# Electronic Dictionaries of Biblical Hebrew: A Demonstration 

John Hobbins<br>jfhobbins@gmail.com

This is the first of a series of posts in which I am going to put dictionaries and databases of ancient Hebrew literature in electronic format to the test. I review ten electronic dictionaries which include discussion of biblical Hebrew vocabulary items, and describe what it's like to use them alongside other tools, electronic and otherwise, in the course of an exploration of the statistics, morphology, and semantics of the verb אכל 'to eat.'

In the study of ancient literature, few things matter more than how useful and accurate tools like lexica, grammars, and concordances are. We might especially expect accuracy in reference works that relate to the Bible, a book, after all, pored over with great care by many. To the extent that reference works fail to describe textual details helpfully and accurately, I will pound the point home. If the sight of blood disturbs you, turn back now.

My comments relate in almost equal measure to print and electronic versions of resources where available in both. The discussion will be of interest to anyone who loves the fine detail of the language and literature of the Hebrew Bible, regardless of whether one plans to acquire electronic tools for research purposes or not. If nothing else, my discussion of specific passages may prove interesting. Referenced resources are referred to by author, acronym, or short title. Full bibliographical data are supplied in a downloadable file. In this post, I concentrate on the statistics of אכל. Statistics, properly understood, reveal more than is sometimes thought.

My first-hand experience with electronic dictionaries of biblical Hebrew is limited to those available through Logos. Except for eHALOT, they form part of the Scholar's Library. Other software firms are welcome to send review copies of their products this way. I will discuss them in future posts.

A disclaimer is necessary. I am currently negotiating a contract to produce a Hebrew dictionary for Logos. Nonetheless, I do not hesitate to point out aspects of Logos products that need improvement.

If you're like me, you often have a dozen books open to various places in the midst of a hot and heavy study of a text or an item of Hebrew, Aramaic, or Greek vocabulary. In the Libronix system sold by Logos, you may open up multiple resources at the same time and make a side-by-side comparison in tiled windows. You may copy and paste discussion from an electronic commentary or dictionary into a document of your own. Hebrew/Aramaic,

Greek, Arabic, Syriac, and Ethiopic transfer over without difficulty in the easy-to-read SBL Hebrew, Gentium, Scheherazade, Serto Jerusalem, and Abyssinica SIL scripts, respectively. Hover over a scripture reference, and a verse of pointed Hebrew appears in a popup window. Click on a reference to a resource that is part of your electronic collection, e.g., GKC, WaltkeO'Connor, or Joüon-Muraoka, and the referenced paragraph appears in a new window. The quantity of data and resources available is immense and growing exponentially. Accessing it is like drinking water from a fire hose.

These features make it possible for the electronic study of a Hebrew vocabulary item or a particular passage to quickly reach a depth of inquiry that is impossible to match if one is limited to dead-tree resources.

On the other hand, dependence on electronic resources alone is selfdefeating. Some of the best resources do not yet exist in electronic format. The important thing is to learn to use electronic, print, and online resources conjointly and effectively.

Let's say I'm interested in exploring the semantics of אכל 'eat.' How often, in what binyanim, and in what contexts is it used? In what idiomatic expressions does it occur? How should one go about translating it in context?
[You knucklehead Hobbins! Everyone knows what אכל means. The dictionary is the place you go when you don't know the meaning of a word ed. That's where you're wrong. The most important discoveries in the fields of philology and linguistics are made over familiar terrain falsely so-called.]

Resources useful in exploring the semantics of ancient Hebrew vocabulary are numerous. In a piece entitled "A Brief Guide to Dictionaries of Biblical Hebrew," I review dictionaries anyone with a serious interest in the vocabulary of classical Hebrew will want to be at home with. Other reference works, like those which canvass epigraphic Hebrew, Dead Sea Scrolls Hebrew, later Hebrew, and/or cognate languages, not to mention dictionaries of names, places, and concepts are also essential. Qimron, DJPA, DNWSI, and Olmo and Sanmartín come to mind, as do eABD, DBSup, RAC, TRE, THAT, and ThWAT (=TDOT). Unfortunately, I don't have all of the resources I need in my personal library. In my case, and probably yours, a trip to a research library is essential to the completion of an honest-to-goodness research project. That brings up a dimension of serious study of the Bible I will post on in the future: the necessity of a working relationship with a friendly neighborhood research institution.

Print resources I have on hand for doing linguistic and philological study are alluded to below. The dictionaries I have in electronic format which include discussions of biblical Hebrew vocabulary items are the following.

