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Diachrony in Biblical Hebrew

Edited by

CYNTHIA L. MILLER-NAUDÉ and ZIONY ZEVIT

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Methodological Issues in the Dating of Linguistic Forms

Considerations from the Perspective of Contemporary Linguistic Theory

B. ELAN DRESHER

1. Introduction

The purpose of this essay is to present some methodological principles that underpin contemporary work in diachronic linguistics and sociolinguistics and see to what extent they can be brought to bear on current controversies concerning the dating of Biblical Hebrew. While recognizing that the dating of biblical texts poses unique challenges, one can nevertheless seek to evaluate hypotheses about the development of Biblical Hebrew in the light of what is known about language variation and change in general.

In *Linguistic Dating of Biblical Texts* (henceforth *LDBT*), Young, Rezetko, and Ehrensverd (2008) question the possibility of dating biblical books using linguistic criteria. Although some points they make about earlier claims may be valid, they go too far in my view in discounting the possibility of any sort of diachronic account of the variation found in the texts. This is because the methodology they use to argue against particular diachronic interpretations of variation is overly rigid and would, if applied to other languages, fail to identify even well-attested diachronic variation in texts. Further, their central arguments against diachronic accounts rest on flawed reasoning and unrealistic assumptions about dialects and language change.

I begin by considering a major difference between working with the biblical texts and dating historical texts in Old English, tasks that have sometimes

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been argued to be comparable. Following this, I consider how the study of Biblical Hebrew might have more in common with the study of the history of other languages than *LDBT* might allow. I then discuss some ways in which I disagree with the methodological principles adopted by *LDBT* and propose a different methodology for Biblical Hebrew linguistics.

2. How Biblical Hebrew Is Different

First, I agree with *LDBT* that the problems confronting a historical linguist dealing with the biblical texts are not the same as the problems one typically faces in Old English. In an example alluded to by *LDBT* (1.61), Kofoed (2006) suggests that we can follow the example of Amos (1980) in her monograph titled *Linguistic Means of Determining the Dates of Old English Literary Texts*. His point is that, if Amos can do this for Old English, similar methods should apply in the case of Biblical Hebrew.

Consider Amos's first test, which she concludes is not a reliable indicator for dating. The linguistic phenomenon is the deletion of the high vowels *i* and *u* when in the contexts stated in (1a). There is no doubt or controversy that pre-Old English forms such as **wordu* 'words' or **fǣti* 'feet' (1b) changed to *word* and *fǣt*, respectively (1c). In these words, *-u* and *-i* are in an open syllable following the heavy stems *word* (closed by two consonants) and *fǣt* (containing a long vowel). In principle, then, if we find a text with undeleted *i* or *u* in words like these, we should be able to conclude that the language is very early. And if these vowels have been deleted, then it is later than the change.

- (1) Old English high vowel deletion (HVD) as a test for dating a text (Amos 1980)
 - a. High vowels in an open syllable (a syllable that is not closed by a consonant) delete following a heavy stem, that is, a stem with a long vowel or closed by more than one consonant (Campbell 1959: 144–47; Hogg 1992a: 227–30).
 - b. Before HVD: **wordu* 'words' **fǣti* 'feet'
 - c. After HVD: *word* *fǣt*
 - d. Questionable 1: *ætġǣru* gloss of Latin *framea* 'spear'
 - e. Questionable 2: *ðweoru* gloss of Latin *prava* 'perverse'

So why does Amos conclude that this phenomenon is not very useful for dating? Because the change occurred very early, so much so that only a few possible examples exist of the pre-change forms, and these forms are dubious. Nouns in Old English belonged to a variety of declension classes. The form *word* is a member of the *a*-stems (named after an ancient but no-longer-occurring stem ending *-a*), a large and productive class, and *fǣt* belongs to a minor declension class that has only a few nouns. These classes, and most of the "regular" Old English declension classes, undergo HVD in a straightforward way. But there exist other noun classes in which a suffixal *-u* was protected from deletion by

a preceding *-i* which underwent HVD in regular fashion. Such classes include the *ja*-stems and *jō*-stems, so-called because of the *-i* (sometimes designated *-j*) that intervened between the stem and the inflectional suffixes. For example, *wītu* ‘punishments’ is the post-HVD plural of a neuter *ja*-stem: starting from **wītiu*, HVD applies to the *-i*, leaving behind the *-u*. Therefore, in deciding if HVD should have applied to a word, one must know to which declensional class it belongs. In the forms discussed by Amos, this is not always clear.

For example, there is a form *ætġæru* (1d), found in early glossaries as the Old English gloss of Latin *framea* ‘spear’. This looks as though it could be a relevant example, because a final *u* appears after the heavy syllable *ġæ*; we would expect it to delete after the introduction of HVD, suggesting that the form predates this rule. But the declension class, gender, and case of this form are all uncertain, making it difficult to draw a firm conclusion. The form might be the normal plural of a neuter *ja*-stem, like *wītu*.¹ Or it could be the singular of a feminine *jō*-stem, which also had an intervening *-i* that may have protected the final *-u* from deletion.² Somewhat less plausibly, it may not even be a genuine case of a final *-u*, but may represent a dative plural *ætġærum*: the final *m* is sometimes indicated with a bar over the vowel, and this bar may have been omitted.

