistic Periodisation of Biblical Texts”). (We put “replacement” in quotation marks because Hornkohl’s assumption is unidirectional, MT features are replaced elsewhere.) Other recent publications that support our assessment of the MT and the biblical DSS, against Hornkohl’s contestation, include R. Oosting, “Changes of Syntactic Patterns in the Textual Tradition of the Book of Isaiah: A Corpus-Linguistic Approach,” \textit{HIPHIL Novum} 4 (2017): 13–22; J. M. Lundberg, “Long or Short? The Use of Long and Short \textit{Wayyiqtol}s in Biblical, Parabiblical and Commentary Scrolls from Qumran,” in \textit{Studies in Semitic Linguistics and Manuscripts: A Liber Discipulorum in Honour of Professor Geoffrey Khan} (ed. N. Vidro, R. Vollandt, E.-M. Wagner, and J. Olszowy-Schlanger; AAUSSU, 30; Uppsala: Uppsala University, 2018), 57–74 (however, this essay has other shortcomings related to the reporting of MT data and incomplete documentation of both occurrences and non-occurrences or zero-instances); and especially J. Jacobs, \textit{Statistics, Linguistics, and the “Biblical” Dead Sea Scrolls} (JSSSup, 40; Oxford, 2018). Jacobs’ analysis of the MT and biblical DSS finds only four features that can be considered distinctive of the scrolls: pluses of the directive \textit{he}, pluses and minus-es of the conjunction \textit{vav}, shifts toward \textit{vav} plus imperfect, and shifts from singular to plural nouns. At the same time, however, the analysis does not reveal any large-scale patterns of change within the scrolls connected to diachronic development, dialect, or, more specifically, to QH in general.}

\section*{4.3. Individual Versus Group Variation}

In numerous publications we have underlined the principle of individuality which means that occurrences in separate compositions rather than (only) groups of writings are considered and compared.\footnote{See, for example, Rezetko and Young, \textit{Historical Linguistics and Biblical Hebrew}, 227–228 (with references to other cross-linguistic studies), 238–242, 398–399, 407.} Nevertheless, it remains commonplace in much work based on insufficient data to overestimate linguistic uniformity or homogeneity in CBH, or LBH, or QH writings.\footnote{For instance, take Hornkohl’s treatment of the MT Pentateuch and several quasi-biblical DSS works (see n. 164), but the problem is hardly restricted to this publication.} In response, Jacobs discusses this issue further, and he makes some headway in support of the conventional groupings of CBH and LBH books \textit{with regard to one particular linguistic feature}. Specifically, he examines the distribution of the \textit{he-locale} (directional/directive \textit{he}) and com-
pares his findings to those of Hornkohl and Rezetko and Young. He draws four main conclusions: first, there is a statistically valid difference between the use of the *he-locale* in the CBH and LBH books; thus there is some credence to these different groupings of books; second, there is no statistically significant difference in the use of the non-standard use of the *he-locale* in the CBH and LBH books; thus these books should not be grouped when analyzing the non-standard use of the *he-locale*; third, while there is a clear difference between these two corpora, this difference is not consistent with a diachronic interpretation; and fourth, the grouping of texts should be supported by evidence for each feature of Hebrew language studies.

4.4. Common Versus Uncommon Language

Linguists speak often about usual and rare linguistic features and in relation to all sorts of contexts such as a particular writing, corpus of writings, genre, dialect, period, and so on. Needless to say, this is true also for BH where common features like the relative pronoun אֲשֶׁר (5574 times) greatly overshadow the uncommon שֶׁ (142 times; mainly in Psalms, Song of Songs, and Qoheleth) by a ratio of almost 40 to 1. It is also well known that uncommon words, forms, and constructions may be less well understood or welcomed and therefore more susceptible to being replaced by more common ones in speech and writing. This too is true for BH where it is often suggested, for example, that uncommon items in Samuel–Kings were replaced by common ones in Chronicles, for example, 2 Sam 6:16’s מְפַזֵּז כֵּר וּמְכַרְְּ by 1 Chr 15:29’s מְרַקֵּד וּמְשַחֵּק. On the basis of observations like these and careful analysis of parallel passages in the MT and between the MT and other textual witnesses such as the biblical DSS, we noticed time after time that large-scale, basic, common linguistic features of BH rarely show variation and thus were presumably highly stable in textual transmission, whereas less common items were highly fluid (i.e., variable), and consequently only with much caution and great doubt should these less common

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167 Jacobs, “The Balance of Probability,” 941–957; Hornkohl, *Ancient Hebrew Periodization and the Language of the Book of Jeremiah*, 203–217; Rezetko and Young, *Historical Linguistics and Biblical Hebrew*, 374–394. Note also this justification of his approach by Hornkohl: “The approach I adopt in this study, according to which, for example, CBH Masoretic texts, the MT’s core LBH material, and the biblical DSS I treat as more-or-less well-defined corpora, is justified in light of their respective linguistic profiles. This is not to say that the individual texts that comprise each corpus are linguistically homogenous. For example, the language of the books (and even component compositions) that comprise the Masoretic Torah is not unified. Also, as I readily admit below, in the face of widespread orthographic and linguistic development in the case of DSS biblical material, specific manuscripts exhibit striking conservatism. Even so, it seems useful to group compositions, biblical or otherwise, on the basis of linguistic similarity, diachronic and otherwise…” (Hornkohl, “All Is Not Lost,” 56 n. 5). However, the “usefulness” (subjective convenience) of grouping compositions is not an adequate “justification” (objective validation) for doing so.

items be relied on as evidence of the earliest compositional stages of biblical literature or of the (original) language of particular authors at particular times and in particular places.\textsuperscript{169} Nevertheless, it is precisely these less common features, many of which appear sporadically only in the corpus of LBH,\textsuperscript{170} that have played the biggest role in historical linguistic and linguistic dating studies of BH writings.

In addition to Young,\textsuperscript{171} there are several other contributors to the publications under review who discuss the issue of common versus uncommon language. Dean examines Aramaisms—a sort of less common linguistic feature of BH—in parallel MT and biblical DSS material, concluding that they were not stable during the transmission of the biblical text; consequently Aramaisms cannot be safely assumed to have been part of the “original” form of the text; hence Aramaisms are an unreliable criterion for linguistic dating.\textsuperscript{172} Bloch, referring to the illustration of שֶ and אֲשֶ in 4QJudg\textsuperscript{a} and MT Judg 6:13, respectively, comments: “There is no doubt that in some instances, nonstandard features in the language of the biblical books were eliminated by ancient copyists who replaced them with more standard features....No definite answer to this question can be given, which illustrates the difficulty of applying historical-linguistic analysis to a literary text [= the Hebrew Bible] copied and recopied through generations.”\textsuperscript{173}

\textsuperscript{169} For in-depth analysis and discussion, see Rezetko and Young, \textit{Historical Linguistics and Biblical Hebrew}, 87–88, 110–115, 406–409, and especially 145–210 with 413–591. See also our many other relevant publications cited in n. 72. The notion of common and less common linguistic features is the outcome of inductive research on language variation within the MT and between the MT and other textual witnesses. We did not approach the texts with some preconceived common/less common linguistic research method, but just happened to discover what we did after a multitude of observations. Some have misunderstood our approach, such as Notarius in her review-essay of our \textit{Historical Linguistics and Biblical Hebrew}. See T. Notarius, “Just a Little Bend on the S-Curve: The Rise and Fall of Linguistic Change in Post-Classical Biblical Hebrew,” \textit{SJOT} 32 (2018): 201–216, and our response; R. Rezetko and I. Young, “Bending It Too Far: Response to Tania Notarius, ‘Just a Little Bend on the S-Curve: The Rise and Fall of Linguistic Change in Post-Classical Biblical Hebrew,” \textit{SJOT} 32 (2018): 201–216” (http://www.academia.edu/37418069/2018a_Rezetko_Young_Bending_It_Too_Far_Response_to_Notarius_Jus t_a_Little_Bend_on_the_S-Curve).


\textsuperscript{171} Young, “Ancient Hebrew Without Authors”; idem, “Starting at the Beginning with Archaic Biblical Hebrew.”

\textsuperscript{172} Dean, “Aramaisms.”

\textsuperscript{173} Bloch, “Aramaic Influence and Inner Diachronic Development in Hebrew Inscriptions of the Iron Age,” 85 n. 5.
4.5. Meaningful Versus Non-Meaningful Language

Some of our authors discuss the notion of meaningful language. To begin, all should admit the subjectivity of deciding what has a “serious, important, or useful quality or purpose” when it comes to linguistic forms and uses. Two matters come into play here, first “diachronically [or: chronologically, historically] meaningful [or: relevant, significant]” language, and second a significant accumulation of late language. We discuss the first issue here and the second issue below. In these volumes and elsewhere, Hornkohl expresses his opinion on different linguistic features and patterns (or: arrays) of distribution (or: development), both within the MT and between the MT and the biblical and non-biblical DSS, that in his mind carry or do not carry diachronic weight.175 These features and patterns are by and large the conventional ones. His main points regarding “diachronically meaningful” language are, first, there is generally a situation of stability between the MT and DSS, and second, when there are differences between these, it is usually the MT that has the classical feature and the DSS that have the post-classical alternative. Young’s lengthy response to Hornkohl underlines three points about the criterion of “diachronically meaningful”: first, it is selective, because features and patterns that do not fit the conventional paradigm are discounted or unrecognized; second, it is circular, because the approach is based on the conventional CBH → LBH → QH framework; third, it is ambiguous, because the distribution of the “late” items is less straightforward than Hornkohl and others acknowledge.176

4.6. Macro-Diachrony Versus Micro-Diachrony

One contributor makes a distinction between macro- and micro-diachrony, or more specifically between macro-diachronic change versus micro-diachronic variation. Klein says:

It will be useful here to distinguish two aspects of what is traditionally labelled “historical linguistics”: microdiachronic linguistics and macrodiachronic linguistics.177 The first deals with language change in the interstitial time span of generation to generation; the latter deals with time intervals measurable not in generations but in centuries. The former yields the basic material for change reflected in competing variants; the latter yields linguistic salta-

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177 Here Klein cites one of his earlier publications where he says: “Although we would like to determine historical truth to as fine-tuned a degree as possible, in most instances (indeed, in nearly all that really matter in (relatively) distant linguistic reconstruction) we must be content with long-range saltations on a fairly large scale...The actual internal steps in the historical processes yielding our attested forms are as a rule irrecoverable. and [sic] it is probably just as well that this is so, since the intermediate ‘noise’ has been filtered out...It is a measure of the remarkable efficacy of our diachronie methodologies that we can in fact make macrodiachronic sense out of the often overdetailed historical record...” (J. S. Klein, “Theory VS Practice in Diachronic Linguistics,” Language Sciences 21 [1999]: 87–104 [92]).
tions in which the victorious variants are on display, but not the internecine competitions which have produced them.\textsuperscript{178}

As an example of macro-diachronic change, a “real” and “full-blown” diachronic change in BH,\textsuperscript{179} he discusses the establishment of יְהַּ as an independent lexical item as seen in Qoh 8:17.\textsuperscript{180} What is more, he considers that such internal linguistic processes or changes or “processual linguistic change[s],”\textsuperscript{181} which point outward from a starting point to an end point, stand out against the many lexical and grammatical case studies in our Historical Linguistics and Biblical Hebrew which he regards as examples of micro-diachronic change since those show, in his view, synchronic variation rather than diachronic change.\textsuperscript{182} As a matter of fact, this is also our view. Klein is correct that those studies provide evidence for variation rather than change—in the best case scenarios, changes underway and not completed or systematic changes—and this is what we argued, in point of fact, against the conventional viewpoints on the features studied. That said, we disagree with Klein that the variationist analyses in our monograph are, in theory, inadequate for uncovering macro-diachronic change in ancient Hebrew. For example, using variationist analysis, Raumolin-Brunberg demonstrates that the object form you came to be used in the subject function, gradually ousting the older alternative ye from the language, from the introduction of you as subject in the 14th century to the completion of the change by the end of the 16th century.\textsuperscript{183} If the Hebrew Bible was written over roughly a 1000-year period—compared to the roughly 250-year period related to the ye/you change—then it is reasonable to conclude that variationist analysis would, in theory, succeed in revealing at least some completed or systematic changes, or both competing (micro-diachronic variation) and victorious (macro-diachronic change) variants. Given that it does not succeed in revealing these says very little about the theory and method of variationist analysis, but it speaks volumes about the production of the Hebrew Bible.\textit{Either it was composed and/or edited over a much shorter period of time, or the same literary language was used throughout the entire period of its production, or its language was updated as time passed thus smoothing over diachronic changes.} In agreement with us, Klein himself allows for these possibilities.\textsuperscript{184}

\begin{itemize}
\item \textsuperscript{178} Klein, “Historical Linguistics and Biblical Hebrew,” 869.
\item \textsuperscript{179} Ibid., 869, 872.
\item \textsuperscript{180} Ibid., 870–872.
\item \textsuperscript{181} Ibid., 876.
\item \textsuperscript{182} Ibid., 865, 867, 869, 873.
\item \textsuperscript{183} H. Raumolin-Brunberg, “The Diffusion of Subject ‘You’: A Case Study in Historical Sociolinguistics,” \textit{Language Variation and Change} 17 (2005): 55–73. Variationist analysis displays the change over about three hundred years on the “macro” level (p. 60). Note that Klein associates micro-diachrony with sociolinguistics and macro-diachrony with “language history” (Klein, “Historical Linguistics and Biblical Hebrew,” 869), but the discipline of historical sociolinguistics, displayed in Raumolin-Brunberg essay and in our \textit{Historical Linguistics and Biblical Hebrew}, aims precisely to bridge the disciplines of sociolinguistics and historical linguistics.
\item \textsuperscript{184} Klein, “Historical Linguistics and Biblical Hebrew,” 876–879.
\end{itemize}
4.7. Illustrative Versus Diagnostic Use of S-Curves