## eDictionaries relevant to the Study of Biblical Hebrew

(1) Francis Brown, with Samuel Rolles Driver and Charles Augustus Briggs, The Enhanced Brown-Driver-Briggs Hebrew and English Lexicon. With an appendix containing the Biblical Aramaic. Based on the lexicon of William Gesenius, as translated by Edward Robinson, and edited with constant reference to the thesaurus of Gesenius as completed by E. Rödiger, and with authorized use of the German editions of Gesenius' Handwörterbuch über das Alte Testament. Electronic ed. based on the Oxford: Clarendon 1906 edition as corrected in 1951. Oak Harbor: Logos Research Systems, 2000. Abbreviation: eBDB. The classic dictionary of biblical Hebrew, it remains an essential reference tool. A significant plus of eBDB: transliterations of Arabic, Syriac, and Ethiopic words are provided.
(2) Samuel Prideaux Tregelles and Wilhelm Gesenius, Gesenius' Hebrew and Chaldee Lexicon to the Old Testament Scriptures. Bellingham: Logos Research Systems, 2003 [1846]. Abbreviation: eTregelles. A proto-BDB as it were, with greater attention to some details. This dictionary deserves to be better known.
(3) M. E. J. Richardson, ed., The Hebrew and Aramaic Lexicon of the Old Testament. CD ROM Edition. (Translation and revision of Walter Baumgartner, Ludwig Koehler, and Johann Jakob Stamm, eds., Hebräisches und aramäisches Lexicon zum Alten Testament [5 vols; Leiden: Brill, 19671997). Abbreviation: HALAT]). Leiden: Brill, 1994-2000. Abbreviation: eHALOT. An essential reference tool. On the negative side: HALOT and eHALOT contain an inordinate number of typos and other errors. Its glosses and definitions, unsurprisingly, sometimes read as if they were translations of a German, not a Hebrew base. To be used in conjunction with (e)BDB.
(4) William Lee Holladay, A Concise Hebrew and Aramaic Lexicon of the Old Testament based upon the Lexical Work of Ludwig Koehler and Walter Baumgartner. Twelfth corrected impression originally published 1991. Leiden: Brill, 2000 [1971]. Abbreviation: eHolladay. A briefer version of (3). Concision, of course, is valuable in its own way.
(5) James Swanson, Dictionary of Biblical Languages with Semantic Domains: Hebrew (Old Testament). Abbreviation: DBL. Electronic ed. Oak Harbor: Logos Research Systems, ${ }^{2} 2001$ [1997]. The chief advantage of this dictionary is the classification of vocabulary into semantic domains
according to the typology devised for New Testament Greek by Louw and Nida.
(6) Enhanced Strong's Lexicon. Woodside Bible Fellowship, 1995. Abbreviation: ESL. For every Hebrew word, an overview of KJV translation equivalents is given, with number of occurrences. The resource is of interest to students of translation.
(7) Robert L. Thomas, Hebrew-Aramaic Dictionary of the New American Standard Exhaustive Concordance. Updated Edition. Anaheim: [Lockman] Foundation Publications, 1998 [1981]. Abbreviated title: DNASV. Derivations and "general meanings" are taken from BDB. "Specific meanings" = NASV translation equivalents are also given, with number of occurrences. The resource is of interest to students of translation.
(8) R. Laird Harris, Gleason Leonard Archer, and Bruce K. Waltke, eds., Theological Wordbook of the Old Testament. Electronic ed., Chicago: Moody Press, 1999 [1980]. Abbreviation: eTWOT. Not without its uses, this resource is nonetheless inferior to Botterweck-Ringgren (ThWAT/TDOT; not yet complete in English), Jenni-Westermann (ThAT/TLOT), and, more often not, to the OT coverage in the "Outside the NT" sections in Kittel (ThWNT/TDNT). The sooner TDOT is available in electronic format, the better. TLOT is available through Accordance. For TDNT, see the next item.
(9) Gerhard Kittel, Gerhard Friedrich, and Geoffrey W. Bromiley, eds., Theological Dictionary of the New Testament (10 vols.; tr. Geoffrey W. Bromiley and [vol. 10] Ronald E. Pitkin; Grand Rapids: Eerdmans, 19641976 [ $=$ Gerhard Kittel and Gerhard Friedrich, eds., Theologisches Wörterbuch zum Neuen Testament (10 vols.; Stuttgart: Kohlhammer, 19331979)]. Abbreviations: ThWNT/eTDNT. TDNT vol. 10 (1976) is missing the Literaturnachträge of ThWNT vol. 10 (1979) 946-1294. The omission is unfortunate. TDNT's discussions of NT vocabulary items, where they touch upon the equivalent vocabulary items in the Hebrew Bible, are an important resource.
(10) Johan Lust, Erik Eynikel, and Katrin Hauspie, A Greek-English Lexicon of the Septuagint. Revised Edition (Stuttgart: Deutsche Bibelgesellschaft, 2003 [1992, 1996]). The electronic edition is available through a number of Bible software firms. Abbreviation: eGELS. The look up of a Hebrew vocabulary item via the search function turns up instances of lexicographical significance in which a Hebrew base text at odds with MT is suggested.

Each of these resources has value. The verb אכל 'eat' may illustrate. Strictly speaking, eTDNT is not a Hebrew dictionary at all, but one may find the appropriate entries in eTDNT via a search for 'eat' in eTDNT from the Libronix Basic Search function. The results make it clear that the entries $\varepsilon ̇ \sigma \theta i ́ \omega$ and $\tau \rho \omega \hat{\gamma} \omega$ deserve the closest attention.

## Defining the Corpus of a Word-Study: The Example of אכל

So then, how often is אכל used in the Hebrew Bible? Logos has a module entitled Bible Word Study. The module was probably not designed for the purposes I will put it to, but let's see where it takes us. I put אכל into its search engine. A wealth of data is generated over the course of a few minutes. At the top, a sum total of occurrences is given: 816. A bar graph presents a book-by-book breakdown. The size of each bar takes into account the size of the book it represents relative to the others. The feature is helpful. Lev, Deut, Hos, Joel, Amos, Nahum, and Qoh tower higher than the others. Anyone familiar with these books will not be surprised. Among print resources on hand, I notice that VOT claims 820 occurrences of the verb אכל in Hebrew ( $755+4+45+1+1+21-7$ occurrences of אכל in Aramaic). $\underline{\text { DCH }}$ and TLOT, claim 809 occurrences. Even-Shoshan lists 807 occurrences.

The causes behind the variation in count are not obvious, and there is no easy way to figure the matter out. A manual comparison of Mandelkern, Lisowsky, and Even-Shoshan, while possible, would be time-consuming, and would not explain the higher counts of VOT and the Bible Word Study. The latter two resources give book-by-book statistics. Adjusting for VOT's inclusion of occurrences of אכל in Aramaic, their counts differ by a margin of 1 or 2 in four cases.