Another dubious example is *ðweoru*, a nominative feminine-singular adjective that occurs in the *Vespasian Hymns* as a gloss for Latin *prava* ‘perverse’ (1e): one source of uncertainty here is whether the stressed vowel was long or short (vowel length was not marked in the text in question). If the vowel was short, no deletion is expected. However, even if the vowel was long, it is not clear that we should expect deletion of *-u*, because the long vowel would have been due to the loss of *h* between vowels from the early Old English form **ðweorh-u* (compare the masculine nominative singular *ðweorh*; Campbell 1959: 264–65; Hogg 1992a: 173–75). This compensatory lengthening, if it indeed occurred, was most likely later than HVD and thus would not affect the final *-u*.

In these cases, and all the others, the diachronic stages of the language are not in doubt. What is in doubt is the interpretation of individual forms and whether we can find useful reflections of these stages in the texts. In Biblical Hebrew, we are faced with a different situation. Here, it is the diachronic stages themselves that are in doubt. Therefore, we are not able simply to emulate Amos (1980).

1. A plural suffix would not match the Latin, but the glossaries are not always precise in such matters.

2. Amos (1980: 21) comments that scholars differ with regard to whether the *-u* would be expected to delete in *jō*-stem nouns. This class of nouns was subject to influences from other classes that obscure the expected phonological changes. For a brief survey of the Old English declension classes, see Hogg 1992b.

More generally, certain diagnostics that linguists rely on in dating Old English texts are not available to us in Biblical Hebrew. First, the biblical books appear to have been revised heavily, and the language of the original composition of the early books may have been updated. Conversely, there is also evidence that later authors sometimes attempted to make their compositions sound more ancient by using archaisms. Both tendencies make dating a tricky proposition. In Old English, by contrast, we often know the identity and general dates of authors of manuscripts.

A second problem is that sound change, which is a mainstay of historical reconstruction, is not available to us. Hebrew writing was originally consonantal, with little or no indication of vowels. A system of representing some vowels by consonants (called *matres lectionis*) developed gradually from the tenth through the sixth centuries, and a more radical set of changes took place after 586 B.C.E. through the period of textual stabilization, ca. 200 B.C.E.–100 C.E.³ The first texts we have with diacritic markings for vowels and other prosodic and phonological marks are the Masoretic codices that date from around 900 C.E.—that is, around 1,000 years after the fixing of the consonantal text. The phonology indicated by the Masoretic texts is largely uniform; therefore, phonological changes are generally not accessible to us through the biblical books.

A third problem is that in the biblical period we do not have a lot of evidence for the state of the language outside the Bible. This is not to say there is none, but there is not a great deal. Therefore, the chief source of evidence for what is Early Biblical Hebrew and what is Late Biblical Hebrew comes from the Bible itself. Thus, features characteristic of early books are considered Early Biblical Hebrew, whereas features characteristic of later books are attributed to later Biblical Hebrew. One might detect some circularity here, and this is what is charged by *LDBT*: a feature is early because it occurs in an early book; and a book is early because its language has early features. To some extent, this critique is valid: our current models of the development of Hebrew are not especially sophisticated, and some particulars are open to the charge of circularity.

3. How Biblical Hebrew Is the Same

Nevertheless, this does not mean that Biblical Hebrew is impervious to linguistic investigation. Hebrew is a language like other languages, and therefore we may assume that basic assumptions about language in general apply to Hebrew as well. Some basic assumptions that most linguists agree on are listed in (2) and discussed below.

3. For various views on the development of the *matres lectionis*, see Zevit 1980; Andersen and Forbes 1986. Gogel 1998 contains a detailed discussion of this issue and other aspects of Epigraphic Hebrew.

- (2) Some basic premises
 - a. All natural languages change.
 - b. All languages have dialects (regional, social, etc.).
 - c. Diachronic change begins with synchronic variation.
 - d. We must distinguish between a language and its reflection in texts.
 - e. To use linguistic criteria as an aid in dating texts, we must have a model of the history of the language—that is, of both diachronic and synchronic variation.

All natural languages change. Although the rate of change is not necessarily constant, and the direction of changes may not be predictable, it appears to be part of the nature of things for languages to keep changing.

The second assumption follows from the first. If languages are always changing, and if the directions of change are not predictable, it follows that a language will change in different ways in different subgroups of speakers, giving rise to dialects. These dialects may be regional, or social, or even age-based.

The third premise, that diachronic change begins with synchronic variation, follows from the observation that many linguistic changes begin as variation within the grammars of individual speakers. Added to this is the fact that speakers (or writers, in our case) with different grammars exist at the same time, so learners (or philologists) may be receiving input from speakers with slightly different grammars, creating both intra- and inter-grammatical variation.

A fourth premise appears to be obvious, but it is worth stating at the outset: we must distinguish between a language and its reflection in texts. Historical linguists are mainly interested in trying to reconstruct the history of a language. This is never a simple task, even in the case of languages that are well documented with texts whose authors and dates of composition are known. As William Labov has famously remarked (1994: 11), historical linguistics is “the art of making the best use of bad data.” In the case of Biblical Hebrew, we have to make the best use of very bad data. Nevertheless, we still aim to arrive at the most plausible scenario we can, using all the evidence available to us. In the case of Early Hebrew, this means relying heavily, though not exclusively, on the biblical texts.