Holmstedt was the first to invoke the s-curve in BH studies, but around the same time it was embraced by Kim, and then in other publications by Holmstedt and several others. Regrettably, however, despite our detailed evaluation of their use of the s-curve, these other authors continue to want to use it, illegitimately, as a diagnostic/prescriptive tool rather than as an illustrative/descriptive model. The truth is, linguists, historical linguists, and historical sociolinguists are of the opinion that the s-curve is a descriptively adequate model for many and perhaps most instances of language variation and change; however, none of these (including those scholars and publications cited by Holmstedt et al.) have attempted to use the s-curve as

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185 R. D. Holmstedt, Ruth: A Handbook on the Hebrew Text (Baylor Handbook on the Hebrew Bible; Waco: Baylor University Press, 2010), 31. In Rezetko and Young, Historical Linguistics and Biblical Hebrew, 239 n. 97, we made a mistake when we claimed that Kim invoked the s-curve prior to Holmstedt.


189 Screnock initially acknowledges some “potential pitfalls” with the use of the s-curve but his use of it in his subsequent case studies actually succumbs to those drawbacks (Screnock, “The Syntax of Complex Adding Numerals and Hebrew Diachrony,” 793).

190 For example, in Holmstedt, Cook, and Marshall, Qoheleth, 36 n. 24, where they cite publications by Bailey, Kroch, Pintzuk, and Nevalainen and Raumolin-Brunberg. We repeat, these scholars and publications do not use the s-curve as a diagnostic tool for dating; they work with dated texts.
a diagnostic tool for the sequencing (relative dating) of written text specimens. There are some strong and compelling reasons for not using the s-curve in this way.

First, and most importantly, empirical studies have shown that the s-curve is not a universal pattern of frequency change in language, that is, not all language variation and change proceeds according to the s-curve shape.¹⁹¹

Second, illustrated by a study of the history of genitive variability in English (the of-genitive and the s-genitive), Szmrecsanyi reaches the verdict “that text frequencies are a regrettably unreliable and inconclusive diagnostic of grammar change: they are at best inconclusive, and at worst misleading. The reason is that the all-other-things-being-equal condition, which typically underpins frequency-driven reasoning about grammar change, is rarely met in historical linguistics...Thus, we advocate conservatism; before positing grammar change, the analyst needs to rule out alternative explanations. In this context, Occam’s razor is useful: the principle reminds us to choose the simplest explanation consistent with the facts – and grammar change, alas, is typically not the simplest explanation of frequency fluctuation.”¹⁹²

Third, when attempting to track language change in progress it is crucial to control for the independent variables of dialect, genre, register, and various social factors—not to mention time it-

¹⁹¹ For example, Nevalainen discusses stable variation, s-curves, inverted s-curves, and potentially continuous/repetitive u-shaped curves (T. Nevalainen, “Descriptive Adequacy of the S-Curve Model in Diachronic Studies of Language Change,” in Can We Predict Linguistic Change? [ed. C. Sanchez-Stockhammer; Studies in Variation, Contacts and Change in English, 16; Helsinki: VARIENG, 2015] [http://www.helsinki.fi/varieng/series/volumes/16/nevalainen]). Feltgen et al. discuss s-curves, Bass curves, and change according to an exponential (Q. Feltgen, B. Fagard, and J.-P. Nadal, “Frequency Patterns of Semantic Change: Corpus-Based Evidence of a Near-Critical Dynamics in Language Change,” Royal Society Open Science, November 2017 [https://doi.org/10.1098/rsos.170830]). Similarly, Ghanbarnejad et al. describe various linguistic changes that do not follow universal s-curves (F. Ghanbarnejad, M. Geralch, J. M. Miotto, and E. G. Altmann, “Extracting Information from S-Curves of Language Change,” Journal of the Royal Society Interface 11 [2014] [http://dx.doi.org/10.1098/rsif.2014.1044]). Note also Labov’s description of language changes in progress in Philadelphia which are the major focus of his volume: “The recalcitrant nature of that data is displayed in three common features of change in progress: 1 Linguistic changes show a sporadic character, beginning and ending abruptly at times that are not predicted by any universal principles. 2 Stable, long-term variation that persists over many centuries in much the same form is perhaps even more common than changes which go to completion. 3 It is not uncommon to find retrograde movements, where the direction of change reverses, or opposing directions of movement in parallel communities” (W. Labov, Principles of Linguistic Change, Volume 2: Social Factors [Language in Society 29; Malden: Blackwell, 2001], 75). Contrast Holmstedt’s remarks: “The process [of change] may unfold relatively quickly or quite slowly; however it unfolds, the statistical research has shown the S-curve to be the expected result of the change over time” (Holmstedt, The Relative Clause in Biblical Hebrew, 241; emphasis added); “…if the features commonly cited were plotted along the dimensions of time and frequency, an S-curve such as the one above would emerge...” (idem, “Historical Linguistics and Biblical Hebrew,” 103; emphasis added).

self!—but this is very difficult and often impossible to do when dealing with written text specimens, especially those that are long-duration writings for which the demographics of the authors, editors, and copyists are uncertain or unknown.

Fourth, another complicating factor is that not all speakers or writers adopt a linguistic innovation simultaneously. Highly fluctuating rates of adoption are exhibited by conservatives, moderates, and progressives. Consequently, in any given speech community or text corpus, there are usually coexistent and competing language variants which are in the process of adoption (or rejection) with different degrees and rates.

These points have not been dealt with adequately by those scholars who have attempted to use the s-curve as a diagnostic tool to sequence the writings of the Hebrew Bible.

Fifth, and finally, the case studies undertaken by us corroborate that most BH linguistic phenomena conforms poorly to the s-curve shape, despite looking at comprehensive data for the features examined and organizing the writings according to the conventional tripartite periodization of biblical writings with which many Hebraists and biblicists would more or less agree.\textsuperscript{193} Furthermore, we are unconvinced that the few case studies offered by others as support for the use of the s-curve as a diagnostic tool actually support their contention.\textsuperscript{194}

In conclusion, due to the preceding general and specific factors, we believe it is more than problematic, it is impossible, to sequence the writings of the Hebrew Bible by using the s-curve model as a diagnostic tool. Rather, the contours of language variation and change must be established independently. Rogers explains: “The S-curve of diffusion is so ubiquitous that students of diffusion often expect every innovation to be adopted over time in an S-shaped pattern. However, certain innovations do not display an S-shaped rate of adoption, perhaps for some idiosyncratic reason...The main point here is not to assume that an S-shaped rate of adoption is an inevitability. Rather, the shape of the adopter distribution for a particular innovation ought to be regarded as an open question, to be determined empirically. In most cases when this has been done in past research, an adopter distribution is found to follow a bell-shaped, normal curve or is S-shaped on a cumulative basis.”\textsuperscript{195} However, as he observes, that is not an inevitability, and consequently the

\textsuperscript{193} Rezetko and Young, \textit{Historical Linguistics and Biblical Hebrew}, 245–403; Rezetko and Naaijer, “An Alternative Approach to the Lexicon of Late Biblical Hebrew.” We have attributed the fluctuating distributions of linguistic variants, to a substantial degree, to Labov’s notion of “change from above” (Rezetko and Young, \textit{Historical Linguistics and Biblical Hebrew}, 401–402, 407–408).

\textsuperscript{194} For general remarks on their case studies see Rezetko and Young, \textit{Historical Linguistics and Biblical Hebrew}, 239–240. For specific comments see: on J. A. Cook’s analysis of the decline of the Qal perfect of דָּעַר expressing a present state, Rezetko and Young, \textit{Historical Linguistics and Biblical Hebrew}, 240 n. 99; on Dresher’s and Kim’s analyses of וֹלֵקָם and וֹלַקָה (and other words), Rezetko and Young, \textit{Historical Linguistics and Biblical Hebrew}, 329–350; on Holmstedt’s analysis of קֵפְרָה and קֵפָר, Rezetko, “The Qumran Scrolls of the Book of Judges,” 40–42; on Kim’s analysis of קֵפָר and קֵפְרָה, Rezetko and Young, \textit{Historical Linguistics and Biblical Hebrew}, 278–282; and on Kim’s analysis of בֵּן and בֵּן, Rezetko and Young, \textit{Historical Linguistics and Biblical Hebrew}, 351–374.

adopter distribution or temporal dimension of the s-curve must flow from the distribution of the data and not be written over the top of the data. And this is, in fact, what other language experts also assert: “As an empirical tool to measure the progress of linguistic change, the S-curve pattern is usually constructed following the periodization adopted by the compilers of a given text corpus.”196

Forbes, in three recent publications,197 has interacted with the use of the s-curve by Holmstedt,198 who wishes to use it as “an approximating diagnostic tool to check the plausibility of a diachronic analysis,”199 and by us in our Historical Linguistics and Biblical Hebrew, where we use it as “a heuristic model or technique for displaying the distributional patterns of coexisting ‘old’ and ‘new’ linguistic items.”200 The point of contention is whether the s-curve has value as a diagnostic tool for the sequencing (relative dating) of written text specimens, and if so then to what degree?

Forbes seems to agree with aspects of both sides of the discussion. On the one hand, he believes that Holmstedt’s “stance [on the use of the s-curve as an approximating diagnostic tool to check the plausibility of a diachronic analysis] is reasonable.”201 On the other hand, he says: “I have warned against assuming a functional form for s-curves (in agreement with Rezetko and Young...) and have shown how non-monopolisation, non-monotonicity, and fluctuation seriously compromise the usefulness of simple s-curves. I have used confidence interval theory to show how the fluctuations associated with small samples cause intuitive s-curves to be misleading. I have shown how a small adjustment in the composition of a corpus can alter the ordering of its so-called ‘EBH-LBH’ feature values across sub-corpora.”202 As an alternative to the s-curve he therefore suggests using seriation of multiple linguistic features.203

196 Nevalainen, “Descriptive Adequacy of the S-Curve Model in Diachronic Studies of Language Change” (emphasis added).


200 Rezetko and Young, Historical Linguistics and Biblical Hebrew, 225.

201 Forbes, “Two Candidate Approaches to Text Sequencing,” 714.

202 Forbes, “The Diachrony Debate: A Tutorial On Methods,” 922. “That BH linguistic phenomena typically diffuse into use in rough accordance with an ‘s-curve’ was a valid insight of Holmstedt...and Cook...However, the curse of fluctuating data muddled the details of their informal s-curves....Based on the [confidence intervals], many orderings of the corpora might be made. Ordering the texts from smallest-to-largest value is misleading” (ibid., 905–906). In the light of Forbes’ seemingly mediating position, Holmstedt et al. seem to us to be a little too enthusiastic when they say that Forbes has given a “statistical
Forbes approaches the debate with a high level of scientific rigor and statistical sophistication and he expresses relevant criticisms of both sides\(^\text{204}\) while also offering some valuable insights for potentially making significant advances. This said, we should return to our points above against using the s-curve as a diagnostic tool to sequence biblical writings.