I return to the Bible Word Study. Below the total and bar graph of אכל, a series of Keylinks is in view. Five are listed: eBDB, eHALOT, DBL, eTregelles, and eHolladay. I click on "More" and eight additional links are uploaded: eStrong, eNAS, references to אכל in introductory textbooks and helps, in a reference grammar, and eTWOT. Of the 10 resources I originally thought of for the purposes of a word study of אכל, all but eTDNT and
eGELS appear. Their omission is understandable. Reference tools of lesser importance also appear. A few I thought would appear do not. ${ }^{1}$

I notice that eBDB claims 806 occurrences; ESL, 802.
Below Keylinks, a section entitled Grammatical Relationships appears. Grammatical relationships in which אכל occurs are groups into categories and exhaustive lists provided. This is little bit like having The Dictionary of Classical Hebrew (DCH) in electronic version format at one's fingertips, without, unfortunately, extra-biblical occurrences of אכל included. One may upload the actual occurrences in context, and after that, the Andersen-Forbes Phrase Marker Analysis of contexts of choice. All of this is magnificent.

Below Grammatical Relationships, a unit entitled Translation appears. I will return to it in a future post. Last but not least, a concordance of occurrences of אכל appears, listed according to morphology. Entitled Biblica Hebraica Stuttgartensia: with Westminster 4.2 Morphology, it also gives a total of occurrences: 820 . This contradicts the 816 showing up at the top of the Word Study beside the bar graph, also derived from BHS/WHM 4.2.

If I put the verb אכל into the search engine of the Andersen-Forbes Phrase Marker Analysis (AFPMA), another total is given: 792. As noted earlier, VOT, another Andersen-Forbes product, gives 820. Divergent totals of this magnitude probably point to issues of broader import. It will be interesting to find out what they are. [I discuss them in a future post.]

The coda of the concordance provided strikes the eye. The data presented is corrupt. The phrase אֲכָלַנִו חֲמָמַמִו occurs in context twice under the heading (2) v \#2 (WTS) אֲכָלָנִו חֲמָמַנִו . המם appeared in context earlier, once under the heading "verb, qal, perfect [ketiv]," and once under the heading "verb, qal, perfect [qere]. הֲמָמַנִו is misspelled as חֲמָמַנִו in each instance.

To be sure, the masoretes record two occurrences of אכל by means of a single, per se impossible form: אֲכָלָנוּ = אֲכָלַנִו (ketiv) and אֲכָלִנִי (qere). But a presentation of the data four times without ever disambiguating it is not helpful. There are four sets of qere/ketiv readings in the MT אכל corpus. They all show up in the concordance with a total of 820 provided. 820

[^0]reduces to 816 following standard counting procedures, in agreement with the figure at the top of the Word Study.

But is the standard counting procedure correct? After all, both אֲכָלָנוּ and אכל are attested in MT Jer 51:34. A comprehensive presentation of אֲכָלַנִי data in MT would provide one total counting qere/ketiv readings as two occurrences, and another that does not. The Word Study seems to do this. If so, the totals should be explained for what they are in pop-up windows.

BHS/WHM 4.2 has some rough edges, but I prefer its Isa 37:30 וְאִכְוְל פִרְים to The Hebrew Bible: Andersen-Forbes Analyzed Text (AFAT) Isa 37:30 פְרְיָם קוְאָכוֹל . The latter appears in a window if one hovers over the reference in BHS/WHM. AFAT makes the aspirated פְרְיָם of look like an error. It would have been wiser to read the qere in the body of AFAT, and superscript the ketiv with the vocalization that best seems to suit it.

How does Even-Shoshan fare? אכל in Jer 51:34, Ezek 16:13; 44:3, and
 in every case. In two cases, the ketiv is given in parentheses. Why not the other two? Mandelkern registers all eight readings, but you have to know where to look. Qere/ketiv readings are not presented in a consistent fashion.

Let us summarize results so far. None of the resources currently available, electronic or print, gives its users a comprehensive, error-free, and consistent presentation of the raw data relative to אכל in MT.

The advantage of electronic resources is that they are readily modifiable. Future editions of BHS/WHM, and AFAT, I expect, will be free of the problems just noted. The wait between one edition and another, furthermore, will be miniscule compared to the span of time that separated the appearance of the corrected BDB (1951) from its predecessor (1906).

## Alice in אכל-land

I'm still wondering how many occurrences of אכל in MT there are. A Hebrew Morphological Bible Search specifying אכל as a verb, Hebrew words only, with BHS (WTS) and Hebrew Morphology (Westminster) as additional parameters, yields 862 occurrences according to BHS/WHM 4.2 tags. I scroll down and take a look at the book of Ruth, a text I feel I know well, to see what's up. The morphological analysis is wrong two out of six times. אֹכֶלְלעֵת הָ in in Ruth 2:14 is highlighted as if it were a verbal

[^1]form, ${ }^{2}$ not the noun that it is. אכוּכַל in in לאזאוּכַל לִגְאֹל in 4:6 is highlighted as if it derived from אכל. The correct derivation, of course, is from יכל לכל graph at the top of the Word Study, described as dependent on BHS/WHM 4.2 data, gives a total of 5 occurrences of אכל in Ruth, not 6. Better, but still not correct. The correct total is 4 .

A Morphological Search specifying אכל as a verb, "all resources of specified morphology" as the database, and Hebrew Morphology (AndersenForbes) yields a total of 2586 occurrences. The number is mysterious. The following forms are parsed in The ESV English-Hebrew Reverse Interlinear Old Testament [ESVIB] as if from וַאֲכַלֵּם :אכל (Exod 32:10); וָאֲכַלֵּם (2 Sam 22:39); and וָאֲכַל (Ezek 43:8). In each case, the correct derivation is from . As far as the book of Ruth is concerned, across all three resources indexed (AFAT, ESVIB, and The Lexham English-Hebrew Interlinear Bible [LIB]), the analysis appears to be wrong one out of five times. לְעֵת in הָאכֶל אֹכֶלהָ in Ruth 2:14 is highlighted as a verb, not the noun that it is.