Given the doubts about the circumstances in which these texts were created, linguistic arguments have played, and will continue to play, an important role in establishing their provenance. But this puts us in the somewhat uncomfortable position, as *LDBT* reminds us, of using the language to date the texts, and then using the texts as evidence for the history of the language.

In this situation, it follows that dating the texts cannot be our primary goal; rather, establishing a plausible history of the language is a prerequisite to dating texts. This is because dating a text using linguistic evidence is a more difficult problem than establishing a diachronic sequence for a language. If we

have some notion of the history of the language, we can say, for example, that a given form in a given text comes from an earlier or later stage of the language (or alternatively, from this or that synchronic dialect). But making this sort of determination still leaves many unanswered questions about how the text as a whole came to have this form in it. It could represent the date the text was composed, or it could be a later insertion into an older text, or a borrowing from another dialect, and so on. If the editorial history of a text is particularly complex, there may not be a well-defined answer to the question “To what date should this text be assigned?” Thus, *LDBT* may well be correct in asserting (2.100) that “the outward form of the biblical texts was in constant flux. In this context, the question of the ‘original date’ when a biblical book was composed is anachronistic and irrelevant.”

My disagreements with *LDBT* concern its model of linguistic change in general and the history of Hebrew in particular.

4. An Example of Variation: *mamlākâ* and *malkût*

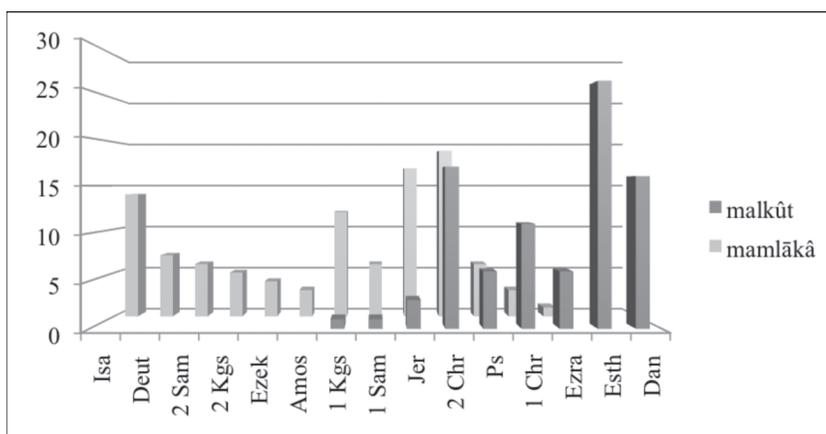
Let us take as an example the much discussed variation between several Biblical Hebrew forms for ‘kingdom’, in particular *mamlākâ* and *malkût*. According to *LDBT* (1.21 n. 21), the distribution of these forms is considered a “classic illustration” of a diachronic shift, with *mamlākâ* being the older form and *malkût* the newer form. A table showing the number of occurrences of each form in each book is given in (3).

(3) Number of Occurrences of *mamlākâ* and *malkût* in Biblical Texts

<i>Book</i>	<i>mamlākâ</i>	<i>malkût</i>	% <i>malkût</i>	<i>Book</i>	<i>mamlākâ</i>	<i>malkût</i>	% <i>malkût</i>
Gen	2	0	0	Mic	1	0	0
Exod	1	0	0	Nah	1	0	0
Num	2	1	33	Zeph	1	0	0
Deut	7	0	0	Hag	2	0	0
Josh	2	0	0	Ps	6	6	50
1 Sam	6	1	14	Lam	1	0	0
2 Sam	6	0	0	Qoh	0	1	100
1 Kgs	12	1	8	Esth	0	26	100
2 Kgs	5	0	0	Dan	0	16	100
Isa	14	0	0	Ezra	1	6	86
Jer	17	3	15	Neh	1	2	67
Ezek	4	0	0	1 Chr	3	11	79
Amos	3	0	0	2 Chr	19	17	47
				<i>Total</i>	<i>117</i>	<i>91</i>	<i>44</i>

If we sort the books in terms of rising percentage of *malkût*, we can display them on a chart as in (4): books with less than three examples in both columns have been omitted. The books on the left side of the chart are, for the most part, those that are conventionally considered to be early, and the books on the right side are considered to be late. This is a very rough first approximation: we are assuming that all the books can be treated as uniform wholes, which is not the case.

(4) *mamlākâ* and *malkût* (at least 3 of either form)



A diachronic interpretation of this distribution appears to be supported by extrabiblical attestation, as *LDBT* points out. In (5) is a listing of the distribution of these forms in Ben Sira, Qumran nonbiblical documents, and the Mishnah (numbers provided by Robert Holmstedt). They also fit in on the right side of the chart, as we might expect if they are late books.