First and foremost, Forbes’ concurrence with Holmstedt, that the use of the s-curve as a diagnostic tool is a reasonable stance, is problematized by the fact that diachronicians of language do not use it this way, for the reasons summarized above. It seems to us that Forbes has agreed too quickly with Holmstedt et al.’s idiosyncratic diagnostic use of the s-curve. Again, Nevalainen describes the same perspective that we have encountered in all the literature we have examined: “As an empirical tool to measure the progress of linguistic change, the S-curve pattern is usually constructed following the periodization adopted by the compilers of a given text corpus.”\(^\text{205}\) Therefore, Forbes’ remark is correct, “Historical linguists typically wish to fit an s-curve to a dated linguistic feature, thereby quantitating the extent to which standard innovation theory approximates the observed data,”\(^\text{206}\) except that we are unaware of any exception, such that Forbes’ “typically” seems to be an understatement (and Nevalainen’s “usually” also seems to be an understatement).

Second, it is uncertain, and it actually seems doubtful, that Forbes’ alternative suggestion for text sequencing (i.e., seriation) will itself be able to control adequately for the various independent variables and different rates of adoption that are likely associated with the linguistic phenomena of the BH writings. There is also the matter of the complex production history of the Hebrew Bible. Forbes makes this cautious statement: “Whether innovative seriation methods can be used to advance diachronic analysis is an open question. The extent of the various kinds of noise afflicting our texts may prevent success...We shall only know whether this is the case after we carry out the analysis.”\(^\text{207}\) Among “the various kinds of noise afflicting our texts” he includes transmission noise, but since, as we saw above, he admits that the use of linguistic information to recover the preceding composition/redaction history of the Hebrew Bible is improbable (“mis-guided”), how could seriation really help to answer questions about the dates of origin of the biblical writings?

defense of using the S-curve as a diagnostic tool” and a “convincing rebuttal of recent arguments [by Rezetko and Young] against using the S-curve as a diagnostic tool” (Holmstedt, Cook, and Marshall, Qoheleth, 36–37 nn. 24–25).


\(^{204}\) For example, we agree that the illustrative use of the s-curve in our Historical Linguistics and Biblical Hebrew would have benefited greatly from some of the comments in Forbes, “The Diachrony Debate: A Tutorial On Methods,” 906–914.

\(^{205}\) Nevalainen, “Descriptive Adequacy of the S-Curve Model in Diachronic Studies of Language Change” (emphasis added).

\(^{206}\) Forbes, “Two Candidate Approaches to Text Sequencing,” 711 (emphasis added).

Third, it would be much appreciated and very helpful if Forbes would “carry out the analysis” on a set of BH data, in addition to the Middle English data he has examined, so that we could get a feel for the viability of his seriation approach for biblical literature.

Finally, returning to Holmstedt’s stance on the s-curve, we challenge him to cite even one discussion by historical (socio)linguists of other languages where it is used as a “diagnostic tool,” and we challenge him to produce just three s-curves of relatively frequent BH linguistic data that coincide for most of the individual biblical writings and therefore might support a plausible chronology of the production of those writings.  

4.8. Cross-Linguistic Data, Language Typology, and Diachronic Typology

In addition to the more traditional major techniques of historical linguistics—internal reconstruction and the comparative method (evident in many of the contributions under review)—a handful of contributors make use of language typology (study of the ways in which languages are similar and different) and, especially relevant to our interests, diachronic typology (historical linguistics using a typological method).  Moshavi and Notarius rightly underscore this as one of the recent advances in BH linguistics.  In essays on ABH, Notarius incorporates cross-linguistic data on imperative-hortative paradigms, elsewhere she has limited recourse to typological comparison of several lexical isoglosses between Hebrew and Canaanite and Ugaritic, and Korchin argues “that the thetical profiles within our Archaic Biblical Hebrew and Sargonic Akkadian test corpo-
ra preserve relatively early evidence for a parallel diachronic development toward increasing three-dimensional (discourse) complexity, analogous to that of their substrate grammaticalization pathways.” Final

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Finally, the Naudés provide additional evidence from the cross-linguistic negative cycle related to the negation of the participle in ancient Hebrew. They cite Croft on the value of “a trajectory (or cycle) of change” when “philological evidence is not available and internal reconstruction may be difficult due to a lack of a sufficient range of data.” In summary, we agree with Moshavi and Notarius that “there is broad agreement on the utility of the corpus-based approach and typological comparison.”

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4.9. Quantitative Methods and Statistics

Linguistics has taken a decidedly quantitative turn over the last twenty or so years especially because technological progresses have facilitated the compilation and processing of large(r) corpora which in turn yield higher frequency data that cannot be studied efficiently without the use of computers and statistical tools. This change corresponds with the ongoing data science revolution. Pintzuk, Taylor, and Warner, speaking specifically about diachronic syntax though their description is equally true for the transformation of historical linguistic research generally, elaborate further:

The use of electronic corpora as a source of data is a relatively new development in diachronic syntax. Traditionally, much historical syntactic research was based on a scholar’s knowledge of the language, including sets of collected examples, or on impressions of general patterns, sometimes using individual examples taken from secondary sources...Another approach was to use a set of examples systematically collected from a sample of texts...The availability of syntactically annotated electronic corpora, such as the series covering the history of English produced at the Universities of Pennsylvania and York, in collaboration with Helsinki, has completely transformed the scope, accuracy and speed of such systematic investigations, with benefits also for more qualitative studies.

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Turning to the significance and objective of quantitative methods, it has been argued that quantitative concepts and methods are superior to the qualitative ones on principled grounds. The quantitative ones enable a more adequate description of reality by providing an arbitrarily fine resolution. Between the two extreme poles yes/no, true/false, 1/0, as many grades as are needed can be distinguished up to the infinitely many “grades” of the continuum.

214 Naudé and Miller-Naudé, “Historical Linguistics, Editorial Theory, and Biblical Hebrew.”
215 Ibid., 848.
Generally speaking, the development of quantitative methods aims at improving the exactness and precision of the possible statements on the properties of linguistic and textual objects. They help us derive new insights that would not be possible without them: Subjective criteria can be made objective and operationalized...interrelations between units and properties can be detected, remaining invisible to qualitative methods; and workable methods for technical and other fields of application can be found where traditional linguistic methods fail or produce inappropriate results due to the stochastic properties of the data or to the sheer mass of them... \(^{219}\)

The main point we want to make here is that the quantitative revolution that has happened in historical linguistic research on many other languages is barely underway in our field. \(^{220}\) It remains the case that many and probably most Hebraists with diachronic interests continue to work on the basis of only their “knowledge of the language, including sets of collected examples, or on impressions of general patterns, sometimes using individual examples taken from secondary sources...[or]...a set of examples systematically collected from a sample of texts.” This is not too unexpected since the quantitative turn has taken place after many established scholars were settled in their ways, but it is also a little surprising since Bible software with a morphologically parsed text of the Hebrew Bible (MT) has been available to the wider public since the early 1990s, and now there are also two and almost three complete syntactically annotated texts of the Hebrew Bible (MT) and other texts. \(^{221}\) While these digital resources may not be intended to re-

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220 However, the use of quantitative methods in historical linguistics in general still lags behind the use of them in some other branches of linguistics. For discussion of this issue, and other relevant issues such as problems with the example-based approach (which is still the modus operandi in our field) and what it means to be “empirical” in historical linguistics (which is a matter of transparency and objective verifiability), see G. B. Janset and B. McGillivray, Quantitative Historical Linguistics: A Corpus Framework (Oxford Studies in Diachronic and Historical Linguistics; Oxford: Oxford University Press, 2017), 1–35.

221 The commercial software packages include Accordance, with the Groves-Wheeler Westminster morphology (ver. 4.2, 2016), the Holmstedt-Abegg syntax (ver. 3.0, 2018; nearly completed), and the ETCBC (WIVU until 2012) morphology and syntax (ver. 1.0, 2014), and Logos, with the Groves-Wheeler Westminster morphology (ver. 3.5, 2001), the WIVU (ETCBC since 2012) morphology and syntax (“constituency trees”; 2005), and the Andersen-Forbes morphology and syntax (ver. 0.97, 2012). BibleWorks recently discontinued its operation. For recent detailed discussions of the databases in these packages, see C. L. Miller-Naudé and J. A. Naudé, “New Directions in the Computational Analysis of Biblical Hebrew Grammar,” JSem 27 (2018), 17 pages (http://dx.doi.org/10.25159/1013-8471/4628); C. Kingham and W. van Peursen, “The ETCBC Database of the Hebrew Bible,” JSem 27 (2018), 13 pages (https://dx.doi.org/10.25159/1013-8471/2974); R. D. Holmstedt and J. A. Cook, “The Accordance Hebrew Syntactic Database Project,” JSem 27 (2018), 23 pages (http://dx.doi.org/10.25159/1013-8471/3010); and A. D. Forbes and F. I. Andersen, “The Andersen-Forbes Computational Analysis of Biblical Hebrew Grammar,” JSem 27 (2018), 22 pages (http://dx.doi.org/10.25159/1013-8471/2936). The ETCBC (Eep Talstra Centre for Bible and Computer) database (with morphology and syntax) is freely available online in various formats and locations, for example at the main data repository, https://github.com/Dan-labs/text-fabric, and in several query interfaces, https://shebanq.ancient-data.org (SHEBANQ: System for Hebrew
place printed concordances of words and lists of grammatical phenomena in grammars and elsewhere, it is precisely because of them that there has been a significant move in the past ten to fifteen years toward comprehensive data-driven analysis, and especially of morphological and syntactic phenomena that may not be fully documented in printed resources. Furthermore, it is only in more recent times that diachronic studies of ancient Hebrew have moved beyond complete lists of data, and sometimes tables comparing frequencies of distribution, to various other kinds of illustrative figures (bar graphs, line charts, tree diagrams, cluster diagrams, scatter plots, etc.), and statistical analyses and comparisons. The application of data science and computational linguistics to ancient Hebrew has entered a new and exciting stage.

When looking at the volumes under review, conspicuously only a handful of contributors give complete datasets or anchor their analyses in full data that is given elsewhere. A notable example is Hornkohl who routinely aims to give exhaustive data in his case studies. The other major examples are Jacobs, and Naaijer and Roorda. Among these, however, statistics and statistical relevance/significance are taken up by only Jacobs. Forbes also gives many valuable insights on...
statistical issues.\textsuperscript{224} Other substantial contributions along these lines have been published only recently or are still underway.\textsuperscript{225}

Despite Köhler and Altman’s remark that “quantitative concepts and methods are superior to the qualitative ones on principled grounds,” he, others, and we are not suggesting that qualitative (non-numerical) data and methods should actually be exchanged for quantitative (numerical) ones. Rather, the two approaches should be combined and integrated.\textsuperscript{226} This is partly because things have to be qualitatively assessed before they can be quantified. After all, one must decide that apples are apples and oranges are oranges, or nouns are abstract or concrete or common or proper—in short, divide the data into classes—before the numbers of each are counted and compared. Accordingly Köhler and Altman make this remark before the one cited at the start of this section:

Any science begins with categorical, qualitative concepts, which divide the field of interest into delimited classes as clearly as possible. A linguistic example of this kind of concept is the classical category parts of speech....It is possible to decide whether a word should be considered as, for example, a noun or not. Every statement based on categories can be reduced to dichotomies (having exactly two values, such as \{true, false\}, \{1, 0\}, \{yes, no\}). This kind of concept is fundamental and indispensable but insufficient for a deeper insight.\textsuperscript{227}


\textsuperscript{225} Examples are Jacobs, Statistics, Linguistics, and the “Biblical” Dead Sea Scrolls; B. J. Noonan, Non-Semitic Loanwords in the Hebrew Bible: A Lexicon of Language Contact (LSAWS, 14; University Park, PA: Eisenbrauns, 2019); on Aramaic texts see J. Starr, Classifying the Aramaic texts from Qumran: A Statistical Analysis of Linguistic Features (LSTS, 89; London: Bloomsbury, 2017); see also Historical Linguistics and Biblical Hebrew, 410–411 with nn. 8–9. In addition, there are several ongoing research projects, for example in Amsterdam (http://www.nwo.nl/onderzoek-en-resultaten/onderzoeksprojecten/i/30/9930.html, http://etcbc.nl/projects) and Leuven (https://www.kuleuven.be/onderzoek/portaal/#/projecten/3H150603), and various other PhD theses underway as well as some papers at last year’s and this year’s annual meeting of the Society of Biblical Literature illustrate the “quantitative turn” in our field. While some of the afore- and above-mentioned projects and publications may have had their impetus in some of our publications, such as our Linguistic Dating of Biblical Texts and Historical Linguistics and Biblical Hebrew, the quantitative and statistical methods that are currently being developed and applied to the linguistic sources go beyond what we accomplished in these works.


