Review Article: Stuttgart Electronic Study Bible

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Christof Hardmeier, Eep Talstra, and Alan Groves (eds.). *Stuttgart Electronic Study Bible.* Stuttgart: Deutsche Bibelgesellschaft, 2004. ISBN 3-438-01963-9. €240.00. CD-Rom for Windows. System requirements: PC minimum Pentium II, 300 MHz; 128 MB RAM. Hard disk space: 60-400 MB. Screen resolution: 1024 x 768 recommended. Windows 98, 98SE, ME, NT 4.0 (SP3), 2000, XP.

Introduction

The release of the Stuttgart Electronic Study Bible (aka *Stuttgarter Elektronische Studienbibel* aka SESB)—a joint endeavour by the German and Dutch Bible Societies—marks the beginning of an exciting new era for computer Bible software. I say this because SESB is the first software product to include the critical apparatus for both the Old and New Testaments along with the *Werkgroep Informatica* database (formed by the Theology Department of the *Vrije Universiteit* in Amsterdam), which allows phrase- and clause-level searching on the Hebrew text for the first time.

SESB utilises the Libronix Digital Library System (aka Logos) and is focused towards comparative textual study and searching. The following review will highlight features particularly unique to SESB and not Libronix per se. I will move to a discussion of how SESB might help in understanding two difficult "test cases" from the OT.

Modern versions

SESB contains a range of modern translations, but is certainly by no means complete on the English side (one would have to purchase additional translations if this were one's only Bible software). The English versions are the *New International Version* (1978) and the *New Revised Standard Version* (1993); German versions are *Die Bibel nach der Übersetzung Martin Luthers* (1984), *Gute Nachricht Bibel* (2000), *Einheitsübersetzung* (1982), *Elberfelder Übersetzung* (rev. ed., 1985), and *Die Schrift* (1962); French versions are *La nouvelle Bible Segond* (2002), *La Bible en Français courant* (1997), and *Traduction Oecumenique de la Bible* (1977); Dutch versions are *Statenvertaling, Vertaling* (1951), and *Groot Nieuws Bijbel* (1996); and the Danish version is *Den hellige Skrifts kanoniske Bøger* (1992).

Original language and ancient versions

SESB includes BHS, NA27, LXX, as well as the Vulgate. Morphological tagging of NA27 is the GRAMCORD tagging and that of the LXX is CCAT. BHS tagging, however, is that of the *Werkgroep Informatica* of the *Vrije Universiteit* in Amsterdam. This morphosyntactical, syntactical, and textual database is known as the WIVU database, and more will be said concerning it below since it really is the stand-out feature of the package.

Lexicons
SESB lexicons include: for Hebrew there is *Wörterbuch zum Alten Testament: Hebräisch/Aramäisch–Deutsch und Hebräisch/Aramäisch–Englisch* (Bosman, Oosting, and Postma); for NT Greek there is *A Concise Greek-English Dictionary of the New Testament* (Newman) and *Kleines Wörterbuch zum Neuen Testament: Griechisch–Deutsch* (Kassühlke and Newman); and for the Greek of the Septuagint there is *A Greek–English Lexicon of the Septuagint* (Lust, Eynikel, and Hauspie). These (basic) lexicons do the job simply of providing a definition and not much else; they are no HALOTs or BDAGs, for which, again, one would have to make additional purchases.

Critical apparatuses
SESB produces the critical apparatus in digital format for the first time of BHS and NA27. Perhaps they could have gone the whole way and offered the apparatus for the LXX and UBS4, but having the two that are provided ends a long wait. What I found exceptionally good about these digital apparatuses is that by hovering the mouse over confusing sigla, manuscripts, etc., I was provided with information concerning the meaning of the a particular sigla or what manuscript is represented by another (as well as its date, its textual contents, etc.). Also to be applauded is the fact that these apparatuses are also fully searchable. For example, searches can be conducted on the NA27 apparatus for particular uncials, lectionaries, miniscules, papyri, church fathers, etc. The BHS apparatus, however, can only be searched for text as it appears in the footnotes.