A Search specifying אכל as a verb, BHS/WIVU as the database, and Hebrew/Aramaic Morphology (WIVU) yields 861 occurrences. Not to be outdone by its competitors, אֹכֶל לְשֵת הָ in in Ruth 2:14 is once again misconstrued as if it were a verbal form, not the noun that it is.

Is it really that hard to parse הָאֹכֶל in אֹכללְעֵת הָ 'at mealtime' correctly?
Not to my knowledge. If I examine AFAT Ruth 2:14 in situ, it turns out האֹכָל is understood as a noun. Ditto for BHS/WHM 4.2 and BHS/WIVU.
The databases parse the form correctly, but one is led to believe otherwise based on the searches I just described.

As a last resort, I visit the Logos website, and immediately discover the problems noted are well-known. It also turns out I was performing the search incorrectly (see footnote 2 ). Workarounds exist. I follow instructions, and soon have in hand the lemmatized analyses of אכל of the three distinct databases of the Tanakh in the Scholar's Library: BHS/WHM 4.2, BHS/WIVU, and AFAT. It is fabulous to have all three. Comparative study of their contents is an effective way of flagging problems and identifying promising avenues of research. Aside from two obvious errors in WHM and three in AFAT, the databases agree in all but four instances, with WIVU deriving אָכְלוֹ in Ex 12:4; 16:16, 18, and 21 from the noun אֹכֶל, and WHM

[^2]and AFAT parsing the same forms as suffixed infinitive constructs of the verb. ${ }^{3}$ In short, according to WIVU, the verb אכל occurs 810 times in MT; according to WHM and AFAT (after the elimination of error), 814 times.

## Hebrew Dictionaries and the Field of Text Criticism

Text-critical research is on a new footing thanks to eGELS and searchable databases like The Parallel Aligned Hebrew-Aramaic and Greek Texts of Jewish Scripture (hereafter: CATSS) and those of the Comprehensive Aramaic Lexicon (CAL). Their integration into the Libronix system makes them that much more useful. Commentary series with strength in the area of text criticism, such as ICC, WBC, JPSTC, and Hermeneia, are also available in Libronix format. A combination of background knowledge and intuition are irreplaceably important in the search for text critical discussions of interest relative to a particular study. At the same time, the value of keylinks across multiple resources is immense. A resource designed specifically for the work of text criticism merits development, but I would digress too much if I discussed the matter in this post.

The student of ancient Hebrew fools herself if she thinks that MT as it stands is a serviceable basis for serious study of the language or the texts it transmits. MT is a point of entry, not a final destination. The texts MT contains were copied many times before becoming a part of it. A goal of text criticism is the identification of inadvertent errors and conscious changes introduced into the text over the course of time.

A foray into the field of text criticism is an essential component of a serious word-study. In this section, sixteen אכל occurrences of text-critical interest are reviewed. In ten cases, MT is upheld. In six cases, MT is held to reflect a miniscule corruption involving a single or single cluster of syllables or letters. וְ וְ became in Ps 81:17 via assimilation to the preceding line.

 transmission. יֵאָכֵל בְּדַו became יאכַל בַּדַּי by assimilation with the following line in Job 18:13. By aural misapprehension, וֹבִיל לוֹ בוֹל became אוכיל לא in Hos 11:4-5. וְלְלֹאֶל became וְלֶכל via assimilation perhaps to the stress

[^3]pattern and syllabics of וְלַאֲשֶׁר preceding in Gen 47:24. In two cases, arguments in favor of reading a form of אכל outweigh those opposed, but not decisively: וְאֹכְלֵם/וַאֲכַלֵּם in Exod 32:10 and אֹכַלְך/אֲכֶלְך in Exod 33:3.

To be sure, scribal errors have sometimes become the foundation for a rich history of interpretation. The same goes for conscious changes made at the micro and macro levels. They are retainable for specific purposes. But if an interpreter desires to know what the text looked like at a point in time prior to the intromission of said errors and changes, she will avail herself of text critical methods.

Text criticism has always been an aspect of the work of serious exegetes. Rashi, ibn Ezra, Kimchi, Luzzatto, and more recently, Driver, Greenberg, Craigie, and Fox, to cite a few prominent examples, sometimes propose a text at odds with MT, with or without the support of ancient witnesses. Of course, the proposals of those who seek to restore the received text to a more pristine state are themselves subject to evaluation.

Inclusion and summary evaluation of text-critical suggestions are traditional features of dictionaries of biblical Hebrew. eBDB is the most helpful in this regard, but is now outdated. DCH claims to abstain from evaluation, but the very fact that it omits mention of most past proposals is a form of evaluation. I discuss eHALOT's text critical choices below. Sad to say, available dictionaries fail to describe the procedure followed whereby text-critical proposals were collected and evaluated and included or omitted. Glaring omissions of important past text-critical suggestions are evident in every one of them. Two examples may illustrate.

Psalm 81:17
MT Ps 81:17 reads as follows:
3:3
וֹמִצּוּר דְבַשַׁ אַשְּבִּיעֶךָ
וַיַאַכִילֵהוּ מֵחֵלֶב חִּטֵה

And he fed them with the fat of wheat, and from the rock I sated you with honey
The line recalls Deut 32:13-14 and like Ps 81 as a whole, is best understood against the background of the traditions about Israel's transit through the wilderness preserved elsewhere in ancient Hebrew literature. However, the past reference implied by MT is out of place in context. The change from third to first person of the speaking subject midway through the line, furthermore, is jarring. 81:17 is the conclusion of the entire psalm, and one expects it to relate to the lines which precede it. It seems best to understand v18 as the conclusion of a subunit that begins in v. 14, the
protasis of a condition; the apodosis takes up all of vv. 15-17. In that case, v. 17 is best understood as a divine promise, and slightly emended: read
 him with the fat of wheat, // from the rock I will sate you with honey." The enallage of object is retainable; it occurs often in ancient Hebrew literature. One might have expected BDB, HALOT, and DCH to note the emendation, without giving it credence if such was the thought, but they do not.