\textsuperscript{227} Köhler and Altman, “Quantitative Linguistics,” 696.
In addition, and especially in corpus-based research whether of spoken or written specimens, it is also the case that quantitative information serves as a check on qualitative information. First, quantitative analysis shows that a form/use is meaningful rather than random. Second, quantitative analysis in historical research effectively functions as the equivalent of native speaker judgments of grammaticality thus ruling out the possibility of accidental gaps in the evidence.

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228 An additional point, which we do not develop here, is that quantitative analysis is also essential for hypothesis testing (cf. Jacobs, “The Balance of Probability,” 928–936; ibid., Statistics, Linguistics, and the “Biblical” Dead Sea Scrolls, 61–68).

229 M. Penke and A. Rosenbach, “What Counts as Evidence in Linguistics?: An Introduction,” in What Counts as Evidence in Linguistics: The Case of Innateness (ed. M. Penke and A. Rosenbach; Benjamins Current Topics, 7; Amsterdam: John Benjamins, 2007), 1–49 (esp. 7–9 on “qualitative vs. quantitative evidence”): “Using data qualitatively simply means that we use data to show that a certain form/construction is possible in a specific context or that a certain experimental effect occurs in an experimental setting” (ibid., 7); “Positive evidence certainly constitutes first-order evidence in empirical research, but this evidence should be based on solid ground, i.e. on a systematic collection of data. Isolated or dubious cases require further, independent, and systematically collected evidence to distinguish mere ‘garbage’ from meaningful evidence...” (ibid., 8); “To work quantitatively means that we do not use data solely to show that a form/construction or effect exists but rather how much of it exists, i.e. we quantify the data...Statistical methods help to decide whether the differences found are meaningful (= significant) or random” (ibid., 9; emphasis original).

230 Pintzuk, Taylor, and Warner, “Corpora and Quantitative Methods,” 218–221: “Corpora are particularly important in historical research, since there is no route to I-language through the judgements of native speakers. The main use of quantitative data in diachronic syntax is the analysis of variation and change. Frequencies, properly underpinned by a careful theoretical/structural analysis, can provide missing evidence, as we demonstrate below” (ibid., 218); “While corpora particularly lend themselves to quantitative research, they can also be used for qualitative research. A good syntactic analysis makes predictions beyond the construction under consideration. In studies of living languages, these predictions are checked using grammaticality judgements; for dead languages, a search for the construction in a sufficiently large corpus can provide similar confirmation” (ibid., 219); “It is important to note, however, that the presence/absence of a construction in a corpus does not straightforwardly equate to grammaticality-ungrammaticality. The absence of a construction, in particular, can be difficult to interpret. The crucial construction type may be rare (e.g. parasitic gaps), or unlikely to occur in the text types available, which are necessarily written and restricted in genre. The possibility that a gap is simply accidental is difficult to rule out. The interpretation of absence is always a judgement call on the part of the researcher” (ibid., 220); “Positive evidence must also be handled with care. A single example may indicate grammaticality, but given the nature of the text production process, it might equally be an error or misinterpreted” (ibid., 220); “Even in qualitative studies, therefore, it is important to give some indication of the frequency of crucial examples. This kind of information is impossible to provide when relying on secondary sources, but can easily be extracted from a corpus” (ibid., 220); “Beware of statements about frequency based on secondary sources when true quantitative data are not available!” (ibid., 220); “Corpora make the reporting of actual frequencies and proportions straightforward, giving the reader the information to evaluate an author’s claims” (ibid., 221); “In conclusion, Pintzuk and Taylor...show that in cases where more than one analysis of a linguistic change is possible on the basis of qualitative data (i.e. the presence/absence of
In the light of this discussion, we believe that the Naudé’s claim that “the evidence for syntactic change in left dislocation thus provides qualitative evidence of language change, thus mitigating the need for quantitative evidence (pace Rezetko...),” is highly problematic. We will return to this issue below.

4.10. Accumulation of “Late” Language

The word “accumulation” (sometimes “concentration” or “clustering”) means this in our field: “a given composition of unknown date may be judged late only if its language exhibits an accumulation of linguistic features distinctively characteristic of LBH, the presence of which cannot otherwise be explained....Conversely, a text lacking such an accumulation is judged to be early, i.e., pre-exilic.” This notion of accumulation is a keystone of the conventional linguistic dating method. It is also a concept that we have yet to encounter in any other field of historical linguistic inquiry, for the reason that dating elsewhere is a task of philological analysis in its broad sense and historical linguistic research is preferably, and most often, based on dated and localized texts. We have dealt with accumulation in many previous publications, so here we will deal with ongoing controversial points and some specific responses to our work in the publications under review.

To set the context, in a nutshell, these are the main points that we have argued about Hurvitz’s linguistic dating criterion of accumulation:

(a) The underlying assumption entails literary–linguistic circularity since late features are identified by their appearance (mainly or only) in a small set of undisputed late writings (Esther–Chronicles), and writings without those late features (e.g., Genesis–Kings) are deemed early.


233 Hornkohl, Ancient Hebrew Periodization and the Language of the Book of Jeremiah, 7–8; cf. 37–41; Hurvitz et al., A Concise Lexicon of Late Biblical Hebrew, 8, 10–11.

234 Like many others, we understand philology as the full range of critical scholarship on written documents, including linguistic, textual, literary, historical, and other methods of analysis. For references and discussion, see Rezetko and Young, Historical Linguistics and Biblical Hebrew, 26–29.

(b) Many late features are evidently not absolutely late based on their distribution (mainly or only) in late writings, or their opposition/contrast to corresponding early features in early writings, or their attestation/corroboration in late extra-biblical writings, or their appearance in late writings due to language contact or typological development or other factors. Related to this, many typical late features appear (occasionally) in early writings; in fact, all early writings have at least some late features.

(c) The degree of accumulation of late features that is required to determine that a writing is late is left undefined and in reality is interpreted with great flexibility.

(d) The accumulation of late features in particular writings sometimes defies expectations; there can be a relative accumulation of late features in some early (biblical and non-biblical) writings and a relative non-accumulation of late features in some late (biblical and non-biblical) writings.

(e) Consequently, we have suggested that a possible logical outcome of the criterion of accumulation is that all writings could be late (although we do not argue or believe this ourselves), because all writings have late features and there are early and late writings that have a similar degree of accumulation of late features.

(f) The evidence of linguistic variants between parallel passages in the MT and between MT and non-MT manuscripts demonstrates that the distribution and therefore accumulation of late features is due (to some degree) to editorial and scribal factors in addition to authorial ones.

Several of the contributors to the publications under review, especially Forbes and Hornkohl and Young, engage with some of these points. We will review them in the order given and then comment on several additional issues.

(a) The underlying assumption entails literary–linguistic circularity since late features are identified by their appearance (mainly or only) in a small set of undisputed late writings (Esther–Chronicles), and writings without those late features (e.g., Genesis–Kings) are deemed early. We discussed this issue previously (see section 3.3.2). In other words, the default position is that a biblical writing is early unless it is demonstrated to be late by an accumulation of LBH features, but those features are defined as late because they occur (mainly or only) in late writings. Some scholars argue that “the burden of proof must lie with those who suppose that late writers were able to imitate the classical style without betraying their late context” and “the sort of

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evidence required would consist of copious amounts (not just an example or two) of non-linguistically datable post-classical compositions (not just copies of earlier material) employing pure CBH, that is, late writings without “a conspicuous accumulation of distinctive post-classical linguistic features.” Despite the fact that we and others have argued that there are in fact late biblical and extra-biblical writings that meet this definition, we believe that the burden of proof argument should be reversed and defined differently, in order to avoid the problem of circular argumentation: The “classical style” should be defined and described positively, by the presence of specific (recurrent and prevalent) linguistic traits, rather than negatively, by the absence of specific (mainly sporadic and idiosyncratic) linguistic features. What is “classical style” other than “not post-classical style”? Until this is accomplished—and we challenge other scholars to attempt to do this—it will remain impossible to escape the charge of circular argumentation.

(b) Many late features are evidently not absolutely late based on their distribution (mainly or only) in late writings, or their opposition/contrast to corresponding early features in early writings, or their attestation/corroboration in late extra-biblical writings, or their appearance in late writings due to language contact or typological development or other factors. Related to this, many typical late features appear (occasionally) in early writings; in fact, all early writings have at least some late features. According to Hornkohl, who cites Forbes, in our treatment of accumulation in Linguistic Dating of Biblical Texts, we “fail to exercise sufficient discrimination in the selection of features...and/or in the identification of relevant cases,” and he goes on to say, “by their own admission, Young, Rezetko, and Ehrensvård...‘follow a loose definition of LBH features,’ accepting ‘any feature cited by an authority as LBH provided that it occurs in more than one core LBH book (including…Qohelet).’ This can hardly be described as adherence to Hurvitz’s approach, which is characterised by far greater discernment. For example, Young, Rezetko, and Ehrensvård’s list of late lexical features...numbers 372 entries, whereas Hurvitz’[s] entire LBH lexicon has just 80.” This criticism by Hornkohl and Forbes, if sus-

238 Hornkohl, “Diachronic Exceptions in the Comparison of Tiberian and Qumran Hebrew,” 70.
239 Ibid.
241 In their recent book, Hendel and Joosten cite a handful of linguistic features which they believe are “positive markers” of CBH (Hendel and Joosten, How Old is the Hebrew Bible?, 43–45), but the features cited are far from characteristic of the “classical style” (cf. Young and Rezetko, “Can the Ages of Biblical Literature be Discerned Without Literary Analysis?,” 8–12, and also our appendix 2 on the qal passive, https://www.academia.edu/38112870/2019c_Young_Rezetko_Review_of_Hendel_and_Joosten_How_Old_Is_The_Hebrew_Bible_Appendix_2).
244 Ibid., 2:179–214.
245 Hurvitz et al., A Concise Lexicon of Late Biblical Hebrew.
tained, would be a strong response to our points (d) and (e) above. But their criticism is not without its own problems.

First of all, we feel that our application of Hurvitz’s criterion of accumulation was clearer and more refined than Hornkohl and Forbes seem willing to allow. All of the features we included are commonly-accepted LBH features. We are happy for them to experiment with different features. For example, how about using only LBH features that Hurvitz has used? It would be helpful if they used their own set of features to produce samples of accumulation to see if they agree with ours, and if not, why not? Second, Forbes does make an effort to do this, but his treatment of candidate features has many errors. He claims to identify false positives/false-declared features and false negatives/missed features in our work and attempts to rework some of the text samples on the basis of his corrections, but very many of his corrections are erroneous. For example, he claims that we overlooked two features in 2 Chr 18:16 while including the parallel ones in synoptic 1 Kgs 22:17, thus we “robbed the Chronicles passage of two accumulation points,” but both his additions to Chronicles are incorrect. Third, Hornkohl undertakes to illustrate his criticisms with concrete examples, but in many cases he appears to hold us to a stricter standard than others. For example, he comments that “it is not the mere presence of the feature that indicates late linguistic tendencies—as these are in fact documented in texts thought to be classical—but their increased or frequent use,” and one of the illustrations he cites is רצון (“to want”), but it is arguable that if the occurrence in (our) Arad 40:6–7 is to be excluded, then the instance of the semantically similar רצון (“want”) in (Hurvitz’s) Ps 145:19 should be excluded too. Fourth, such details could be debated, but it is not debatable whether Hornkohl and Forbes use our tables of linguistic features in a different way than we expressly intended them — they do. We cited above Hornkohl’s comment that “Young, Rezetko, and Ehrensvärd’s list of

246 Hornkohl, “Hebrew Diachrony and the Linguistic Periodisation of Biblical Texts,” 1010 n. 10; cf. 1008 n. 8 (“overly-inclusive list”); idem, Ancient Hebrew Periodization and the Language of the Book of Jeremiah, 39: “Third, the selection of characteristically late linguistic features on which Young, Rezetko, and Ehrensvärd base their counts is maximal, mixing late elements of undisputed diachronic significance with elements of more dubious diagnostic value. Fourth, the treatment of individual linguistic elements is sometimes superficial, glossing over important details...”

247 Consider, for example, that many of the features in our accumulation studies are the same as those in Hornkohl, “Hebrew Diachrony and the Linguistic Periodisation of Biblical Texts,” 1022–1054.


249 Confusion of אֶל for עַל is evident in 1 Kgs 22:17 (שם), not in 2 Chr 18:16 (שם); cf. Young, Rezetko, and Ehrensvärd, Linguistic Dating of Biblical Texts, 1:134 nn. 59, 62, 356–357. In the same verse, Chronicles’ לָהֶן agrees with the gender of the antecedent צֹאן, Kings’ לָם does not; cf. ibid., 1:134 nn. 59, 62, 357.