Searching NA27, BHS, and LXX
Many types of searches can be conducted on the NA27, BHS, and LXX texts. Sometimes they can even be arranged graphically if desired if the Libronix software update 2.1c (as of April 2005) has been downloaded from the Logos website and installed. The LXX can be searched for actual text, lemmas, glosses (lexical definitions or explanations), etc. NA27 can be searched for morphological tags for a given word, instances where a morphological form is used for a different function (e.g. nominative used as a vocative), variant morphological forms of a word, crasis, lemmas, OT quotations, disputed passages (i.e. text whose authenticity is disputed), text considered to be a later addition to earlier manuscripts, etc. BHS can be searched for grammatical parts of speech that head a lexical entry, glosses, lemmas, *qere* readings, etc. Search capabilities for each book can be found (once a book has been opened) by clicking: Help | About This Resource. And to figure out actually how to conduct such searches as those listed above, the help file on *Searching* MUST be read in its entirety—preferably more than once. I say this because each search needs to be entered with specific, particular text, i.e. there is no graphical user interface to simplify matters.

WIVU database
The WIVU database is really the standout feature of the program. While the apparatuses have not been available in electronic format before, they have been available in print form. Not so for the WIVU database—this is the first time it has been made widely available in any form. Now, for the first time, searches can be conducted on the phrase- and clause-levels. Consequently, the linguistic knowledge of Biblical Hebrew is potentially set to expand and become more precise. Searching at the phrase- and clause-levels can be conducted in various combinations of syntactic or grammatical features and functional categories (i.e. the function of the particular constituent in the phrase or clause). The two screen-shots below depict, firstly, the syntactic and functional searching options at the phrase-level; and, secondly, at the clause-level:

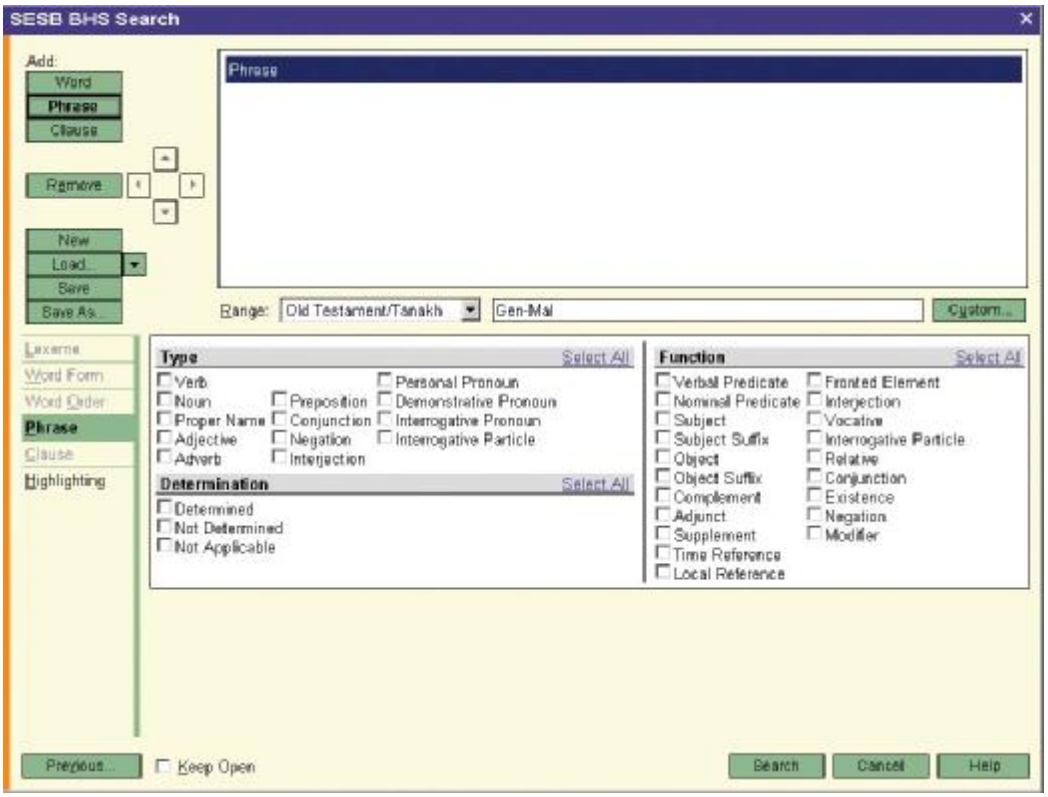

Figure 1: Syntactic and functional searching options at the phrase-level.