Hosea 13:8b
MT Hos 13:8b reads as follows:
3:3
חַיַּיֵת הַשָׁדָה תְּבַקְֵֵּם
וְאֹכְלֵּם שָׁם כְּלָבִּיא

There like a lioness I will eat them, a wild animal will rip them to pieces.
The conclusion to a complex simile that begins in 13:7, the difficulties of MT 13:8b are not evident in a number of translations, which render the last
 them up'). OG Hos 13:8 read וַשְכָלִם as ואכלם 'and they will eat them,' the more difficult reading, because it presupposes a change of subject. וְאֹכְלֵם כִּלב אֶפְגְּשֵּם כְּדב 'I will encounter them like a bear' of the preceding line, but is not necessarily correct. If one emends שְּכְדָבִבים to a slight change, the concluding line of 13:7-8 ends strongly, without the inconcinnities of MT. The translation then is: 'there the dogs will eat them, // a wild animal rip them to pieces.' Duhm, Rudolph, BHS, Mays, NJPSV, and Borbone agree on the proposed text. eBDB, eHALOT, and DCH fail to mention the proposal's existence.

Proposed emendations like the above warrant consideration. It is true, of course, that most past attempts at restoring supposedly corrupt passages in MT to their original form belong in the trash heap of history. But that is not the same thing as saying that they all do.

[^4]eHALOT in my view proposes to alter MT more often than is called for, as scholars have been wont to do from time to time. The opposite extreme is now common, whereby alteration of MT is foresworn on principle.

Psalm 22:30 and Job 18:13
eHALOT lists ten cases of אכל as reported in MT "to be read as" something else. eHALOT is right, it seems to me, in two instances: Ps 22:30a, where we should read, with BHS, Craigie, NRSV, and NAB: אַך לוֹ

 prostrate themselves'; and Job 18:13, where we should read (similarly,
 Canaanite noun $d w$ in the phrase $y^{\prime} k l d w$ in KTU 4.767=TT 433, if that is the correct reading ${ }^{5}$ ) יֵאָכֵל בְּדַו עוֹרו 'his skin is eaten away by disease' in place of יאֹאַל בַּדֵּי עוֹרוֹ 'he eats the tendons of his skin.' A compelling defense of MT אכל is offered by Driver pro 1 Sam 1:18; Greenberg pro Ezek 33:27, Allen pro Ps 105:35; Clines pro Job 34:3; Fox pro Qoh 5:16; and Tov (Septuagint, 142) pro 2 Chr 30:22. In Deut 32:13, the reading sustained by eHALOT assimilates to context and is probably derivative. In Prov 31:27, the proposed emendation is odd. It has failed to attract support and does not deserve mention in a work of reference.

It is a drawback that lexica fail to register construals alternative to their own in a consistent fashion. The case of אוֹכִיל in Hos 11:4 may illustrate.

Hosea 11:4
The form is unique and occurs in a difficult passage. As Macintosh points out, אוֹכִיל was understood as a noun by Aquila, Symmachus, and Theodotion, and by Ibn Ezra and Kimchi. OG Hosea has $\delta v v \eta ́ \sigma o \mu \alpha \iota \alpha u ̇ \tau \tilde{~}$ 'I will prevail with him.' Whether אוכיל לא (MT) or אוכל לו stood in its Vorlage is not known, but the translation reads as if it were the latter (so eGELS, example 2.c. in the Introduction, II. B). On this construal, אוכ(י) is a verb derived from יכל. Targum Jonathan, Peshitta, and Jerome, on the other hand, derive אכל from אוכיל. With BHS, eHALOT, NJB, REB, and NRSV, the text to prefer is probably אוֹכִיל לוֹ, in which אוֹכִיל is taken as equivalent to אַאֲכִיל. A truly helpful lexicon in a case like this would note

[^5]and reference alternative construals. In the case at hand, at a minimum that would mean noting that $\alpha \sigma \theta$ construe אוכל as a noun.
eBDB, eHALOT, and DCH do well to alert the reader to difficult and possibly corrupt passages which have exercised the ingenuity of scholars in the past. The signaling of cases in which MT attests to one thing and one or more versions attest to another is especially welcome. eHALOT does so in the case of Qoh 5:16, but not in the case of Deut 32:13; 1 Sam 1:18; Ezek 33:27; or 2 Chr 30:22. E.g., OG Ezek 33:27 translates as if לאכלה was in its Vorlage, the reading eHALOT prefers. The fact deserves note.

In an ideal world, every instance of lexicographical significance in which an ancient version appears to have worked from a base text at odds with MT, or interpreted the same consonantal skeleton in a different way, would be noted in a reference lexicon of biblical Hebrew. eGELS is a step in the right direction. Its relevant notes, however, are incomplete and not always reliable. E.g., in OG Mal 3:11, באכל is translated $\varepsilon$ हí $\beta \rho \tilde{\omega} \sigma v v$ 'for food.' The translator read בִּאֹֹכֶל. A note to this effect is lacking in eGELS. In OG Ps 100 [=MT 101]:5, אתו לא אוכל is translated $\tau 0 u ́ \tau \omega$ oủv $\sigma u v \eta ́ \sigma \theta ı v ~ ' w i t h ~$ him I would not eat' (translation following NETS). The translator read אוֹכַל לכַל ' (spelled the same way in MT Ps 50:13), not אוֹzֵ as eGELS has it. This last case deserves note. It is not surprising that Mowinckel (91) and NEB follow OG and Peshitta's lead in Ps 101:5 and read אוֹכַל against MT אוּכַל. 'With him I will not eat' fits the larger context (vv. 2, 6-7). But MT's 'him I will not endure' is stronger and fits the immediate context better (vv. 4-5).

## Genesis 47:24b



'and the [remaining] four parts will serve as field seed for you and as your food and for those in your house, and as food for your children.'