(5) Extrabiblical Occurrences of *mamlākâ* and *malkût*

Book	<i>mamlākâ</i>	<i>malkût</i>	% <i>malkût</i>
Ben Sira	3	2	40
Qumran	36	52	59
Mishnah	0	20	100
Total	39	74	65

5. *LDBT*'s Central Argument against a Diachronic Interpretation of Variation

LDBT does not accept the conventional diachronic interpretation of the distribution of these forms. The authors' arguments with respect to this example

are fairly typical of their general position, so it is worth considering them in some detail.

Their first argument runs as follows: if *malkût* is a late form, then its appearance in a text indicates that the text is late. This would make Numbers, Samuel, and Kings late books—a conclusion that would be unacceptable to almost all writers who support a distinction between Early Biblical Hebrew (EBH) and Late Biblical Hebrew (LBH). Anticipating the obvious reply to this line of reasoning, *LDBT* presents perhaps its central argument against the entire diachronic project (1.86; cf. 2.84–85):

If against this is it argued that the LBH linguistic feature found in the EBH text is not actually ‘late’ but was also available in an early period, then its value for dating texts ‘late’ is negated. . . . Therefore, if EBH texts are early, and most LBH features are attested in EBH texts, then LBH features already existed in an early period, and were available to early authors, and thus their use is a matter of style, not chronology.

As stated, this argument is untenable. It is a well-attested fact in many languages that competing forms may coexist over a period of time, and thus a late form may occur sporadically in early texts, and an early form may survive in late texts. It is an empirical question, in any given case, whether the distribution of forms has a diachronic dimension or not; there is no basis for ruling out chronology as part of the story. Thus, it does not follow from the mere fact of coexistence that all the variation in the distribution of these forms must be stylistic and not diachronic.

Let us consider more closely the claim that, if a late feature existed at an earlier period, it was therefore “available” to early authors. This notion of “availability” is contrary to findings in historical linguistics that much synchronic variation has a diachronic trajectory. Contrary to *LDBT*’s assertion that the coexistence of competing forms “negates” their value for dating texts, it can be shown that the proportion in which the forms occur has a characteristic signature in a given time and place and can have considerable predictive value in dating a text.

6. The Rise of English Periphrastic *Do*

In this connection I would like to look at the rise of periphrastic *do* in English. In present-day English, an auxiliary verb *do* must appear in a variety of contexts, as shown in (6).

- (6) Present-day English contexts requiring periphrastic *do*
1. Negative declarative sentences
 - (a) She does not deserve it.
 - (b) *She deserves it not.

2. Negative imperatives
 - (a) Do not look at the answers.
 - (b) *Look not at the answers.
3. Yes-no questions
 - (a) Do you know the answer?
 - (b) *Know you the answer?
4. *wh*-adverbial questions
 - (a) Why does she deserve a reward?
 - (b) *Why deserves she a reward?

In each type of sentence in (6), the (a) sentence with *do* is grammatical, and the (b) sentence, in which the main verb moves to a position before the negative marker or the subject, is ungrammatical (as indicated by the asterisk).⁴

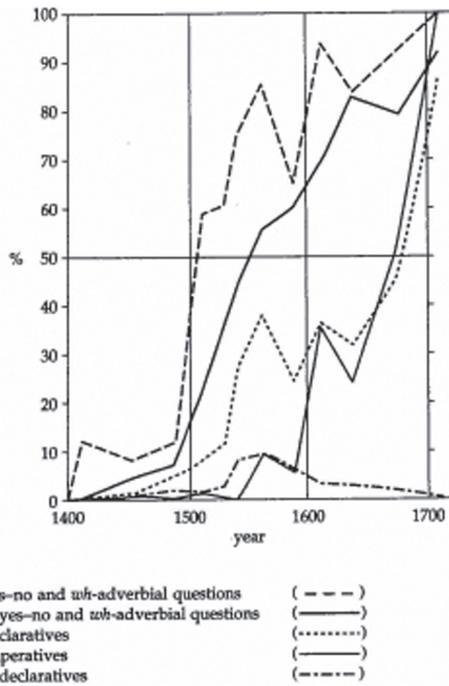
In Old and Middle English, the equivalents of the (b) sentences were all grammatical, and *do* was not used in these constructions. Beginning around the year 1400, verbs, with the exception of *be*, *have*, and modals (*shall*, *will*, *may*, *can*, etc.), began to lose the ability to move to the front of the sentence. Periphrastic *do* began to be used in sentence types that require the tensed verb to be before a subject or *not*. This change began slowly and took hundreds of years to complete. A graph showing the percentage of *do* in different types of sentences is shown in example (7) on p. 28.

Building on Kroch (1989) and Han and Kroch (2000), Warner (2006) demonstrates that the changes in the percentage of *do* in the different sentence types advance in lockstep. The reason, according to these authors, is that a single basic change in the grammar affects all these sentence types, and in each period the old grammar and the new grammar coexist in a proportion that manifests itself in each type of sentence.

The graph also illustrates another characteristic of language change—namely, the S-shaped curve of an innovation. Thus, periphrastic *do* advances relatively slowly at first until just before the year 1500, when it takes off and rises at an increasing rate (with some local dips) until it reaches about 90%, at which point the rate of change necessarily slows as the change moves to completion.