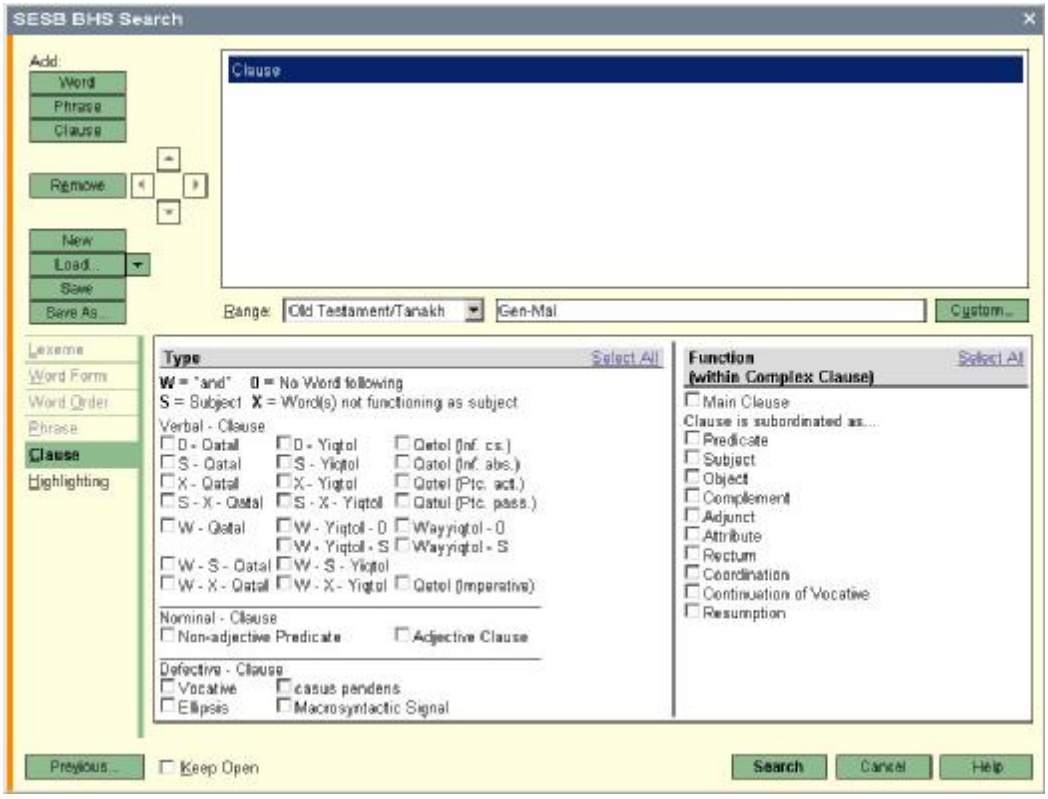

Figure 2: Syntactic and functional searching options at the clause-level.

The database has been a work-in-progress for around twenty-five years. Not all OT books, however, have been completely tagged at the highest linguistic level. The distinction between narrative and direct speech is a tag applicable at the highest level. Tagging is complete for the following books: Gen–2 Kings; Jonah; Ruth; and Qohelet.

However, access to this tagging is unavailable in SESB. This essentially means that searches cannot be limited to "narrative" or "direct speech" domains but has to wait for a future update. In the future, a search could be conducted for a subject of a particular verb as it appears in direct speech vis-à-vis narrative. For example, being able to limit searches to these domains would allow much faster evaluation of an argument such as Joosten's, who agues that the predicative participle is used in direct speech for the expression of the present tense.[1] All predicative participles appearing in direct speech could be quickly retrieved for assessment alongside the data which Joosten himself presents.

For the moment there are still many various searches which may be conducted; essentially the possibilities are as great as the linguistic knowledge of BH itself. I will now present two textual examples where searching the WIVU database helps to evaluate and shed light upon.[2]

The first example I take from Malachi 2:16, the start of which is usually rendered: "'I hate divorce,' says the LORD God of Israel" (NIV; cf. GNB; NASB; NET; NJB; NRSV; RSV). Rudolph has argued that "שָׂנֵא ist Verbaladjektiv im Sinn eines Partizips, bei dem das Pronominalsubjekt fehlen kann" and suggests that this is the case "wenn es sich aus dem Zusammenhang ergibt (GK §116s); das ist hier wegen אמר י".[3] In other words, Rudolph argues that שָׂנֵא (*śāne'*; "hate") is here a verbal adjective used as a predicative participle which has the subject unexpressed because of the close connection with the following clause which reads אמר יהוה (*'āmar YHWH*; "says Yahweh").[4] However, Shields has called into question Rudolph's interpretation, arguing that "[w]hen a participle constitutes the predicate of a verbless clause, the subject is usually explicitly represented in the clause."[5] Conducting a