251 Young, Rezetko, and Ehrensvärd, Linguistic Dating of Biblical Texts, 1:134 n. 55, 167, 217.

252 Hurvitz, The Transition Period in Biblical Hebrew, 73–78, 110, 126, 175.

late lexical features...numbers 372 entries, whereas Hurvitz’[s] entire LBH lexicon has just 80,” which is intended as a criticism of our lack of “discrimination” and “discernment” in our accumulation experiments. Similarly, Forbes argues that many of the features in the tables are “inappropriate” for describing the texts and then proceeds to reassess many of the text samples on the basis of the features in the tables and in the light of what he regards as falsely-declared features, missed features, and overfitting. The problem is that both these scholars overlook our introduction to the tables where we clarify that they are intended to be helpful catalogs of items that are cited in a dozen major secondary sources, but that we ourselves actually doubt the validity of many of them: “It is important to point out that many of the linguistic features, grammatical and lexical alike, suggested by scholars to be LBH are doubtfully so...” Consequently, Forbes is mistaken to use them indiscriminately and undiscerningly in his lengthy attempt to reassess our accumulation experiments. What is the point of this brief response to Forbes’ and Hornkohl’s criticism that we “fail to exercise sufficient discrimination in the selection of features...and/or in the identification of relevant cases”? Returning to the start of this point (b), our first point is that many LBH features are doubtful — Which features are really late? — and our second point is that in order to carry out accumulation experiments on which we all can agree, we first have to agree on which LBH features are valid, and persuasive, and which are not, because otherwise the results will not be reproducible.

(c) The degree of accumulation of late features that is required to determine that a writing is late is left undefined and in reality is interpreted with great flexibility. There are various issues involved here: the quantity of unique late features, the usefulness of common versus uncommon late features, and single versus multiple occurrences of a particular late feature in the same text specimen.

The main problem is easy to illustrate. We discovered in our accumulation experiments in Linguistic Dating of Biblical Texts that while samples in Esther, Daniel, Ezra, Nehemiah, and (non-synoptic) Chronicles usually have a much higher accumulation of LBH features, many other bib-

255 Ibid., 28–38.
257 For example, as one example of very many, Forbes remarks: “L7, גָּז (shut), was included in error as a feature of 2 Chr 30:1. In their footnote, Young et al. have simply ‘פֶּט (31.1)’ [Young, Rezetko, and Ehrensvärd, Linguistic Dating of Biblical Texts, 1:132 n. 47]. Andersen and Forbes classify this word as a noun, ‘possession,’ rather than the verb ‘shut’ specified by Sáenz-Badillos [cf. Young, Rezetko, and Ehrensvärd, Linguistic Dating of Biblical Texts, 2:179].” The problem is that גָּז in the text sample has nothing to do with גָּז in the table or in the volume by Sáenz-Badillos. Rather, on גָּז, see A. Hurvitz, “Dating the Priestly Source in Light of the Historical Study of Biblical Hebrew: A Century After Wellhausen,” ZAW 100 (1988): 88–100 (91–97); cf. Rezetko, “‘Late’ Common Nouns in the Book of Chronicles,” 394–395. This example shows clearly that Forbes, despite our disclaimer, somehow managed to conflate two different entities, the (more certain) features in our accumulation experiments and the (many doubtful) features in our tables, and consequently this confusion repeatedly calls into question his discussions and criticisms of our text samples.
lical and extra-biblical writings that are conventionally dated to either the pre-exilic, exilic, or post-exilic period exhibit (high or low) concentrations of LBH features that are at variance with their purported (early or late, respectively) dates of composition.258 Or, despite many conceivable LBH features (which they regard as features of a northern dialect), including one Persian loan-word (וּפַרְדֵּס, Song 4:13, which they regard as the product of linguistic updating), Noegel and Rendsburg date the Song of Songs to the pre-exilic period.259 In contrast, Joosten dates Num 36:1–12 to the post-exilic period because of a single “late” expression (דִּבְרֵלְפָּנֵי, “to speak before”, Num 36:1).260 Or, there are six or seven LBH features in the Prose Tale of Job (Job 1:1–2:13; 42:7–17). Hurvitz dates it to the post-exilic period, Joosten to the exilic period, and Young allows that it could date to either of these or to the pre-exilic period.261 Or, in his influential monograph on Psalms, Hurvitz determines that eight psalms (103, 117, 119, 124, 125, 133, 144, 145) and three short doxologies (41:14, 72:18–20, 106:47–48) are definitely late, because of the concentrations of late features in them, but the late dating of 23 other psalms is unsettled due to the isolated or lesser degree of late features in them.262 Upon closer examination, however, one uncovers that while three late psalms have a much higher number of distinct late features (103,
119, 145), five other late psalms have only two or four distinct late features (117, 124, 125, 133, 144), and the 23 psalms of uncertain late date also have one (13 psalms), two (8 psalms), or three (2 psalms) distinct late features.\(^{263}\) Compare, for instance, late Psalm 124 with two distinct late features with uncertain late Psalm 137 also with two distinct late features.\(^{264}\) Furthermore, many of the late features in the uncertain late psalms are the same evidence that is cited in other psalms that are regarded as late, such as הָעֵדֶת in Ps 45:7 (uncertain late psalm) versus Pss 103:19; 145:11, 12, 13 (twice) (definitely late psalms).\(^{265}\) Many other illustrations with various nuances are available. In short, what counts as an “accumulation” of late language is interpreted very broadly.

Hurvitz himself has expressed various opinions about what amounts to an abundant, considerable, heavy, meaningful, outstanding, and so on, accumulation or concentration of late linguistic elements. For example: “A text suspected of being of post-Classical provenance can be so classified only if it contains an abundance of late linguistic features.”\(^{266}\) Elsewhere, “abundance” apparently means an “assortment” or at least more than “one or two”: “This criterion demonstrates that we are not dealing with a text that includes one or two isolated cases of nonstandard CBH only by chance but, rather, with a text, the language of which as a whole is marked unambiguously as late owing to an assortment of features characteristic of the postexilic period.”\(^{267}\) On the other hand, “abundance” is indefinite: “This accumulation is relative. It is very doubtful whether we can mechanically apply statistical criteria to linguistic issues like these.”\(^{268}\)

It is difficult to see how the linguistic dating criterion of accumulation can be of any practical value when it is interpreted with such leeway and so subjectively. The results are the very fluid situations that we described above. The Prose Tale of Job, with six or seven LBH features, could belong to any historical period! What constitutes a sufficient quantity of LBH features for a text specimen to be considered late, exilic or post-exilic? One, two, five, ten, twenty? Hornkohl commends us for “[t]he aim of establishing objectively quantifiable accumulation benchmarks,”\(^{269}\) for having “pressed for greater quantitative precision (e.g., how should one define ‘accumulation’?),”\(^{270}\) for [t]he call for more objective quantification...and the attempt to develop

\(^{263}\) We discuss below the issues of the repetition of the same feature(s) and the length of the psalms and sample size in general.

\(^{264}\) Hurvitz, The Transition Period in Biblical Hebrew, 160–163, 174. The two psalms are relatively similar in length. Psalm 124 has 74 words (57 graphic units) and Psalm 137 has 98 words (84 graphic units).

\(^{265}\) Ibid., 79–82, 110, 175.

\(^{266}\) Hurvitz et al., A Concise Lexicon of Late Biblical Hebrew, 10.


\(^{269}\) Hornkohl, Ancient Hebrew Periodization and the Language of the Book of Jeremiah, 38.

and apply just such a methodology,“271 and he acknowledges that “we are still in need of a nuanced and finely-tuned method for quantifying accumulation.”272 Forbes suggests that “we might attempt to define an optimal cut-off level in the accumulation totals above which lie LBH texts and below which lie EBH texts. Alternatively, we might explore means of classification more sophisticated than this...One way to do this would involve supervised learning...and a formalism called ‘Classification and Regression Trees’ or CART. “273 Unfortunately, neither scholar has so far taken any real steps toward grounding accumulation in some degree of scientific rigor rather than intuitional judgment. We would invite them to develop their suggestions, either as modifications of our earlier method, or by proposing a new method to evaluate accumulation.

In addition to which features are really late and how many of them render a text specimen late,274 there is the question of the usefulness of common versus uncommon late features. Most common LBH lexical and grammatical features are attested somewhere in CBH writings, and most of those that do not appear in CBH writings are mainly lexical items that are rare (i.e., are used relatively few times) and idiosyncratic (i.e., are used by relatively few writers) in LBH writings.275 “With this in mind,” Hornkohl remarks, “it seems likely that statistical presentations can provide a helpful picture only in the case of commonly occurring phenomena, but not necessarily in the case of the odd classical or post-classical lexeme or even a concentration of individual lexemes.”276 However, given that most distinctive LBH items are “odd”—rare and idiosyncratic—it seems to us that lest we develop a more objective way to incorporate them in our accumulation experiments, the linguistic dating criterion of accumulation will continue to hinge on the whims of the individual scholar and consequently will have little if any scientific basis.

This brings us to one final issue related to point (c): single versus multiple occurrences of a particular late feature in the same text specimen. In our original accumulation experiment we stated: “Within this sample we count how many distinct LBH features there are. We do not count repetitions of the same feature. Once an author has demonstrated the possibility of using a particular LBH feature, there is no reason it cannot be repeated as many times as opportunity presents itself. Thus, for example, the LBH order of substantive before numeral occurs seven times in Ezra 1.9–11 simply because this is a list.”277 In addition, we describe a “preference for” facet to our accumulation studies: “In regard to ‘preference for’ categories, we decided to score this as an

271 Ibid., 1010 n. 10.
272 Ibid., 1058.
274 One naturally asks why one or two definitely late features does not definitely make a text specimen late? The answers within the conventional linguistic dating perspective tend to relate to either statistical chance or sporadic updating.
275 We have documented these facts at great length in Young, Rezetko, and Ehrensvärd, Linguistic Dating of Biblical Texts; Rezetko and Young, Historical Linguistics and Biblical Hebrew; Rezetko and Naaijer, “An Alternative Approach to the Lexicon of Late Biblical Hebrew”; etc.
276 Hornkohl, Ancient Hebrew Periodization and the Language of the Book of Jeremiah, 41.
277 Young, Rezetko, and Ehrensvärd, Linguistic Dating of Biblical Texts, 1:130.
LBH feature if the feature in question occurs five times or more in the 500-word section with no examples of the EBH form or a ratio of 10 to 1 if the data so permitted... The ‘preference for’ categories in the following table include preference for collectives as plurals, preference for verb suffixes, and preference for אֲנִי over אָנֹכִי. This “preference for” approach could be viewed as a rudimentary but incomplete way of dealing with the issue of repetitions (and also diffusion). We still think there is some reasonableness to this approach when it comes to the linguistic dating criterion of accumulation, but we also agree with our critics that we should aim for a higher standard, for at least these reasons. First, why squander any potentially valuable information? Second, it would be optimal to integrate (historical linguistic) diffusion with (linguistic dating) accumulation in a comprehensive way. Third: “Because of the ever-present threats of noise [e.g., transmission noise], not taking repetitions into account throws away potential information. While any single observation may simply be a result of noise, repeated observations tend to reinforce one another.”