WHM 4.2 and AFAT mistakenly parse לְאָכְלְכֶם as a suffixed infinitive construct. eHALOT, DCH, and WIVU parse it correctly as a suffixed noun. DCH notes a proposed emendation of לֶשֶּלֹל לְכֶם to לְאְכְלֶכם. Vocalizing alleviates the text's difficulties in less invasive fashion.

The clause contains a string of ל-introduced items in coordination. היה sq. $ל$ pred. $+\zeta$. pers. structures occur often in biblical Hebrew, in which the predicates consists of nouns and/or noun phrases (see eBDB היה II. 2 f). It is
natural to construe accordingly here, with both לאכלְכְם and לאכל read as nouns rather than infinitive constructs. היה sq. Inf. c. ל לק לק structures are also well-attested, but not + לל. pers. (see eBDB היה III. 5 b). MT לֶאֶכל ל לֶו may have arisen via assimilation to preceding לאכלְ לכשם understood as an infinitive construct (*)לַאֲכְלְכֶם; cf. Targum Onkelos (וּלמֵיכַלכוֹן) [against CAL; but note CAL's double tag on Targum pseudo-Jonathan's לוֹלמיכמיכמיכון]). Among the versions, Targum Neofiti correctly read ולאכל as a noun (ולמזון).

It is rare that MT's vocalization is less probable than a conceivable alternative. But MT לֶאֵל in this verse counts as an example.

Exodus 32:10 and 33:3
According to a note in A Dictionary of Biblical Hebrew (DBH), a masoretic note associates with the "East" the reading פֶּך־ֹֹכַלְךָ in Exod 33:3. There is something to be said for this vocalization, and for reading וְאֹכְלֵם in place of וַאַכַלֵּם in Exod 32:10. In both cases, Yahweh is the subject, who is elsewhere spoken of as a devouring fire (Exod 24:17; Deut 4:24; Isa 33:14; etc.). His anger is said to be about to חרה 'burn' against his people. For Yahweh then to say that 'that I may devour them' and 'lest I devour you' would be vivid and harsh. The harsh word, according to Exod 33:4, is precisely what got the people's attention. To be sure, the verb כלה is securely attested in $33: 5$ and is elsewhere used with God as subject in equivalent contexts (e.g., Num 16:21; 17:10; 25:11; Josh 24:20; Jer 14:12; Ezek 22:31; Job 9:22). But on two occasions the verbs אכל and כלה cooccur (Jer 10:25; Hos 11:6). It is possible that Exod 33:3-5 also contains a co-occurrence. It is easier to imagine original אוֹכַכְלֵּ
 respectively, than vice versa. The chief obstacle to this line of reasoning is the weak to non-existent attestation of אֹאַלְּך ind in ancient witnesses. On the other hand, that may only go to show that the assimilation was ancient and almost universally received.

## 'To Eat' or not 'To Eat': That is the Question

It remains to discuss eight cases with respect to which a consensus is lacking as to whether occurrences of the verb אכל are represented: Ezek 21:33; 42:5; Mal 1:12; Job 20:21; Gen 47:24; and Exod 12:4; 16:16, 18, 21.
eTregelles, eBDB, and Even-Shoshan (with a question mark) understand לְהָכִיל in Ezek 21:33 to attest the elision of medial according to a welldocumented tendency (GKC $\S 68 \mathrm{~h}-\mathrm{k}$; Ezek 21:33 is cited in $\S 68 \mathrm{i}$, where the
 be a byform of לְהַאֲכִיל (note that רְאשׁי alternative, which takes MT לְלָכִיל לוּל as derived from, seems forced in
 It is not surprising that Even-Shoshan counts לְהָכִיל among the occurrences of אכל. But he would have done well to also list it under כוּל לכוּ, a derivation compatible with MT, with a cross-reference to אכל. ${ }^{6}$
eHALOT, if it understood לְהָכִיל in Ezek 21:33 to conceal as it were לְהַאֲכִילל with elision of medial $\boldsymbol{\kappa}$, would have so listed it. It does not. Alonso Schökel does not reference לְלָכִיל either. But in his commentary on Ezekiel, he notes that לְהַאֲכִיל = לְהָכִיל and translates accordingly.

A derivation of להכיל from אכל accords with the overall sense of Ezek 21:33. Bertholet proposed לְכָלָה in place of לְהָכִיל, followed by BHS. The Vorlage of OG Ezekiel, to judge by its $\varepsilon i \varsigma ~ \sigma u v \tau \varepsilon ́ \lambda \varepsilon ı \alpha \nu$ at this point, read thus. I doubt לכלה represents the original reading. It is easier to imagine להכיל, a difficult form, being corrected to לכלה than vice-versa. Of course, that one of the readings is derivative does not make it any less an example of ancient Hebrew than the other. In the lexicon of my dreams, sub לְכָלָה under ,כָּלָה, VOG Ezek 21:33 would be listed ( $\sqrt{ }$ for reconstructed Vorlage). Quite apart from this instance, and in light of words like מַּכֹּלֶת 'foodstuff,' a clear case of elision of medial $\kappa$, the possibility that forms vocalized in MT as if from כלוּל ,כוּ, or יכל derive on occasion from אכל must be kept in mind.