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[1] Jan Joosten, "Do the Finite Verbal Forms in Biblical Hebrew Express Aspect?" *JANES* 29 (2002), 49-79. On the participle used as a present tense (but still with differing views), see also Mark S. Smith, "Grammatically Speaking: The Participle as a Main Verb of Clauses (Predicative Participle) in Direct Discourse and Narrative in Pre-Mishnaic Hebrew," in *Sirach, Scrolls, and Sages: Proceedings of a Second International Symposium on the Hebrew of the Dead Sea Scrolls, Ben Sira, and the Mishna, Held at Leiden University, 15-17 December 1997* (ed. T. Muraoka and J.F. Elwolde; Leiden: Brill, 1999), 278-332; Randall Buth, *Living Biblical Hebrew for Everyone* (2 vols.; Jerusalem: Biblical Language Center, 2003), 1:ט; 2:48-49, 341; Vincent Joseph DeCaen, "On the Placement and Interpretation of the Verb in Standard Biblical Hebrew Prose" (PhD diss., University of Toronto, 1995), 265-275. It is difficult to discern whether Joosten still holds to his earlier proposal that the order subject–participle represents an action as actually happening at the moment of speaking (an "actual/real present" tense) vis-à-vis to the order participle–subject which represents an action as present but not actually occurring (a "factual present" tense) (see Jan Joosten, "The Predicative Participle in Biblical Hebrew," *ZAH* 2 [1989], 128-159; and idem, "The Indicative System of the Biblical Hebrew Verb and Its Literary Exploitation," in *Narrative Syntax and the Hebrew Bible: Papers of the Tilburg Conference 1996* [ed. Ellen van Wolde; Biblical Interpretation Series 29; Leiden: Brill, 1997], 51-71). Whatever the case, Randall Buth has convincingly argued that the varying word order is motivated not by aspectuality (i.e. a real present vis-à-vis a factitive present) but by pragmatics ("Word Order in the Verbless Clause: A Generative–Functional Approach," in *The Verbless Clause in Biblical Hebrew: Linguistic Approaches* [ed. Cynthia L. Miller; LSAWS 1; Winona Lake: Eisenbrauns, 1999], 79-108, esp. §3.4).

[2] My thanks to Dr Martin Shields who has helped provide the first example and has drawn my attention to his article (see below). The second was prompted by my own investigation of the unheeded use of גם in Job 16:19. Elsewhere, in an as-yet-unpublished essay I explore further the ramifications for the book of Job in heeding the particle גם in this verse.

[3] Wilhelm Rudolph, *Haggai—Zacharja 1–8—Zacharja 9–14—Maleachi* (KAT 13; Neukirchen: Neukirchener Verlag, 1976), 270. Cf. also idem, "Zu Mal 2 10–16" *ZAW* 93 (1981), 85-90.

[4] Similarly, Pieter A. Verhoef says: "we prefer the reading according to which God is the subject, and only the Masoretic punctuation is altered to provide a participle with a suppressed personal pronoun" (*The Books of Haggai and Malachi* [NICOT; Grand Rapids: Eerdmans, 1987], 278).

[5] Martin A. Shields, "Syncretism and Divorce in Malachi 2,10–16," *ZAW* 111 (1999), 82.

search with the WIVU database on predicative participial clauses confirms Shields' criticism: participles are not deployed as predicates without also specifying a subject. Waltke and O'Connor note some exceptions with הנה (*hinne*^{h}; "behold"), viz. Gen 24:30 and Gen 37:15.[6] However, both of these may be better understood as instances of nominal usage, i.e. when a participle is used predicatively after הנה (*hinne*^{h}; "behold"), the subject is expressed either lexically (with a participle) or pronominally (cf. Dan 8:19). Waltke and O'Connor also note Josh 8:6 as an exception which leaves the subject unexpressed, the referent of which has just been mentioned; however, the participle, נסים (*nāsîm*; "fleeing"), may also be nominal here, with לפנינו (*lĕpānênû*; "before us") taken as its predicate.[7]