The question then becomes: How should we properly quantify repeated instances of a LBH phenomenon in a text specimen? First, though, there are two other relevant points here. One is that the issue of repetitions barely applies to most LBH features, because most of them are rare and idiosyncratic. For example, in his study of the Prose Tale of Job, Hurvitz includes one feature that occurs eleven times (חָשְׁתֵן), one that occurs twice, and five that occur once; in his study of Psalm 145, he includes one feature that occurs four times (מַלְּכוּת) and eight that occur once; and so on. Chiding us, Hornkohl claims that “Hurvitz’[s] notion of accumulation considers both features and frequency,” but we are unaware of any references in support of this claim, and in any case it is irrelevant to most LBH features in our and Hurvitz’s accumulation studies. There is

278 Ibid., 131; cf. 131–136.
279 Forbes, “The Diachrony Debate: Perspectives from Pattern Recognition and Meta-Analysis,” 27; cf. 38–39; idem, “The Diachrony Debate: A Tutorial on Methods,” 886–887: “There is a flaw in this argument. We read: ‘Once an author has demonstrated the possibility of using a particular LBH form...’ But, of course, the texts that we study have passed through the transmission channel...and so any given run of text may be contaminated as a result of transmission noise quite disconnected from the author of the text....Consequently, we hold that each instance of a proposed LBH feature should enter into the accumulation sum.”
280 Notarius comments in a discussion of ABH that “[t]he requirement of systematicity...correlates with Hurvitz’s criterion of concentration” (Notarius, “Lexical Isoglosses of Archaic Hebrew,” 83 n. 3), but it is extremely rare in ABH poems that particular ABH features are used consistently and in place of CBH ones (see Young, Rezetko, and Ehrensvärd, Linguistic Dating of Biblical Texts, 1:327–338; cf. Young, “Starting at the Beginning with Archaic Biblical Hebrew,” 101–103), and likewise it is very unusual in LBH writings that particular LBH features are used regularly and instead of CBH ones (see, e.g., Rezetko and Naaijer, “An Alternative Approach to the Lexicon of Late Biblical Hebrew”).
281 Hurvitz, “The Date of the Prose-Tale of Job Linguistically Reconsidered.”
a second point related to this same comment by Hornkohl, which continues: “while, as noted above, Young, Rezetko, and Ehrensvärd...count features, not tokens, meaning that their methodology cannot distinguish between rare phenomena and elements genuinely characteristic of a text or period.” The flaw in Hornkohl’s argument is that he has confused and conflated two separate issues, two different phenomena and methodologies, namely accumulation (or concentration or frequency) of LBH features in a particular passage or book versus diffusion (or spread or frequency) of LBH features through a “population” of writings.

(d) and (e). See (b).

(f) The evidence of linguistic variants between parallel passages in the MT and between MT and non-MT manuscripts demonstrates that the distribution and therefore accumulation of late features is due (to some degree) to editorial and scribal factors in addition to authorial ones. We base this claim on our detailed studies of texts in the MT versus other textual traditions, especially the DSS, Samaritan Pentateuch, and Septuagram (Pentateuch poetry, Judges, Samuel, Isaiah, Jeremiah, Song of Songs, Daniel), and on parallel texts within the MT (Samuel//Psalms, Samuel//Chronicles, Kings//Isaiah, Kings//Jeremiah, Kings//Chronicles). We have addressed the main issues relevant to this point, especially in response to some of Hornkohl’s assessments, above in section 3 (especially 3.4), section 4.3, and section 4.5.

Two other issues related to accumulation require brief treatment.

First, in our previous accumulation experiments we chose to compare the concentration of LBH features in text samples of 500 graphic units. As an example, "וּבַיוֹם" is one graphic unit but four words. Our text samples of 500 graphic units usually correspond to 750 or more words. We considered using longer samples but finally decided that 500 graphic units represented a pragmatic compromise between having a large enough sample and having to exclude texts of a size similar

284 Ibid., 1010 n. 10; cf. idem, Ancient Hebrew Periodization and the Language of the Book of Jeremiah, 38–40, 45–46.

285 Diffusion is usually described as taking place among the members of a social system, but as is customary in historical linguistics, we are using the term in relation to a corpus of historical text specimens. Note that Hornkohl’s misunderstanding is evidenced by his references to some discussions by J. A. Cook, Drescher, Forbes, Holmstedt, and Naudé, which deal with diffusion, but Hornkohl’s discussion is about accumulation. At the same time, some of the scholars cited by Hornkohl seem to misunderstand several of our references to tendency or statistical divergence as referring to diffusion rather than rate of accumulation (Young, Rezetko, and Ehrensvärd, Linguistic Dating of Biblical Texts, 1:81, 117, 140). This criticism applies especially to this remark by Holmstedt: “Thus, the common refrain from the challengers that ‘the existence of a supposed late feature in a supposedly earlier text invalidates the entire approach’ falls on its face for lack of linguistic awareness. Again, it is simply a fact that old and new forms do coexist, often for hundreds of years” (Holmstedt, “Historical Linguistics and Biblical Hebrew,” 103).

286 For references, see n. 72.

to biblical Habakkuk or Pesher Habakkuk (two of our 28 text samples). Our text block size has been criticized by Forbes, followed by Hornkohl: “While Young’s accumulation is a genuine advance, it fluctuates needlessly because it is based on too-small blocks of text. As I have shown elsewhere, doubled block sizes of ~1 000 words each should lead to much more stable results.” If we were to go back to the beginning we might decide to establish text blocks by words rather than graphic units. We also agree with Forbes that longer text blocks might lead to much more stable results, but the practical issue would remain. Text blocks of 1000 words would render the method useless for all Hebrew inscriptions, many DSS, the biblical books of Obadiah, Jonah, Nahum, Habakkuk, and Haggai, all psalms except 119, and the Prose Tale of Job (psalms and the Prose Tale of Job being two of Hurvitz’s major applications of his method).

Second, twice above we brought up the issue of the connection between accumulation and diffusion. We commented, first, that some scholars such as Hornkohl and others have confused and conflated these two separate issues, two different phenomena and methodologies, namely accumulation (or concentration or frequency) of LBH features in a particular passage or book versus diffusion (or spread or frequency) of LBH features through a “population” of writings, but second, that to the extent that linguistic dating is concerned, it would be optimal to integrate (historical linguistic) diffusion with (linguistic dating) accumulation in a comprehensive way. Hurvitz’s accumulation is concerned with individuals (or authors of individual writings or individual writings themselves) but it is well known that contemporaneous individuals can have very different tendencies with regard to early and late linguistic items, so unless there is very good evidence

288 Young, Rezetko, and Ehrensvärd, Linguistic Dating of Biblical Texts, 1:130 n. 41.
289 Forbes, “The Diachrony Debate: A Tutorial on Methods,” 888; cf. 885–886; idem, “The Diachrony Debate: Perspectives from Pattern Recognition and Meta-Analysis,” 23–27, 41; Hornkohl, Ancient Hebrew Periodization and the Language of the Book of Jeremiah, 39; idem, “Hebrew Diachrony and the Linguistic Periodisation of Biblical Texts,” 1010 n. 10. Forbes claims that “Young et al. silently reduce this to 500–word samples” (Forbes, “The Diachrony Debate: Perspectives from Pattern Recognition and Meta-Analysis,” 24; emphasis added), but our reduction of Biber’s 1000 words to 500 graphic units (~750+ words) was hardly done “silently” since we explicitly discuss our reasoning behind that decision. Hornkohl claims that in Hurvitz’s method “texts [are] marked as late only if they contain an accumulation of post-exilic features relative to length” (Hornkohl, “Hebrew Diachrony and the Linguistic Periodisation of Biblical Texts,” 1006 n. 5; emphasis added), but we do not believe Hurvitz has ever connected accumulation with length of text (if so, where?).
290 It is worth mentioning that even Psalm 119 would not qualify as LBH using the same criteria as our other accumulation experiments. The psalm has 1061 graphic units or 1332 words, and according to Hurvitz twelve unique LBH features. (As an aside, note that 11 of 12 occur only 1–3 times, and 4 relate to the same semantic field [חֻקִים, מִצְּוֹת, עֵדֹת, פִקוּדִים, תוֹרָה].) 12 unique LBH features in 1061 graphic units, or 6 in about 500 words, aligns Psalm 119 with most of our CBH text samples.
291 That there can be considerable differences in the participation of individuals in an ongoing change—i.e., conservatives, moderates, and progressives—is discussed in detail in Rezetko and Young, Historical Linguistics and Biblical Hebrew, 51–52, 223–228, 240–242. Such variation is an element of “noise” or a “nondiachronic factor” that is inadequately considered by Forbes and Hornkohl, though they are hardly the only ones to overlook this problem for linguistic dating.
related to the “population” of which the individual is a member, accumulation means very little with respect to items that cannot be shown to be late innovations absolutely (by distribution, typological development, etc.) or to have replaced early items (nearly) completely or systematically. We emphasize again, it is extremely important to be very clear, we must keep in mind that we are dealing with two separate issues, which we contextualize here in the framework of textual analysis: accumulation (including repetitions) in an individual text versus diffusion in a group of texts. Far too much of what has been regarded as late linguistic features for the purpose of linguistic dating accumulation has relatively little or even no support when those features are examined from the standpoint of historical linguistic diffusion. The major problem with the criterion of accumulation is that it should tally genuinely late linguistic features, but the often overlooked fact of the matter, we repeat, is that what is generally called “late” language is a rare and idiosyncratic part, a very thin layer of the language of the corpus of late books. So, what is our conclusion about accumulation? We have addressed a variety of issues in this section. Most importantly, we agree with Forbes and Hornkohl that more work has to be done on refining accumulation, especially if, as we believe, it should have a measure of “scientific objectivity” rather than mere personal and intuitional significance. That said, we must clarify that even though we share some similar aims with other scholars in our desire to find the best way of expressing accumulation, it should not be forgotten that our aims may be somewhat different that theirs. Our methods of quantification led us to discover further flaws in the traditional linguistic dating method, which contributed to our rejection of that method, whereas others may more conventionally be wishing to still use it as a tool for dating biblical texts.

292 In some previous publications we have described this problem as overestimation of linguistic contrast between CBH and LBH or “early” and “late” BH (see, e.g., ibid., 241–242, 399–400, and the other publications cited there).
5. Periodization Issues

5.1. MH as a Continuation of BH or QH (or CBH > LBH > QH > MH)?

In a recent essay E. M. Cook examines four alleged archaic elements in MH and concludes, first, that they are not archaisms and, second, that MH is a “continuation of BH itself” rather than (as we—and others—have argued) “an independent dialect from BH, whose ancestor coexisted with BH for an unknown length of time in the biblical period.” This issue of the relationship of MH to other stages or varieties of ancient Hebrew is touched on in several of the publications under review, and it is plainly an issue that requires more research, including more systematic and exhaustive linguistic analysis. Despite the red flags that we and others have raised, 


In this section we focus on MH as a continuation of (L)BH or QH, but an analogous issue is QH as a continuation of (L)BH. This matter receives less explicit attention in the publications under review. See especially Joosten, “The Hebrew of the Dead Sea Scrolls”; idem, “Late Biblical Hebrew and Qumran Hebrew.” The main problem with these particular discussions is that they gloss over the problem of sporadic versus systematic variation (see above in section 4.2). In particular, the phenomena that Joosten discusses, such as the modal use of the participle in QH, are so marginal in usage that they can hardly be seen as evidence for his larger argument about “systemic changes” and “structural difference[s]” between (L)BH and QH. The application of quantitative methods (see above in section 4.9) would go a long way toward clarifying potential systematic variations and changes between (L)BH and QH.


Young, Rezetko, and Ehrensvärd, Linguistic Dating of Biblical Texts, 1:246.

Cook’s essay is problematic for at least three reasons. First, Cook frames his essay as a response to our argument in Linguistic Dating of Biblical Texts (Cook, “On Some Supposed Archaisms in Mishnaic Hebrew,” 11–12, 20), but in actuality he does not engage our data or analysis and he even misrepresents what we say when he claims that we say that “Mishnaism” have “no chronological implications” (ibid., 11; emphasis added) and “the lexical and grammatical differences found in the books of the Hebrew Bible are never indications of chronological change, but are always and only stylistic variants” (ibid., 11; emphasis added). We have addressed such straw man caricatures of our work previously, for example, in Rezetko and Young, Historical Linguistics and Biblical Hebrew, 594–596; Young, Rezetko, and Ehrensvärd, “Do We Really Think That Ancient Hebrew Had No Chronology?” Second, Cook engages several of the proponents of the argument which he is opposing (e.g., Bar-Asher, Kutscher, Pérez Fernández), but other significant work on dialects, diglossia, and MH by Qimron, Young, and especially Rendsburg is ignored (for references and discussion, see Young, Rezetko, and Ehrensvärd, Linguistic Dating of Biblical Texts, 1:173–200, 223–249; 2:75–77). Third, Cook’s analysis of the four alleged archaic elements in MH is less persuasive than he lets on. As an example, and aside from difficulties with some of his specific points, he latches on to Huehnergard’s work for his argument that “the use of ψ cannot be used to argue that MH is derived from a dialect genetically separate from BH, since ψ is a reduced form
the work of scholars whose work fits largely in the framework of the conventional linguistic dating approach\textsuperscript{299} continues by and large to regard MH-like lexical or grammatical items or “Mishnaisms” in BH as absolutely late or sometimes only relatively late. Here we would just like to distinguish several different viewpoints or general stances on MH. In some of their case studies, Hornkohl and Samet cite MH as evidence that particular linguistic features in reworked Pentateuchal material at Qumran and in MT Qoheleth, respectively, are late phenomena.\textsuperscript{300} Along similar lines, the Naudés talk about new syntactic constructions that diffused and persisted in QH and (then) in MH/Rabbinic Hebrew (RH).\textsuperscript{301} A different view is signaled in passing comments by several others. Bloch discusses the use of the verb יכל as a participle in Arad ostracon no. 40 and in MH—but not in BH—and the probability that MH developed out of a spoken dialect of Hebrew.\textsuperscript{302} Notarius refers to certain data in our Historical Linguistics of Biblical Hebrew as additional evidence for the view that “MH is a typologically different linguistic stage, rather than a continuation of QH.”\textsuperscript{303} Along similar lines, Naaijer and Roorda discuss examples of rare syntactic phenomena in BH that challenge the claim (by Bergey and others) that LBH is a “forerunner” of MH.\textsuperscript{304} Finally, we would like to remark briefly on the following comment by Klein, who

\textsuperscript{299} In particular, the criterion of extra-biblical attestation, according to which alleged late or LBH linguistic features in BH should be corroborated by their appearance also in biblical or post-biblical Aramaic, or in post-exilic Hebrew sources outside the Hebrew Bible (MT), such as the Wisdom of Ben Sira, the non-biblical DSS (QH), the Bar Kochba letters, or Rabbinic Hebrew (RH/MH), or which are Persian or Greek loanwords or loan translations, or even which occur in non-MT biblical texts such as the biblical DSS or the Samaritan Pentateuch. See, for example, Hornkohl, Ancient Hebrew Periodization and the Language of the Book of Jeremiah, 7, 23–25; Hurvitz et al., A Concise Lexicon of Late Biblical Hebrew, 5, 10. Note, however, that Hornkohl and Hurvitz have a more critical perspective on “Mishnaisms” than the view that is advocated by Cook (see above).