Warner (2006) also argues for a stylistic influence on the development of *do* in negative declarative sentences (the dotted line in the middle of the graph). Beginning in about 1575, the percentage of periphrastic *do* in this type of sentence dipped and fell far behind the affirmative sentences (the solid line

4. Some readers may find some of the (b) sentences to be high rhetorical or a bit archaic but not ungrammatical. These constructions can become familiar through exposure to Shakespeare or the King James Version of the Bible. However, for contemporary children learning English, or in the context of informal conversation, sentences of this sort would definitely be odd enough to be considered ungrammatical.



- (7) Percentage of *Do* in Different Types of Sentences (Ellegård 1953: 162; cited by Warner 2006: 48)

just above it). This deviation is an apparent counterexample to the claim that periphrastic *do* increased at a constant rate across sentence types.

Warner argues that a more detailed analysis shows that the dip was not universal but occurred mainly in texts of what he calls “high lexical complexity”—that is, texts that use longer words and a greater variety of words. Such texts are more literary and sophisticated than texts with low lexical complexity, which tend to be more colloquial and closer to speech. Warner proposes that the drop in *do not* after 1575 in texts of higher lexical complexity was due to a stylistic avoidance of the sequence *do not*. This stylistic dispreference did not extend to texts of lower lexical complexity, meaning that, in the spoken language, *do not* continued to advance, and over the long run this stylistic tic did not significantly impede the rise of periphrastic *do* in negative declaratives.

The conclusions I want to draw from this example are summed up in (8).

- (8) Conclusions from the rise of periphrastic *do*
- a. Old and new forms can coexist over a long period.
 - b. This coexistence is not static but changes systematically over time.
 - c. The proportions of old and new forms are highly significant and can be used to estimate the date of texts.
 - d. There is a place for stylistic variation, but the stylistic influences are specific and occur in the context of ongoing diachronic change.

When we apply these conclusions to the Hebrew example of the words for 'kingdom', it follows that the differing proportions of the two forms in different texts could well point to a diachronic difference in the texts. *LDBT* ignores differences in proportions and considers only presence versus absence of forms, a criterion that would miss the entire diachronic development of periphrastic *do*. Thus, they observe (1.88) that the EBH books Numbers, Samuel, and Kings have both *mamlākâ* and *malkût*, "but so do Jeremiah, Ezra, Nehemiah and Chronicles." The suggestion is that these books are all the same in having both forms. The table in (9) reprises the numbers of forms in these books.

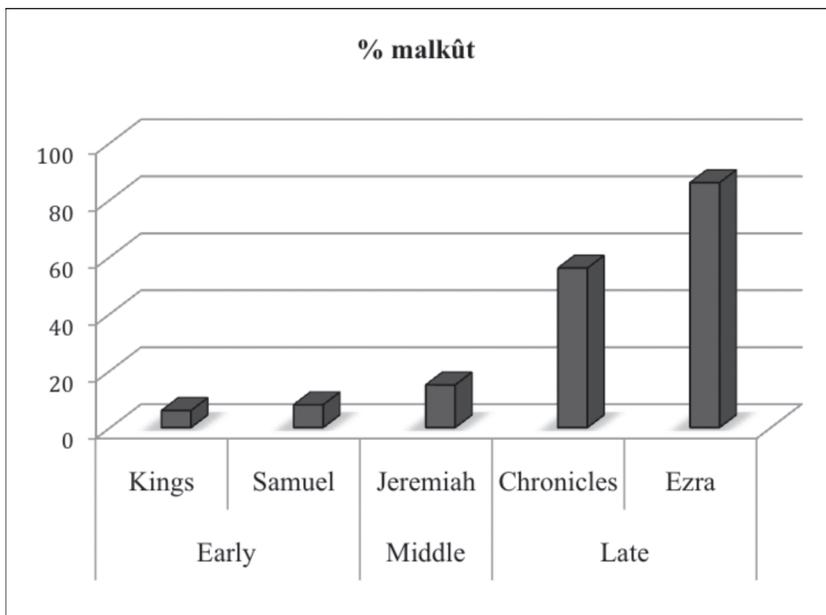
(9) Distribution of *mamlākâ* and *malkût* in Selected Books

<i>Book</i>	<i>mamlākâ</i>	<i>malkût</i>	% <i>malkût</i>
Numbers	2	1	33
Samuel	12	1	8
Kings	17	1	6
Jeremiah	17	3	15
Ezra	1	6	86
Nehemiah	1	2	67
Chronicles	22	28	56

If we exclude Numbers and Nehemiah, which have only three forms each, it is apparent that the two groups of books (actually three, since Jeremiah occupies an intermediate position) are quite different with respect to the distribution of the two forms. In fact, they fit quite well the conventional division of books into periods reviewed by *LDBT* (1.11), as shown in example (10) on p. 30.

7. External Attestation and Dialect Variation

We observed above that the diachronic interpretation of this distribution is supported by extrabiblical attestations in Ben Sira, Qumran Hebrew, and the Mishnah. *LDBT* is not impressed by these facts, however, arguing that Mishnaic Hebrew (MH) is not in fact later than Biblical Hebrew. Again, the



(10) Conventional Division into Periods

reasoning is flawed and rests on unrealistic assumptions about dialects and language change.