GKC also note exceptions.[8] Most of these involve third- and second-person referents. But as with the Waltke and O'Connor examples, they can all be understood nominally and as such the subject of their particular clauses, i.e. they are not used verbally. The first person examples GKC lists are: Hab 1:5; Zech 9:12; and Mal 2:16. However, firstly, the participle of Zech 9:12 again may be nominal; an English rendering of the clause may be: "Today is a declaration that I will restore double to you." Secondly, Hab 1:5 is more difficult. But here again we do not *have* to understand a phonologically unexpressed pronoun: the noun פֹּעַל (*po'al*; "a work") may well be the subject of the participle פֹּעֵל (*po'ēl*; "working, doing"), i.e. even though the participle here is *verbal*, a pronoun need not be supplied to render sense. An English rendering might therefore be: "For a work is done in your days..." A search for a similar construction with the WIVU database as that in Hab 1:5 returned Isa 40:6: קוֹל אֹמֵר קְרָא (*qōl 'omēr qĕra'*; "A voice says, "Cry!"). Here, as in Hab 1:5, it is the action of a person which is the subject of a participle. Both examples appear to ***suppress*** their referents for whatever reason by using the action rather than the personal form or a lexical designation. To add a pronoun is to not attempt to understand the words as they are. Bruce's comments on Hab 1:5 that "it is quite clear that the subject is 'I' (Yahweh)" consequently misses the mark,[9] for it is just the opposite of what Bruce says which the clause conveys by its delayed use of the pronoun, i.e. it is *not* clear initially who *is* the "doer of the work" until verse 6—and surprisingly it is *Yahweh*!

With the aid of the WIVU database and its help in assessing the data of the OT, we can thus conclude that the participle in Mal 2:16 is not predicative as the subject is unexpressed. The form can either be understood as a nominal participle (pointed שֹׂנֵא),[10] or as it stands in the MT as a *qal* perfect 3ms.[11] The situation depicted, then, by Mal 2:16 is one where the Israelites considered a form of hatred as sufficient cause for divorce. Shields demonstrates a semantic and conceptual link between faithlessness expressed in syncretistic worship (Mal 2:11-12) and in the divorcement of covenant wives (Mal 2:13-16). He suggests that the juxtaposition implies that idolatry had contributed to divorce or that divorce somehow had promoted idolatry.[12]

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[6] Bruce K. Waltke and M. O'Connor, *An Introduction to Biblical Hebrew Syntax* (Winona Lake: Eisenbrauns, 1990), §37.6a.

[7] The clause may thus be rendered in English something like: "They will say, 'Those fleeing are before us.'"

[8] GKC, §116s.

[9] F.F. Bruce, "Habakkuk," in *The Minor Prophets: An Exegetical and Expository Commentary* (ed. Thomas Edward McComiskey; 3 vols; Grand Rapids: Baker, 2003), 2:847.

[10] So Shields, "Syncretism", 83-84; Beth Glazier-McDonald, *Malachi: The Divine Messenger* (SBLDS 98; Atlanta: Scholars, 1987), 100-111; A. van Hoonacker, *Les douze petits prophètes, traduits et commentés* (EBib; Paris: J. Gabaldo et Cie, 1908), 728-729; David Clyde Jones, "Malachi On Divorce," *Presb* 15 (1989), 17-18.

[11] So Gordon P. Hugenberger, *Marriage as Covenant: Biblical Law and Ethics as Developed from Malachi* (Grand Rapids: Baker, 1998), 67-76; Douglas Stuart, "Malachi," in *The Minor Prophets: An Exegetical and Expository Commentary* (ed. Thomas Edward McComiskey; 3 vols; Grand Rapids: Baker, 2003), 3:1341-1344.

[12] Shields, "Syncretism", 68-86.

The second example is taken from Job 16:19. The verse begins with the particle גם (*gam*; "also"), and it is initially unclear what the particle here is in fact doing. One of the commentators that I can find who provides a comment simply says that its deployment here is "somewhat redundant."[13] However, investigation with the WIVU database proves otherwise. The database allowed me to conduct a search for similar clauses as the גם-clause of Job 16:19, viz. nominal clauses with an adverbial phrase with the lexical item גם functioning as a modifier. The search returned instances of the same construction as Gen 20:12; 48:28; Exod 4:14; 2 Sam 19:44(43); 1 Kgs 7:31; and Ruth 3:12. Each of these appear to have גם indicating that the foregoing is to be supplemented or added to with additional information. And consulting the reference grammar of van der Merwe, Naudé, and Kroeze confirms this observation. There the authors argue that גם may modify a word, a constituent, or even a clause.[14] Elsewhere, van der Merwe presents Josh 2:24 as another instance of גם modifying a clause, on which he says:

> גם is used to constrain the interpretation of the first of two propositions concerning a particular topic by the fact that it must be supplemented by a second proposition.[15]

Thus the treatment of גם by these studies confirms what was suspected from the WIVU database search, i.e. גם is a focus word which signals that the word, constituent, or clause in its scope is adding to or supplementing previous text, speech, or assumed knowledge. Consequently, the deployment of גם in Job 16 functions to show that Job somehow recognises that his previous characterisation of God as his violent, unrelenting enemy (Job 16:7-18) needs to be supplemented by a second proposition that God paradoxically remains his witness (עד) and advocate (שהד). As a result, we can rule out interpretations proposing that Job abandons his hope in God for some other "personal private deity",[16] that Job denies the goodness of God,[17] or that Job only explores a hypothetical possibility of a witness in heaven.[18] With the help of SESB in identifying the function of גם, we can confidently maintain that Job expresses a bold trust in God despite the present torment of his circumstances.

It should be evident from the above examples and discussion that the WIVU database presents an exciting tool for linguistic and exegetical research on the OT. Such searches as those above have not been able to be conducted previously. True, such information could still be obtained—but not without considerable effort. Taking Mal 2:16 as an example, one would have had to conduct a search for all participles from which one would then have had to manually remove all the participles that were not used predicatively—in effect doing what the computer can now do thanks to the database.

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[13] John E. Hartley, *The Book of Job* (NICOT; Grand Rapids: Eerdmans, 1988), 262,n.2. J.P. Fokkelman, in a different vein, says "[t]he importance of the witness is indicated in v.19 by a special signal, the long chain of no fewer than three words, *gam 'atta hinne*" (*Major Poems of the Hebrew Bible: At the Interface of Prosody and Structural Analysis. Volume IV: Job 15–42* [SSN 47; Assen: Van Gorcum, 2004], 42). Just *how* this "importance" is indicated beyond the fact of a chain of three words is not elaborated upon. Also, what has enabled Fokkelman to identify the clause in question as a "special signal" is also unhelpfully left unsaid—is it one particular word more than the others; the three words themselves; or the particular occurrence and combination of all three?

[14] Christo H.J. van der Merwe, Jackie A. Naudé, and Jan H. Kroeze, *A Biblical Hebrew Reference Grammar* (BLH 3; Sheffield: Sheffield Academic Press, 2000), 314-315.

[15] Christo H.J. van der Merwe, "Old Hebrew Particles and the Interpretation of Old Testament Texts," *JSOT* 60 (1993), 37.

[16] John Briggs Curtis, "On Job's Witness in Heaven," *JBL* 102 (1983), 549.

[17] David J.A. Clines, "Job's God," *Concilium* 4 (2004), 44-47.

[18] Lindsay Wilson, "Realistic Hope or Imaginative Exploration? The Identity of Job's Arbiter," *Pacifica* 9 (1996), 243-252.

Suggested Improvements

I now include four suggestions for improvement. Please note that they are ***my*** suggestions to make the program a better one, and may not reflect how another user may perceive the program. Note, also, that these comments relate to Libronix Digital Library System 2.1c.

1. I suggest that it is important that more detailed morphological auto-information for BHS be made available. For example, hovering the cursor over the first two words of Genesis provides the following auto-information:

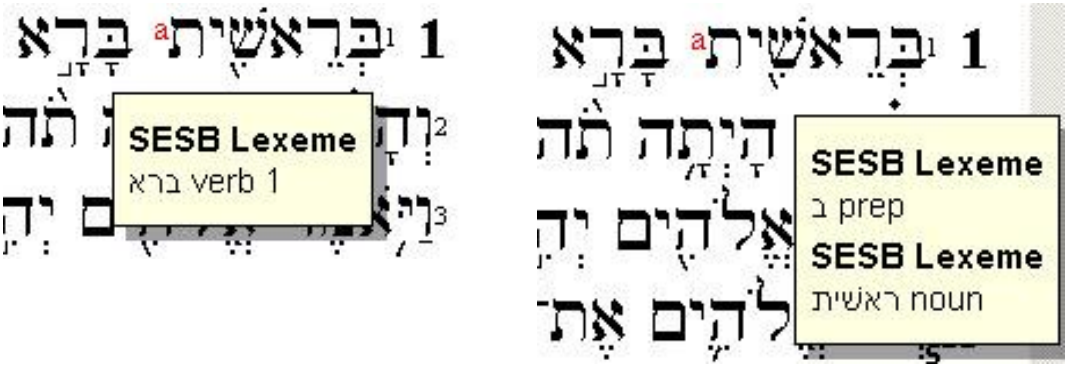

Figure 3: Morphological auto-information for BHS.