\textsuperscript{300} Hornkohl, “Hebrew Diachrony and the Linguistic Periodisation of Biblical Texts,” 1008 n. 7 and in some of his case studies; Samet, “The Validity of the Masoretic Text as a Basis for Diachronic Linguistic Analysis of Biblical Texts,” 1064–1065 and in her case studies.


\textsuperscript{302} Bloch, “Aramaic Influence and Inner Diachronic Development in Hebrew Inscriptions of the Iron Age,” 103–105 with n. 57 (citing the work of Talshir).

\textsuperscript{303} Notarius, “Just a Little Bend on the S-Curve,” 210 n. 29 (citing also the work of Qimron).

\textsuperscript{304} Naaijer and Roorda, “Syntactic Variation in Masoretic Hebrew,” 965, 967–969.
is thinking along the lines of a “trajectory” of change from BH to MH (he does not address QH):305

Note that the prehistory of MH is irrelevant to these considerations. There can be no doubt that this stage of the language is a continuation of one or more spoken dialects tracing their roots to the very origin of Hebrew itself. But any feature of MH not itself a characteristic of BH generally that penetrates the literary language only in books of the Tanak that can justifiably be considered late on non-linguistic grounds must be said to be late relative to the time-stream of BH.306

While like Klein we would stress that particular features must be treated on a case-by-case basis, it is uncertain in our minds, for both theoretical and methodological reasons, that “the prehistory of MH is irrelevant to these considerations” (emphasis added). For example, there are several heavily-“Mishnaizing” biblical writings that some Hebraists have been reticent to date relatively late in the time-stream of BH, including Qoheleth and especially the Song of Songs.307 In particular, we feel that the potential colloquial and dialectal issues have not been adequately factored into Klein’s perspective. Thus in one of the most recent and extensive studies of the book’s language, Noegel and Rendsburg argue that “the Song of Songs was written circa 900 B.C.E., in the northern dialect of ancient Hebrew.”308

5.2. Further Thoughts On Language Periodization

Moshavi and Notarius note that the periodization of BH is an issue about which less consensus exists in the current scholarly discussion.309 As far as we know, we were among the first to discuss theoretical and methodological issues related to the periodization of BH in the context of general historical linguistics and comparative research on other languages.310 Four years later, it

310 See, in addition to the reference in n. 293, for example, Rezetko and Naaijer, “An Alternative Approach to the Lexicon of Late Biblical Hebrew,” 35–36; Rezetko, “Response to William A. Schniedewind, ‘Do Difficult Hapax Legomena Illustrate a Gap in the Hebrew Scribal Tradition?’” (http://www.academia.edu/34516509/2017d_Rezetko_Response_to_Schniedewind_Do_Difficult_Hapax_Legomena_Illustrate_a_Gap_in_the_Hebrew_Scribal Tradition); idem, “Thoughts on Language Periodization with a Response to Jacobus A. Naudé and Cynthia L. Miller-Naudé.” In Rezetko and Young, Historical Linguistics and Biblical Hebrew, 396–398, we refer to the discussions of periodization by J. A. Cook, De Caën, Drescher, Holmstedt, Kim, and Naudé, which question the empirical status of the conventional
still seems true that Hebraists have not thought much about the highly complex, and very problematic, idea of language periodization, and what would be required to construct a periodization of BH on the basis of empirical evidence. Even the most recent publications that deal explicitly with the periodization of BH totally disregard the recent discussion.\textsuperscript{311}

Generally a language periodization is simply the \textit{recognition} of two widely separated, in time (by generations or centuries), and divergent, in type, forms or systems of language. This simple statement conceals problems such as the endpoints, duration, separation, and homogeneity/heterogeneity of language periods.\textsuperscript{312} In previous publications we attempted to define a language periodization on the basis of linguistic criteria and we suggested how one might construct a language periodization on the basis of linguistic criteria:

\textit{Definition of a language periodization}: “A division of language with a (statistical) combination of linguistic attributes which is not identical to another division of the same language with its (statistical) combination of linguistic attributes.”\textsuperscript{313}

\textit{Construction of a language periodization}: “Identify specific language properties that have adequate tokens (probably morphosyntactic features) and that ideally are represented by old (archaisms, retained versus lost) and new (innovations) variants, which when studied in relation to presence or absence and shifts in markedness, demonstrate that different collections of individual constituents (that is, books or sources) each has some statistical properties that define them individually and collectively.”\textsuperscript{314}

This may not be the only or best way to construct a language periodization based on empirical linguistic evidence, but it seems to us that this approach is preferable to the current one which


\textsuperscript{312} Rezetko and Young, \textit{Historical Linguistics and Biblical Hebrew}, 50–56.

\textsuperscript{313} Ibid., 50 n. 135.

\textsuperscript{314} Rezetko, “Thoughts on Language Periodization with a Response to Jacobus A. Naudé and Cynthia L. Miller-Naudé.” Note that this necessarily involves distinguishing between sporadic and systematic variants (see above in section 4.2).
depends on disputed historical and literary presuppositions (including literary-linguistic circularity, on which see above in section 3.3.2 and section 4.10).\textsuperscript{315}

To date nobody in our field has disputed or discussed these issues, with the exception of the Naudés who mainly address one aspect of the topic but with regard to QH in particular. Their main points are, first, QH reflects a distinct stage in the development of Hebrew between BH and MH,\textsuperscript{316} and second: “The evidence for syntactic change in left dislocation thus provides qualitative evidence of language change, thus mitigating the need for quantitative evidence (pace Rezetko...).”\textsuperscript{317} To begin, we and the Naudés seem to agree that any periodization of ancient Hebrew should be worked out from the linguistic data; it should be based on a bottom-up approach, instead of the conventional top-down one (i.e., literary periodization \rightarrow linguistic periodization) that imposes itself on the linguistic facts. That said, the principal idea we want to put forward here in response to the Naudés is that qualitative evidence cannot substitute for quantitative (or statistical) evidence when it comes to the matter of language periodization. Above in section 4.9 we mentioned two connected points: quantitative analysis shows that a form/use is meaningful rather than random, and quantitative analysis in historical research effectively functions as the equivalent of native speaker judgments of grammaticality thus ruling out the possibility of accidental gaps in the evidence. Specifically, the linguistic data adduced by the Naudés, especially regarding the negation of the participle with special reference to constructions involving left dislocation, is equivocal, because it exhibits both insufficient frequency (number of tokens in the corpus) and incomplete diffusion (spread through the corpus). Stated differently, their data does not display replacement and systematicity. We believe, in agreement with some other historical linguists who have treated this issue explicitly, that the absence of replacement and systematicity (i.e., no completed change) controverts the empirical usefulness of their linguistic data with regard to corroborating language periodization. Klein’s description of “a linguistic period, which for [him] relates primarily to systemic diachronic change”\textsuperscript{318} represents the consensus.\textsuperscript{319} Finally,

\textsuperscript{315} In some ways, the question is not far from the one Young asked fifteen years ago: “If Samuel–Kings are older than Chronicles then it is obviously most likely that linguistic contrasts between them reflect that chronological difference. However, can the argument be reversed, and the linguistic contrasts be used to show that Samuel and Kings are in fact older than Chronicles?” (I. Young, “Introduction: The Origin of the Problem,” in \textit{Biblical Hebrew: Studies in Chronology and Typology} [ed. I. Young; JSOTSup, 369; London: T&T Clark International, 2003], 1–6 [2]).

\textsuperscript{316} Naudé and Miller-Naudé, “Historical Linguistics, Editorial Theory, and Biblical Hebrew,” 842–860. In our opinion there is some tension in the Naudés’ approach. They say: “We do not argue that such changes can be used to assign dates to texts, especially since linguistic change necessarily involves variation and thus overlapping constructions. What we do argue, however, is that if a feature reflects deep, syntactic structure, it can be used to place related constructions in a typologically related diachronic seriation” (ibid., 847). At the same time, however, they speak about QH as a distinct stage in the development of Hebrew, and they reach that conclusion about periodization on the basis of linguistic criteria (“typologically related diachronic seriation” of language features).

\textsuperscript{317} Ibid., 855.

\textsuperscript{318} Klein, “Historical Linguistics and Biblical Hebrew,” 868 n. 7. Note also his further references to “systemic diachronic change” (ibid., 877) and “systemic replacement” (ibid., 879).
There is an additional problem with the Naudés’ view of QH as a distinct stage from (L)BH, and that is whether the timespan between these is sufficiently long (cf. Bynon’s remark below; cf. Klein, “Historical Linguistics and Biblical Hebrew,” 878). For those interested in exploring further the theoretical and methodological issues of language periodization, we highly recommend the following literature: A. R. Barros, “Periodization,” in International Encyclopedia of the Social Sciences (ed. W. A. Darity, Jr.; 2nd edn; 9 vols; Detroit: Macmillan, 2008), 6:210–211 (note this statement on the link between quantitative/statistical and qualitative evidence: “The origin of the idea of periodization is rooted in the old philosophical principle that there are possible quantitative variations in most concepts associated with social phenomena. Such quantitative variations can lead to qualitative changes in some features of social reality that can be used to define different periods” [210]); T. Bynon, Historical Linguistics (Cambridge Textbooks in Linguistics; Cambridge: Cambridge University Press, 1977), 1–14 (note this statement on successive language states and completed changes: “It can, in fact, be said that there is an optimal time-lapse of say four or five centuries which is most favourable for the systematic study of change. This is so because on the one hand the differences between successive language states are then sufficiently large to allow the statement in the form of rules of completed changes and on the other continuity is not at stake – one is clearly still dealing with ‘the same language’” [6]); A. Curzan, “Interdisciplinarity and Historiography: Periodization in the History of the English language,” in Historical Linguistics of English (ed. Á. Bergs and L. Brinton; HSK 34.1; Berlin: De Gruyter, 2012), 1233–1256; J. Fife, “On Defining Linguistic Periods: Gradients and Nuclei,” Word: Journal of the International Linguistic Association 43.1 (1992): 1–14; J. Fisiak, “Linguistic Reality of Middle English,” in English Historical Linguistics 1992: Papers from the 7th International Conference on English Historical Linguistics, Valencia, 22–26 September 1992 (ed. F. Fernández, M. Fuster, and J. J. Calvo; Current Issues in Linguistic Theory, 113; Amsterdam: John Benjamins, 1994), 47–61; W. A. Green, “Periodization in European and World History,” Journal of World History 3 (1992): 13–53; J. Kopaczyn, “Rethinking the Traditional Periodisation of the Scots Language,” in After the Storm: Papers from the Forum for Research on the Languages of Scotland and Ulster Triennial Meeting, Aberdeen 2012 (ed. J. Cruickshank and R. M. Millar; Aberdeen: Forum for Research on the Languages of Scotland and Ireland, 2013), 233–260; W. Labov, Principles of Linguistic Change, Volume I: Internal Factors (Language in Society, 20; Oxford: Blackwell, 1994), 43–44; R. Lass, “Language Periodization and the Concept ‘Middle,’” in Placing Middle English in Context (ed. I. Taavitsainen, T. Nevalainen, P. Pahta, and M. Rissanen; TEL: 35; Berlin: De Gruyter, 2000), 7–41; E. Rinke and M. Elsig, “Quantitative Evidence and Diachronic Syntax,” Lingua 120 (2010): 2557–2568 (note these comments on the necessity of quantitative/statistical evidence for diachronic syntax: “We nevertheless think that, to a certain extent, generalizations about the grammar generating the actual utterances can be obtained on the basis of textual sources. In our view, this is only possible with recourse to quantitative evidence. Therefore, quantitative corpus studies are absolutely indispensable in diachronic syntax” [2557]); “In the following, we will argue that although frequency, if taken by itself, is not a reliable criterion for the reconstruction of the underlying grammatical system, quantitative data are nevertheless indispensable for the study of diachronic syntax. We will discuss the advantages and limitations of quantitative evidence in diachronic syntax by illustrating it with concrete examples from our own work” [2558]); “Quantitative evidence is indispensable for the analysis of historical language data and can be very helpful in different respects. The application of the sociolinguistic variationist methodology – elaborated for the study of language use – can support the exclusion of artefacts from the corpus and the distinction of differences in use between different grammatical options” [2567]; etc.; J. H.-Y. Tai and M. K.M. Chan, “Some Reflections on the Periodization of the Chinese Language,” in Studies in Chinese Historical Syntax and Morphology: Linguistic Essays in Honor of Mei Tsu-lin (ed. A. Peyraube and C. Sun; CLAO; Paris: École des Hautes Études en Sciences Sociales, 1998), 223–239; R. Wright, “Periodization,” in The Cambridge History of
until Hebraists attempt to discuss the theoretical and methodological issues and present convincing linguistic evidence for the periodization of ancient Hebrew, for now we are happy to end this discussion with the words of Klein:

So where does all of this leave us? Is it possible to produce a scientifically demonstrable, as opposed to an intuitional, periodisation of BH that is based on more than just one or two features? As an outsider, my view is that we may have to be satisfied with something less than this. There can be no doubt that the underlying linguistic system of which BH is a stylistically more or less rigid reflection changed over eight hundred years or so. It is also clear to me that such books as Song of Songs and Qoheleth, irrespective of when they may have been composed, have the special status they do precisely because in them some of the barriers elsewhere erected between the literary language and the living language have broken down. This can be imputed to any number of factors, beginning with the societal strata from which they emerged and extending to dialect, place of composition, time of composition, and genre. Otherwise, the more or less closed nature of the BH literary language affords us few opportunities to see real systemic diachronic change at work. As far as I can see, the only kinds of authoritative statements we can make are statements about the history of Hebrew in general.320

Or, as stated in his final words in his original paper:

I know that some major scholars of Biblical Hebrew have posited periodizations of the language; and perhaps, according to some unattainable external omniscient perspective, these are correct; but external omniscience is antithetical to scholarship, which is based on human standards of argumentation; and I now see, based on my reading of Rezetko and Young’s book, that periodization of Biblical Hebrew is largely intuitional. One may choose to accept it as a working hypothesis; but in doing so, one should also understand that this is in large measure an act of faith.321

6. Conclusions

Research on the historical linguistics and linguistic dating of the Hebrew Bible entered a new stage about fifteen years ago and has advanced rapidly in the last five years or so. The diachronic study of BH is a vibrant field that is currently undergoing dramatic changes thanks to advances in our appreciation of language variation and change, consideration of the history of the biblical writings in their literary and textual dimensions, and the application of far more in-depth, data-driven, and methodologically sound methods of collecting and analyzing linguistic phenomena.


Here we have interacted with dozens of publications from the recent several years in order to characterize the present state of investigation on diachrony in BH. We organized the contemporary “currents” around the themes of research objectives, perspectives on sources, documentation of variation and change, and periodization issues, similar to the contents of our *Historical Linguistics and Biblical Hebrew*, and comparable to some of the main points in the recent summaries of research by Naudé and Miller-Naude and Moshavi and Notarius.

To summarize the *status quaeestionis* and bring this discussion to an end, we would like to highlight some of the conclusions we have reached on various general and specific issues.

**General issues:**

(a) There are many interesting and valuable contributions in the publications we have reviewed, and there are also quite a few contributions that contribute very little that has not been said previously. As we said in the beginning, on the whole, we see a significant progression in the application of historical linguistic theory and method as we move from the volumes edited by Garr and Fassberg and Gertz et al. which by and large reflect a conventional and somewhat dated stage of scholarship on language chronology, to the volume edited by Moshavi and Notarius, to the two journal issues which are the most up-to-date in their historical linguistic ideas and approaches. There continue to be some stalwarts of run-of-the-mill views, but even among those there are also some in the “new generation” who are willing to engage with selected issues, even if they have a tendency to caricature the other side of the discussion.

(b) We have discovered, as acknowledged also by Gesundheit, Naudé and Miller-Naudé, and Moshavi and Notarius, that there is still a far-reaching lack of consensus on many general and specific issues. This is due partly to a refusal by some to sincerely research and engage competing perspectives and approaches, but it is also a situation that is normal as old and new views and methods collide with one another in scholarly dialogue; the consensus of our precursors is a strong force.

(c) Some positives and/or advances in the field include a willingness by some to respond to general and specific criticisms and to converse with one another with sincere consideration of divergent viewpoints; some serious dialogue about literary and textual issues; an ongoing transition from a linguistic dating to a historical linguistic framework; increasing recourse to corpus-based methods that include variationist analysis and quantitative methods and statistics; and advances in the use of diachronic typology.

(d) Some negatives and/or stoppages in the field include a refusal by some others to engage critiques and to dialogue with perspectives that they find objectionable. In particular, they summarily dismiss or silently ignore particular theoretical and methodological issues that have fundamental and critical importance, such as the proper use of the s-curve model and the problems and procedures of language periodization. Also, while there are some interesting and helpful new case studies, more than a few scholars continue to use the same illustrations without interacting with or even acknowledging conflicting data or valid criticisms or out-and-out rebuttals. It is also unacceptable that some act like the debate ended in 2012, dealing for example with Young’s *Biblical Hebrew*, our *Linguistic Dating of Biblical Texts*, and Miller-Naudé and Zevit’s *Diachrony*
in Biblical Hebrew, while disregarding subsequent publications such as Kim’s Early Biblical Hebrew, Late Biblical Hebrew, and Linguistic Variability, our Historical Linguistics and Biblical Hebrew, and the relevant Journal for Semitics issue (25.2) (see section 1). On a personal note, we consider it a scholarly misfortune that some scholars continue to caricature our approach to ancient Hebrew as “anti-diachronic,” “non-diachronic,” and the like, and to reference a review of our Linguistic Dating of Biblical Texts as if it were a substantive review of that work or as if it had any relevance to the content or argument of our Historical Linguistics and Biblical Hebrew, both despite our clarifications and rejoinders.

Specific issues:

(a) Historical linguistics: Our field is slowly advancing from a prescriptive linguistic dating to a descriptive historical linguistic research framework. Many have not yet come to grasp the literary-linguistic circularity of the popular linguistic dating approach. Variationist analysis and diachronic typology—and also cross-textual variable analysis which we have not addressed in this review-essay—are several linguistic methods that are gaining ground.


324 See, for example, R. Rezetko, I. Young, and M. Ehrensvärd, “A Very Tall ‘Cautionary Tale’: A Response to Ron Hendel,” B&I September 2011 (http://www.bibleinterp.com/articles/lez358028.shtml); Young and Rezetko, “Can the Ages of Biblical Literature be Discerned Without Literary Analysis?,” 15–16; Young, Rezetko, and Ehrensvärd, “Do We Really Think That Ancient Hebrew Had No Chronology?” (https://www.academia.edu/24578410/2016b_Young_Rezetko_Ehrensvard_Do_We_Really_Think_That_Ancient_Hebrew_Had_No_Chronology); Rezetko and Young, Historical Linguistics and Biblical Hebrew, 593–600.

325 This review-essay has interacted with over 1000 pages of recent publications (800 pages in the five main publications). We could not comment on every issue. We have focused on the major points of discussion and debate. In other places we have looked more deeply at some other issues, such as Joosten’s pseudo-classicisms and Schniedewind’s hapax legomena. We have focused on issues that are set within the conventional CBH-TBH-LBH framework; we have said very little about ABH. Some other matters that have come up in the publications which we have not discussed include the use of epigraphic Hebrew as a pre-exilic anchor for CBH; the nature of BH as a natural/spoken or unnatural/literary language; the role of orality in textual production; register and style (including “change from above”); diglossia and dialect; Aramaic influence and Aramaisms, and also other loanwords from Iranian and other languages.
(b) *Corpus linguistics*: Variationist analysis overlaps with corpus linguistics. As remarked above, there is increasing recourse to corpus-based methods that include variationist analysis and quantitative methods and statistics, and attention is turning toward far more in-depth, data-driven, and methodologically sound methods of collecting and analyzing linguistic phenomena. However, many discussions of linguistic phenomena continue to be based on examples, prooftexts, small samples, incomplete documentation, etc. Also, assertions of systematic differences between purported stages of ancient Hebrew are poorly defined and insufficiently corroborated.

(c) *Diachronic approaches*: There remains a significant chasm between scholars who claim to do diachronic analysis but whose approach excludes linguistic analysis on the one hand or literary (including source and redaction) analysis and textual analysis on the other. In our estimation, the “biblicists” are interacting with the “linguists” more than the other way around, and this seems to relate to Hebraists’ belief in the “objectivity” of the linguistic evidence and the “conjecture” of literary and textual analyses.

(d) *Textual properties*: There has been some progress in dialogue on the extent of textual stability vs. fluidity and its implications for language variation and change, but much more systematic research still has to be done. Preliminary results suggest that the situation varies according to books and sections of the Hebrew Bible.

(e) *S-curve model*: A few scholars continue to use the s-curve as a diagnostic tool (for sequencing, relative dating, periodizing, etc.) against the normal (illustrative, descriptive, etc.) practice of historical linguists, and without considering the theoretical and methodological problems involved.

(f) *Language periodization*: The notion of language periodization remains one of if not the most neglected issues in our field such that scholars continue to talk about and work within the conventional CBH-TBH-LBH framework without considering the theoretical and methodological issues involved.

(g) *Late accumulation*: The conventional linguistic dating concept of accumulation of “late” language continues to be poorly defined and is applied with so much flexibility that one can legitimately doubt its value as a working principle. Scholars who adhere to the concept do not agree on which features are really late and how many of them render a text specimen late.

7. Concise Statement of Our Current Views

The Hebrew Bible evidences countless instances of language variation and change in progress, but it displays very few and perhaps no completed changes. Furthermore, the Hebrew Bible’s complex production history prevents us from sequencing the individual writings according to those ongoing diachronic linguistic developments. Historical linguistics, diachronic development: Yes! Linguistic dating: No! The conventional Hurvitzian linguistic dating method has proven inadequate to the task. We are open to such ideas as Holmstedt’s many overlaid s-
curves\textsuperscript{326} and Forbes’ seriation\textsuperscript{327} as attempts toward the sequencing (relative dating) of biblical writings, but seeing is believing, so we invite them to do it. The current large-scale Dutch research project, “Does Syntactic Variation reflect Language Change? Tracing Syntactic Diversity in Biblical Hebrew Texts,” may show something. Otherwise, for the time being, we share Klein’s view: “So where does all of this leave us? Is it possible to produce a scientifically demonstrable, as opposed to an intuitional, periodisation of BH that is based on more than just one or two features? As [insiders, our \{= RR/IY\}] view is that we may have to be satisfied with something less than this.”\textsuperscript{328}

8. Bibliography for 2015–2018\textsuperscript{329}


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\textsuperscript{326} Holmstedt, “Historical Linguistics and Biblical Hebrew,” 103.


\textsuperscript{328} Klein, “Historical Linguistics and Biblical Hebrew,” 876. The final sentence in his statement is: “As an outsider, my view is that we may have to be satisfied with something less than this.”

\textsuperscript{329} Previous thorough bibliographies related to the topics of this review-essay were published in Young’s Biblical Hebrew, 318–366, our Linguistic Dating of Biblical Texts, 2:215–283, and our Historical Linguistics and Biblical Hebrew, 601–644. This bibliography is intended to bring the latter up-to-date. The items included here were published in 2015–2018 or are in preparation, in press, or forthcoming, with the exceptions of some items published in early 2019, and in 2013–2014 that we did not know about or had not seen at the time of publication of Historical Linguistics and Biblical Hebrew.


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