## Ezekiel 42:5

Several resources list יוֹכְלוּ in Ezek 42:5 as a form of אכל (eTregelles; Even-Shoshan; eHALOT, following BL §371r; AFAT). But is it? That one architectural feature 'ate' from other architectural features in the sense of 'taking space' from them is an otherwise unattested idiom in Hebrew. Zimmerli derives יוֹכְלוֹ יוֹלו from that case the form might be revocalized


[^6]in Ezek יוֹכְלוּ $42: 5$ is followed by the phrase מֵהָנָה 'from them.' The solution seems farfetched. eBDB's proposal, following Ewald and Cornill who appeal to OG, makes better sense, but is far from compelling: read יוצלו [=] יאצלו 'take away' (for this meaning, see eHALOT II אצל). An argument in favor of a derivation from אכל is the attestation of the Akkadian equivalent akālu in texts discussing architectural features with the same meaning suggested above. CAD, von Soden, and CDA all reference this usage. HALOT might have noticed, but did not. The citation of equivalent usages and phraseology in languages beyond Hebrew is an excellent feature of eTregelles, eBDB, and eHALOT. A systematic citation of relevant materials in Akkadian, Ugaritic, Aramaic, and other languages with respect to usages and phraseology in dictionaries of ancient Hebrew remains a desideratum.
\[

$$
\begin{aligned}
& \text { Malachi 1:12b }
\end{aligned}
$$
\]

By your saying: The Lord's table is pollutable; and its bounty, its consumption, treatable with scorn.

BHS does away with the (for us) awkward casus pendens construction by eliminating נִיבוֹ 'its produce' on which the following hangs. But if אָכְלוֹ is understood as a suffixed inf. construct (with VOT, but not AFAT), the grammar of the whole is plausible. If instead אָכְלוֹ is understood as a suffixed noun (OG, Hill, and most), the construction of which it is a part becomes inexplicably redundant. Targum Jonathan, Peshitta, and Vulgate paraphrase here. A text at variance with MT cannot be reconstructed from them.

Mal 1:12b is part of a sentence whose structure has escaped discernment.
(2:2):3


If from the sun's rising to its setting, my name were great among the nations, and everywhere incense and pure oblation offered to my name;
If my name were great among the nations, said Yahweh of armies, you on your part would still profane it by your saying:
The Lord's table is pollutable;
and its bounty, its consumption, treatable with scorn.
(Mal 1:11-12)
The use of (repeated) בִּ and to coordinate the successive parts of an irreal conditional is not surprising. The construction warrants further study.

Job 20:21a

## 

No survivor to eat it.
WHM 4.2, AFAT, and WIVU concur in construing לְאָכְלוֹ as a suffixed infinitive construct. Mandelkern, Lisowsky, and Even-Shoshan construe it as the noun אֹכֶל with suffix. If שָׁרִיד is understood in the sense of 'something left over,' and the referent of the pronoun taken to be the wicked individual whose pride and fall is the chief subject matter of Zophar's speech (so NRSV, REB, etc.), the construal makes sense. But שָׁרִיד elsewhere means 'survivor,' and the more probable antecedent to the suffix in question is ירז 'gain,' תְתמוּרָתוֹ 'his trade,' and בַּיִת גָּזַל 'ill-gotten patrimony' in 20:18-19. The logic of the passage supports this. One who accumulates wealth expects to enjoy it and pass it on to his heirs, but if he is a malefactor, neither he nor his heirs will 'eat' his gain. Instead he will have God's burning wrath as food. Job 20:21 is part of a unit whose versification and text as preserved in MT seem off in a few instances. I would restore as follows:

2:2
(2:2):3
(2:2):3
(2:2):3
3:(2:2)
3:3
(2:2):3

וְלִּא יִּבְרֵע
כָּי־רִצַּץ עָזָּב דַּלִּים

אֵין־שָׁרִיד לְאָכְלֵוֹוֹ
בִּמְלִאות שֵּשְּקוֹ יֵּנֶר לֵוֹ

וְיַמְטֵר עָלֵימוֹ בִּלְחוֹמִוֹ


 noun).
A bringer-back of gain, he will not swallow it down.
One who prospers his trade, he will not savor it, for he crushed, left to die the poor.

Patrimony he stole, he will not build it up, for he will not know relaxation.
Of his children, of his dearest, none he will save, no survivor to eat it.

For a reason his fortune will not prosper, when his sufficiency is complete, distress will be his.
Let the full force of misery come upon him, may it serve to fill his belly.
His burning wrath he will let loose on him, may he rain it down on him for his consumption.
[החיל], חַיִל in denominative Hiphil fromse of 'wealth, bounty,' occurs, as such Hiphils tend to do, in both transitive and non-transitive senses. Kataphoric עַל־כּן constructions are attested elsewhere (Ps 1:5-6; Hab 1:4, in both cases picked up by בִּילִּלְוֹמוֹ is a suffixed infinitive construct.

Tiny changes to MT Job sometimes suffice to restore it to intelligibility.
Exodus 12:4; 16:16, 18, and 21
eBDB sub Qal אכל contains the following note: "לִפִי אָכְלוֹ according to his eating, i.e. according to his needs in eating Ex 12:4; 16:16, 18 also v $21 . "$ The four occurrences of שָכְלוֹ after שְּפִי) לְפִי are understood as suffixed inf. constructs, not as suffixed nouns as Even-Shoshan, eHALOT, and DBH have it. A comparison with other לְפִי idioms lends support to eBDB's analysis. Note the following (discussion of minutiae in brackets):

The proportionally greater the years [since Jubilee past], the more you shall increase its price; the proportionally fewer the years, the more you shall decrease its price.
 misconstrued as a noun in WHM, AFAT, and WIVU. For a non-pleonastic version of the idiom documented here, see Num 26:54.]

Correlative to the lifting of the cloud from the tent, the Israelites would break camp following.
[According to a well-attested pattern (Joüon-Muraoka §167b), the double vav structure marks a correlation between two sentence constituents. Sad to
say, a look at the Andersen-Forbes Analysis at this passage and two of Joüon-Muraoka's examples, Gen 44:22 and Jer 18:4, reveals divergent analyses each time. The pattern I note escaped consistent tagging.]