As is readily apparent, morphological information is extremely basic: firstly, ראשית is simply said to be a "noun" and nothing more is said concerning whether it is an "absolute" or "construct" form (at least as it has been tagged in the database); and, secondly, ברא is said to be simply a "verb", not a "*qal* perfect third-person masculine singular" verb. In contrast, the NA27 auto-information provides full morphological information. Figure 4 below uses the first two words of Matthew as an example:

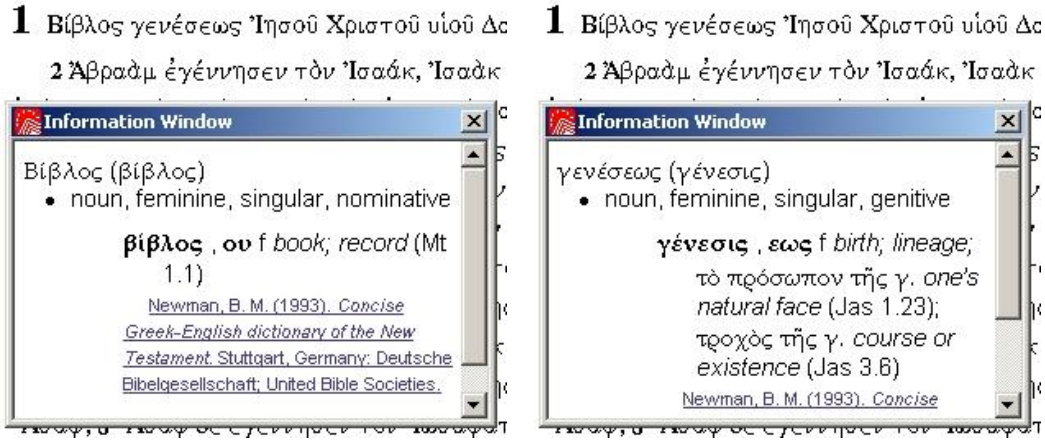

Figure 4: Morphological auto-information for NA27.

2. When constructing a search on the WIVU database, I would also like the option of being able to specify what I ***don't*** want in a search. On the lexeme-level this can be done as figure 5 below shows:

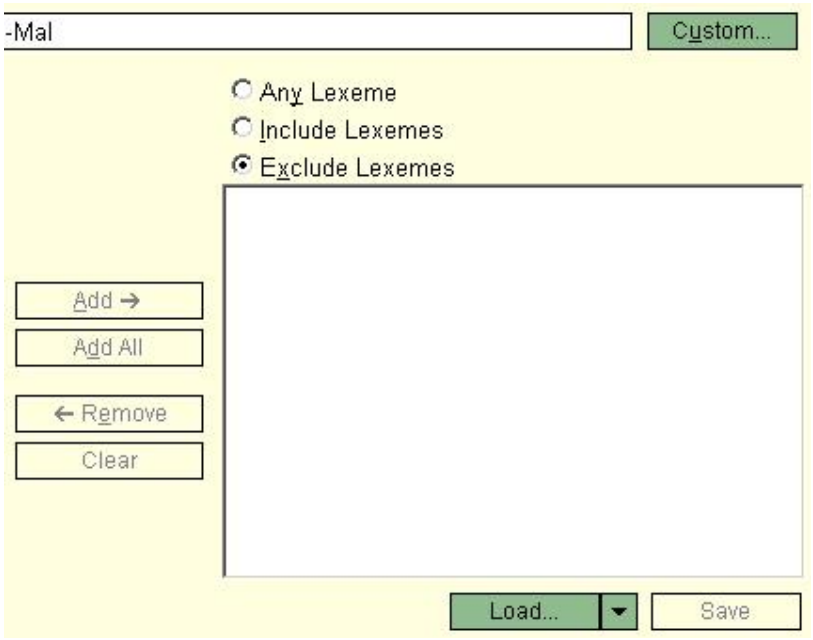

Figure 5: Constituent exclusion at the lexeme-level.