LDBT (2.76) argues that the “nineteenth-century model of a steady development from EBH to LBH to MH is in conflict with the evidence.” This may be true but is of dubious relevance, because a diachronic account of differences between MH and BH does not depend on this model. Scholars such as Kutscher (1982) and Sáenz-Badillos (1993) also reject the nineteenth-century model but still accept that late biblical texts would be expected to show more MH elements than early texts.

The general consensus is that MH developed from a vernacular dialect of Hebrew, whereas BH was a literary language that coexisted with vernacular dialects (Bar-Asher 1999). *LDBT* adopts a similar position but with a significant twist (2.77): “MH is an independent Hebrew dialect of great antiquity. Both ‘Aramaisms’ and ‘Mishnaisms’, far from being markers of a late date, were available in all periods of Hebrew.”

The above quotation appears to suggest that there was no diachronic development in the MH dialect. It is one thing to say that Mishnaic Hebrew develops from vernacular dialects that can be traced back to preexilic times (see Bar-Asher 1999). It does not follow from this that preexilic Mishnaic

Hebrew forms all persisted unchanged for hundreds of years and could appear in any proportion in any text written in this period. If this were the case, then, as Delitzsch (1877: 190) remarked in a similar context, there is no history of the Hebrew language!

8. Diachronic Discontinuities

Maybe the authors of *LDBT* do not intend this radical interpretation. Perhaps they allow that MH changed over the course of hundreds of years. They could still argue that the fact that Biblical Hebrew did not become Mishnaic Hebrew poses problems for diachronic interpretations of variation, because “MH is simply a different dialect of Hebrew” (1.227).

In this respect, Hebrew is not so different from other languages the history of which is better documented. The earliest attested examples of Old English, for example, tend to come from the Northumbrian dialect in the north. Beginning around 715, the Mercian kingdom in the Midlands became ascendant, and the Mercian dialect became the standard. In 825, the West Saxons in the south defeated the Mercians, and West Saxon became the standard until the end of the Old English period.

Therefore, in studying the history of Old English, as one moves back in time, one also moves farther north. For example, a Mercian form from 700 is both older and from a different dialect than a West Saxon form from 1000. But even though early Mercian is not the ancestor of late West Saxon, for many purposes one can pretend that it is. The reason is that in many respects these dialects were similar and underwent many of the same diachronic changes. Thus the Mercian form might reveal to us the original vowels that appear in reduced form in later West Saxon. The main point is that dialect differences do not negate diachrony but must be considered together with diachrony.

Toon (1983) discusses the problem of variation in Old English texts. He writes (1983: 106–7), “It is important to students of the language that variable data need not preclude, as it has for some, meaningful analysis.” One problem he considers is the spelling of the vowel in the Old English ancestor of the word ‘man’. We observe the distribution of spellings shown in (11).

(11) Spellings of the Vowel in Mercian Old English ‘Man’

<i>Text</i>	<i>Date</i>	<i>a</i>	<i>o</i>
<i>Epinal Glossary</i>	ca. 700	58	1
<i>Erfurt Glossary</i>	ca. 750	32	33
<i>Corpus Glossary</i>	ca. 800	38	95
<i>Vespasian Psalter</i>	ca. 830	none	all

Toon observes that the mixed spellings in the glossaries might lead one to suppose that they are the result of dialect mixture or of idiosyncratic stylistic

choice. But he argues that one can make sense of the variation in terms of diachrony. Like other Old English dialects, early Mercian originally had the vowel /a/ in the word *mann* ‘man’. A sound change then occurred in Mercian whereby /a/ became *o* before a nasal consonant. We can see the very beginning of this change in the Epinal Glossary. The later texts reflect later stages in which the change was either becoming more established in the spoken language or, alternatively, was becoming more acceptable as a written form. By the time of the Old English gloss of the *Vespasian Psalter*, *o* was the only option.

It would be misleading and unproductive, in this case, to argue that both *a* and *o* spellings were “available” to Mercian scribes in the entire period 700–830, and that therefore the choice of one over the other was a matter of style, not chronology. Both spellings overlapped for a time, but they were not equally “available”; their distribution has a chronological as well as synchronic dimension.

As Toon (1983) shows, there is also a political dimension to the variation in spellings. The table in (12) is a summary of spellings in Kentish charters.

(12) Spellings of the Vowel of Old English ‘Man’ in Kentish Charters

<i>Period</i>	<i>Dates</i>	<i>a</i>	<i>o</i>
Before Mercian influence	679–741	5	0
Mercian ascendancy	803–824	0	64
End of Mercian influence	833–870	23	65
After Mercian exodus	859–868	13	3
Late Kentish	958–1044	25	0

In Toon’s interpretation, the Kentish vernacular dialect never underwent the change of *a* to *o*. The *o* spellings reflect the Mercian standard; once Mercian influence was gone, the *a* spellings return.

This example shows that we cannot simply label *a* spellings as “early” and *o* spellings as “late.” This equation does hold within Mercian, but it is only part of the story. If we include other dialects, we see that it is also true that *o* spellings are “northern” and *a* spellings are “southern.” In the Kentish documents, where *a* forms are both early and late, it can be said that *o* spellings reflect the official standard spelling and *a* spellings the vernacular. All these dimensions play a role in fashioning a coherent account of the variation in spellings.