Relative to the completion of Babylon's seventy years, I will take note of you.
[The construction headed by לְפִי and closed by שָׁנָה is noteworthy. A peek at AFPMA reveals a splendid analysis of syntactic structure sub loco. The construction is correctly tagged as a clausal immediate constituent on a par with the verbal predicator and object complement following. A study of like constructions is a desideratum. AFPMA makes it possible to establish a corpus of relevant cases. ${ }^{7}$ ]

Given that suffixed nouns after (כְּפִי) לְפִי are also attested, Even-Shoshan, eHALOT, and DBH's construal cannot easily be ruled out. Cf., e.g., לְפִי זַרְעוֹ in Lev 27:16. In a case like this, a reliable reference tool would construe the expression one way, and note the alternative construal in parentheses.

## Lucy in the Sky with Diamonds

In this post, I attempted to establish a corpus of occurrences of the verb אכל in the Hebrew Bible. I could not have done so to my satisfaction without the aid of both electronic and print resources. Along the way, I saw tangerine trees and marmalade skies. I had fun (no acid was involved). Of course, not everyone sees Hebrew as I do, through a looking glass.

For those of you who see Hebrew with unsmitten eyes, the trip into the fine details of אכל may have seemed more like a journey into the bowels of a vast and mysterious underworld. Relax, we have come to a provisional conclusion. Spewed out of the ordeal you are.

The corpus arrived at totals 814 occurrences. The precise contents of the corpus are not identical to those contained in any one of the resources that contributed to its constitution. Excluding errors, identified cases under dispute totaled 24. 22 out of 24 were assigned to the verb אכל, one to the noun אֹכֶל, and one אכל form was divided into two words.

[^7]The wealth of reference tools and databases available in electronic format was a boon for the purposes of the first installment of this word study. I am grateful to the people of Logos for their vision and persistence.

Error is not necessarily a bad thing. It has a place, as theologians say, in the divine economy. Felix culpa. Discrepancies among dictionaries of biblical Hebrew and the AFAT, WHM, and WIVU databases catch the eye, and compel a closer look at the data. In this word study, errors and discrepancies discovered in process became stepping stones in the development of a research strategy.

Along the way, my knowledge of specific texts was deepened. In my book, that's Lucy in the sky with diamonds. If you, dear reader, have yet to explore the advantages of electronic resources for the purposes of serious study, it is time you do.

In future posts, other aspects of the verb אכל will be explored with the help of e-dictionaries of Hebrew, along with print and other e-resources.

## Unscientific Postscript

It would be helpful if publishers of reference tools tailored their products to take advantage of the electronic format from the get go. Let's take the example of HALOT, which is chock full of errors in both its print and electronic editions. The use of an interactive algorithm of community correction for the purposes of product improvement would be appropriate. An editor of Brill's choosing might be designated to oversee the process. Or there might be an agreement allowing Logos to oversee corrections and additions to eHALOT. Truly useful reference tools such as CDA post addenda and corrigenda suggested by users online. One of the original editors oversees the process. CDA does not exist in electronic format, a crying shame, so the exercise is not nearly as user friendly as it might be.

I suggest taking things to a new level. As do many software firms, Logos offers continuous updates of its products free of charge to its customers. But it's up to the original publishers, Oxford in the case of BDB, Brill in the case of HALOT, and Harrassowitz in the case of CDA, to market electronic editions of the reference tools they (also) publish on dead trees with a mechanism in place to facilitate the incorporation of addenda and corrigenda on a continuous basis. They ought to do so as a matter of principle.

In the electronic medium, vanilla-flavored errors a few of which I noted above ought to be fixable at any time. There was a time when students, pastors, rabbis, and professors worked together to produce reference tools
with as few bloopers as possible between their pages. The preface of BDB names and thanks a long list of people who contributed comments and corrections. No wonder BDB is relatively free of error. Excuse my temerity in thinking that reference tools of the future, by virtue of being modifiable electronically on a continuous basis according to pre-established guidelines, have the potential of being more useful and more accurate than tools of the past.


[^0]:    ${ }^{1}$ In a word study, Keylinks to GKC, Joüon-Muraoka, UT, CAL, GELS, and similar resources are not yet possible. But a "Basic Search" on a string of Hebrew consonants with GKC or a similar resource open yields a decent set of results.

[^1]:    קאכְלוּ

[^2]:    ${ }^{2}$ If I had clicked the "Add to Search" button after specifying "verb," this would not have happened. The morphological search function is not as dummy-proof as it needs to be.

[^3]:    
     suffixed inf. construct: it's a suffixed form of the noun אֶכל אלֵ. If inf., it would have been אַכְלְכֶם (see Josh 23:13; Gen 3:5). AFAT misparses Hos 13:8 as Hiphil: it is Qal.

[^4]:    ${ }^{4}$ An error of audition, with assimilation to the third person of the preceding line. The error is probably ancient. The versions, in my view, do not attest to the suggested reading, though S and T appear to in part. As translators tend to do, S and T render difficult texts more approximately than easier ones, based on the logic of the whole as they understood it. For a defense of MT, with misgivings, see Delitzsch. The first to propose the emendation seems to have been Wellhausen. It was adopted by Gunkel, Kraus, BHS, Alonso Schökel, and Hossfeld and Zenger; RSV, NASB, NRSV, NAB, and NJB. NIV and ESV silently emend $\mathfrak{l}$ to ! before the verb. I propose a ban on silent emendations in another post.

[^5]:    ${ }^{5}$ The reading $y$ ' $k l d w$ 'el infermo lo consumirà' is found in Olmo and Sanmartín sub $d w$. Translate rather: 'sickness will consume.' eUDB, however, reads yhtkl dht.

[^6]:    ${ }^{6}$ In passing, one cannot fail to register with disappointment that eBDB and eTregelles each contain a typo at this point. לְהָכִיל inows up as לִהָכִיל in eBDB; הָכִיל as הָכִיל in eTregelles.

[^7]:    ${ }^{7}$ Tags might be added to AFPMA so as to facilitate the study of constructions of this and other types. As Andersen and Forbes note in their introduction to AFPMA, it remains a work in progress.