However, at the phrase- and clause-levels constituents cannot be excluded, i.e. none of the possible syntactic and functional options in figures 1 and 2 above can be selected for specific exclusion from a search. For example, that means that a particular phrase within a clause-level search cannot be selected for exclusion. Regarding my own use of the program for this review, having the option of excluding a constituent at the phrase-level would have made my assessment of Malachi 2:16 much easier: I would have been able to specify that I wanted a search to be run for all predicative participial clauses which ***didn't*** have an overt pronominal subject. Because I could not construct such a search, I had to retrieve every instance of a predicative participle and then sift through them all to remove those which had subjects. (As it turned out, there was none anyway.)

3. I would also like to be provided with a definition of homophonous words when specifying a lexeme in a WIVU database search. For example, it is well-known that the Hebrew direct object marker and a preposition meaning "with"—את—are homophones. However, selecting one of these lexemes for a search is made more difficult than it should be since one is labelled "prep 1" and the other "prep 2":

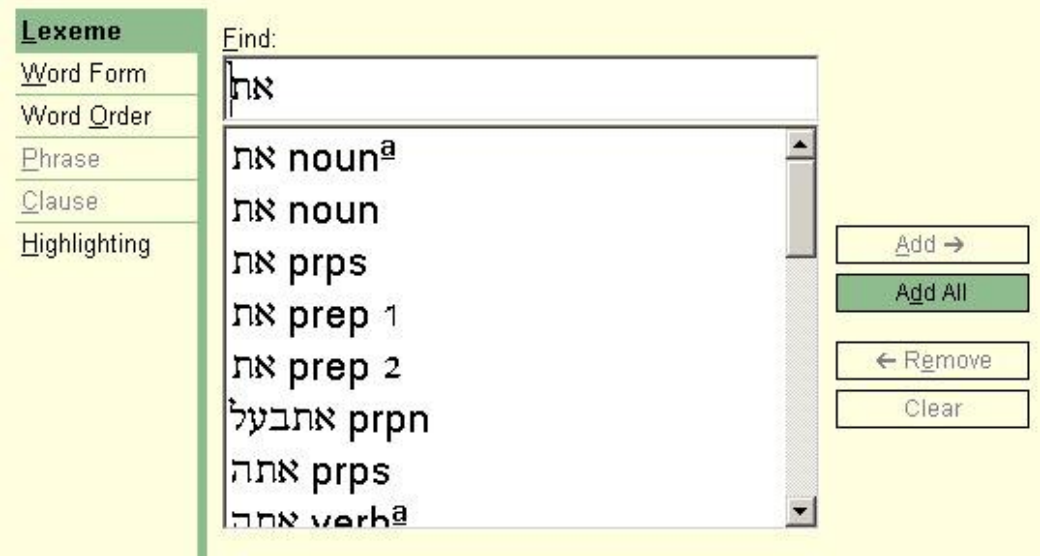

Figure 6: Ambiguous homophonous words.

Only trial-and-error can determine which is which. Perhaps they could be labelled: "את prep 1 (object marker)" and "את prep 2 (with)" respectively. Or perhaps when the cursor is hovered over a word an auto-information window supplies lexical data. In any case, something less ambiguous than "prep 1" and "prep 2" is necessary. Further such examples are plentiful.

4. Finally, I would like a graphical user interface for the searches other than those on the morphological databases. This relates particularly to searches on the NA27 mentioned above, viz. instances where a morphological form is used for a different function, variant morphological forms of a word, OT quotations, disputed passages, text considered to be a later addition to earlier manuscripts, etc. Without a graphical user interface, these searches are difficult and take time to conduct, especially when used in combination. A graphical user interface would simplify matters greatly.

Conclusion

As I have said, the SESB software package presents an exciting new era in Bible software, allowing for the first time complex phrase- and clause-level searching of the OT. However, its appeal is also that it offers for the first time the critical apparatuses of the NA27 and BHS in searchable format. The program should thus be considered by those involved in text-critical work or linguistic and exegetical analysis of the OT. For those needing to conduct searches on the OT such as the examples above, the program is an essential tool. Personally, I look forward with anticipation to the completion of the tagging of the OT and its integration into the program.