It is also relevant to note that the dialects of the texts are not necessarily different stages of a single dialect. I have argued (Dresher 1985), following Kuhn (1939), that the dialect of the *Corpus Glossary* is not the direct descendant of the dialect of the *Epinal Glossary* but is more like a younger sister. Thus, it can be shown that two sound changes that were active in the same period reached these dialects in different orders, as displayed in (13). The fact that the *Epinal*

Glossary dialect coexisted with the *Corpus Glossary* dialect does not preclude us from assigning a diachronic dimension to the variation in these documents.

(13) Sound changes in different orders

- a. *Epinal Glossary*: Second Fronting of *a* before Back Mutation
- | | | |
|-----------------|--|---|
| Earlier forms | fatu | weras |
| Second Fronting | fætu | |
| Back Mutation | fæatu | weoras |
| Gloss | ‘vessel, NOMINATIVE/
ACCUSATIVE PLURAL’ | ‘man, NOMINATIVE/
ACCUSATIVE PLURAL’ |
- b. *Corpus Glossary*: Back Mutation before Second Fronting of *a*
- | | | |
|-----------------|-------|--------|
| Earlier forms | fatu | weras |
| Back Mutation | — | weoras |
| Second Fronting | fæatu | |

9. Accounting for Variation in the Biblical Texts

Returning to Biblical Hebrew, the central empirical problem we are dealing with is: what is the best way to account for the variation in the texts? In the particular example we have been looking at, how can we account for the distribution of *mamlākâ* and *malkût* in the biblical texts? In (14), I summarize the two theories in front of us.

(14) Two theories of the variation of *mamlākâ* and *malkût*

- a. The “chronological” theory
- (i) *Diachronic*
Mamlākâ is the earlier form, and *malkût* is a later form. Books with mixed forms show different stages in the rise of *malkût*.
 - (ii) *Stylistic*
Chronicles and Ezra are both late, but the former was more concerned to imitate elements of the earlier grammar.
- b. *LDBT*’s theory: “Multiple contemporary styles of literary Hebrew”
- (i) *Stylistic*
Mamlākâ predominates in books written in the “conservative” (EBH) style (= “moderate, cautious, avoiding extremes,” not older); *malkût* is preferred in the style (LBH) that is “more open to using a variety of linguistic forms.”

In (14a) is the conventional theory, what *LDBT* calls the “chronological model” (2.85). It accounts for much of the distribution by diachrony but does not attribute all variation to chronology. The difference in (10) between Chronicles

and Ezra, for example, may be partly explained in terms of style, in that the former was more concerned to imitate certain elements of the earlier grammar. In other cases, dialect differences have also been invoked, as well as genre differences between prose and poetry.

LDBT (2.96) proposes replacing this theory with (14b), “a model of multiple contemporary styles of literary Hebrew.” They designate EBH as a “conservative” style, whereas “LBH authors/editors/scribes are more open to using a variety of linguistic forms” (1.141). They hasten to stress (1.141 n. 91) that they “use ‘conservative’ here in the sense of ‘moderate, cautious, avoiding extremes’ rather than conservatism in the sense of favouring an older style . . . both the conservative and non-conservative styles co-existed throughout the period of the composition of the biblical literature.”

Let us now consider the empirical status of the two theories, summed up in (15).

- (15) Empirical status of the two theories
- a. The “chronological” theory
 - (i) *LDBT* presents no compelling argument against this model.
 - (ii) The variation profile is entirely consistent with what we would expect to find and is in keeping with the English cases we have examined.
 - b. *LDBT*’s theory has no testable empirical consequences; therefore, it does not explain why *mamlākā* and *malkūt* occur in the attested proportions.

Looking first at the chronological theory in (15a), I have argued that *LDBT* presents no compelling argument against this model. Moreover, the variation profile is entirely consistent with what we would expect to find and is in keeping with the English cases that we have looked at. Of course, this does not prove that the diachronic account is correct but only that it is plausible and consistent with the evidence that we have reviewed.

Let us turn to *LDBT*’s alternative. Does this theory explain the variation in the forms *mamlākā* and *malkūt* as we find them in the texts? I do not see how it does. Why was *mamlākā* considered a conservative form and *malkūt* not? We can no longer say it is because *mamlākā* was an older form or belonged to a more prestigious dialect. While rejecting these hypotheses, *LDBT* does not replace them with anything that can explain why EBH and LBH have the properties that they do. How do we account for the variation in books that contain both these forms, and why in the proportions that they do? The chronological hypothesis suggests an answer—perhaps a wrong answer, but something we can try to support further or disconfirm. But *LDBT* suggests in the end that all variation is due to “stylistic choices of authors and scribes” (2.95). Because

these choices are “unpredictable,” the proposed model has no testable empirical consequences.

I mentioned at the outset that some model of how Hebrew developed, some notion of chronological stages and dialects, is a prerequisite to being able to date texts, because we need to have some sense of where the forms in the texts originate. By removing time and space from consideration, the authors of *LDBT* make it impossible to arrive at a coherent model of the history of Hebrew.

10. An Analogy: Coexisting Achaemenid-Period Aramaic Styles in Elephantine

What is lost is nicely illustrated by an analogy that *LDBT* (1.294; 2.99) draws between the authors’ own proposal and coexisting styles of Achaemenid-period Aramaic in Elephantine as portrayed by Kutscher (1970: 362) and Folmer (1995: 709–10). According to these authors, there were two dialects of Aramaic, Eastern and Western, existing at the same time. Note here the introduction of geography. Writers in Elephantine, which is in the west, used the Western dialect in their ordinary writings, as we might expect. The Western dialect is in greater continuity with Old Aramaic than the Eastern; note here the introduction of a diachronic dimension. When writing legal documents, the Elephantine writers wrote, as we do, in a more conservative style that had older elements of the language (more diachrony). The Eastern dialect was more innovative and had more Persian loanwords (geography again). In letters directed to the Persian authorities, Elephantine scribes tried hard “to write in the official style of the royal chancelleries” (Folmer 1995: 727)—that is, in the Eastern dialect; here is a political dimension.

(16) Elements of the Kutscher-Folmer account (*LDBT* 1.294; 2.99)

a. *Geographic*

- (i) Two coexisting dialects of Aramaic—Eastern and Western. Eastern Aramaic (in Persia) has more Persian and Akkadian loanwords.
- (ii) Elephantine writers use their native Western dialect in private letters.

b. *Diachronic*

- (i) The Western dialect is closer to Old Aramaic than the Eastern.
- (ii) Elephantine legal documents are in a more conservative (= older) style.

c. *Political*

In letters directed to the Persian authorities, Elephantine scribes try hard “to write in the official style of the royal chancelleries” (Folmer 1995: 727)—that is, in the Eastern dialect.

I think this is a very plausible and convincing analysis. Here is what *LDBT* (2.99) says about it: “It shows us that there is no need to posit chronological or geographical distance to explain the use of different styles of language.” But we have seen that both chronology and geography in addition to politics are crucial in explaining *why* the various styles are the way they are. *LDBT* has in mind that the same community in the same time and place could produce two different styles of writing; but without a diachronic and synchronic account of Aramaic, we would not be able to make sense of these two different styles.

LDBT suggests that its account of EBH and LBH is very similar to the account of the two types of Aramaic produced in Elephantine. LBH writers, they propose, were trying to “distance this style of literature from literature produced in the EBH style. Rather than geographical or chronological distance, we would have intellectual or ideological distance.” However, without history or geography, or even a clear idea of who the two groups were, we have none of the elements that make the Elephantine analysis so compelling. Rather, juxtaposing the Kutscher-Folmer account with *LDBT*’s only serves to highlight the elements that *LDBT* is lacking.

11. A Methodology for Biblical Hebrew Linguistics

To return again to our example of *mamlākâ* and *malkût*: I have argued that *LDBT* does not provide a real alternative to the “chronological” model in (14a). This does not mean that this model is correct. There will always be a number of ways to account for the variation in any one feature studied in isolation. The real challenge is to arrive at a consistent model that can account for all the variation in the biblical texts, or as much of it as is feasible. This model should make use of any internal or external evidence available and should incorporate contemporary theories of linguistic change and typology.

Thus, we can consider the chart in (4) to give us a profile of the variation between *mamlākâ* and *malkût*. We can similarly plot the profiles of other variable features. As DeCaen (2001) has argued, the traditional division into EBH and LBH is too simplistic: language change does not present us with only “early” features and “late” features. Rather, every linguistic change follows its own route. As we saw with the Mercian glosses, changes begin at different times in different places and move at different rates. Therefore, we do not expect every variable feature to give us the same profile as *mamlākâ* and *malkût*. The grid we need to construct is not one-dimensionally diachronic but multidimensional, including time and space as well as genre, politics, and style.

This sort of project was proposed by DeCaen (2001: 23): “One form or one contrast yields precious little, but *all possible variants* statistically correlated should yield much.” Though I have taken issue with *LDBT*’s methodology and some of its conclusions, the authors’ detailed discussion and compilation of many variants will be a great assistance in carrying this project forward.

12. Old English Again

I began by showing how the problem of dating Biblical Hebrew texts is different from the parallel problem in Old English. But in some instances, Old English presents similar difficulties. This is the case in trying to date the language of poems *Beowulf*, for example, survived in a manuscript from the end of the tenth century but was probably composed much earlier. The language shows a mixture of forms that suggest a complex history. Friedrich Klaeber, editor of the authoritative edition of *Beowulf*, had this to say about linguistic tests for dating Old English poems (1950: cviii–cix; footnotes omitted); I think it holds equally well for Biblical Hebrew:

Investigations have been carried on with a view to ascertaining the relative dates of Old English poems by means of syntactical and phonetic-metrical tests. . . . It must be admitted that these criteria are liable to lead to untrustworthy results when applied in a one-sided and mechanical manner and without careful consideration of all the factors involved. Allowance should be made for individual and dialectal variations, archaizing tendencies, and . . . scribal alterations. . . . Yet it cannot be gainsaid that these tests, which are based on undoubted facts of linguistic development, hold good in a general way.

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