During the course of its existence, BibleWorks has emphasized speed, efficiency, simplicity, an intuitive interface and—to cite their slogan—a ‘focus on the text’. With the release of each new edition of the program so far, BibleWorks has succeeded at making progress in each of these categories. BibleWorks 8 (BW8) is no exception. If these are the features that matter most to a person in their daily biblical research, BW8 will not disappoint.

BW8 is lighting fast—and the designers know it. It is the only software (I know of) that times the speed of its searches. For example, my search for πιστεύω in the BGT (a combination of the LXX and GNT) yields 78 hits in 0.09 seconds. If I run the same search again, it gives me the same results in 0.03 seconds. I suppose they time the searches to remind the user of its remarkable speed. It works. This program flies. Even more complex searches, like a query designed to find discontinuous constituents in particular participial structures with at least seven intervening elements between the article and the participle it modifies yields 12 hits in 0.66 seconds. From one of the right click options, the user can easily copy only the verse references for these results to their clipboard and paste them to their document editor: Acts 4.25; 21.28; 24.14; 28.6; Rom. 2.7; 4.12, 18; 5.17; 16.17; Phil. 1.17; Heb. 7.5; Rev. 19.9. When I cast the net a bit more broadly to find these structures in
the LXX and the GNT by switching the search version to BGM (BGT with morphology), it takes a little longer, yielding 64 hits in 61 verses in 23.28 seconds. If I stretch the engine further and examine discontinuous nominal structures, we retrieve 2,213 hits in 1,230 verses from BGM in 125.38 seconds—still fairly impressive given the complexity of the structure and the breadth of the corpus searched. But while the searches themselves produce results quickly, unless the user is quite familiar with the Boolean equations and their graphic counterparts that the searches depend upon, the learning curve may be rather steep. I wonder whether the search terms (including order, etc.) could be more organic to the Greek/Hebrew and simplistic—even if terms have underlying symbolic values that run the program itself. In fact, the search interface is the only thing about the program that I do not find as intuitive and, as far as I can tell, it has not been developed since BW6 with the introduction of the GSE (Graphic Search Engine, formally ASE) search tool. But once users familiarize themselves with it and continue to use it, the tool becomes more efficient and it definitely gets the job done. The speed of the program at every other level is virtually instantaneous. From the populating of pop-up and information windows to the analysis window, BW8 zooms.

The newest edition of BibleWorks has also succeeded in creating an even more efficient workspace. To begin with, the ‘Repeat Last Copy Command’ feature, new to BW8, saves time with cut and paste. You can now export original language fonts in Unicode, adding facility for the use of the tool in writing. However, to copy text you have to manually highlight each letter by holding down left-click. Copy commands should be part of the right-click options. When I first began using the program, transitioning to new resources was kind of sluggish and sometimes the commands pulled up the wrong book or passage, but this seems to have been corrected in an update. The Options menu in BW8 is more consolidated and intuitive. The addition of tabs to the interface, beginning with BW7, makes the software almost worth the upgrade if the user still lives in the world of BW6. But the BW7 user should also be informed: more tabs have been added in the Analysis panel in BW8. These are not traditional tabs, however. They have been

2. Tabbed Interface and Command Line
positioned over the command line in the Search panel (the first pane of the BW8 display) and instead of each tab being a different workspace, they are used to shift the rest of the interface into a different workspace. This means that the Display and Analysis windows (the second two panes of the BW8 display), where the user views their texts and tools, remain uncluttered by multiple tabs. The user can also name the tabs to keep numerous workspaces distinct and easily accessible. This allows me to conceive of different desktops on which I can work with different corpora of texts related to New or Old Testament study. So, for example, I have two workspaces devoted to the New Testament, one to the Old Testament (BHS, LXX and Targums), one to the OTP, one to Josephus and so forth. Most tabs these days can be relocated in the sense that the user can drag and drop tabs to different locations. Unfortunately, this is not the case with the BW8 tabs. This level of functionality would be a nice development in future editions or updates for the program.

The command line provides immediate access to many of the program’s features, greatly enhancing its efficiency. You can add versions to the display window from here by simply typing the name of the version. For example, the command GNT adds the UBS fourth edition to the Display Window. The user can also navigate to passages in this way. The command lu 1:1 shifts the Display Window to the first chapter of Luke’s Gospel, verse 1. One can perform reasonably complex searches from the command line as well. You have to learn the search syntax to take advantage of this feature, but once it is mastered, searches can be preformed quickly and efficiently within the program.

BibleWorks seems to aim for simplicity, doing a few things very well. Their library of available resources has never been very extensive. The kinds of resources have never been very broad. They only have one base package, which comes with most of what they offer. Believe it or not, BibleWorks offers a mere 20 items for purchase that do not come in the base package. This is one feature I love about the program. It avoids complicating things, keeping the program lean and efficient. The cost reflects this virtue. Due to its simple high-quality inventory, BW8 is the most cost efficient software on the market.

The interface remains quite intuitive in the newest installment of the program. It begins with the Search Panel/Command Line that allows you to search and navigate your texts. This is about where I want to begin in my search: choosing the text I will be working with and/or
searching it for a particular passage or linguistic structure. The second panel, moving to the right of the screen, is the Display Window, which displays your versions either in comparison with other versions or in an extended display of the active version. They have improved the pull down menus for biblical (and other) books from BW7 so that in BW8 there are several columns of books to choose from within a version rather than a single straight list that the user must scroll down to finally select the book they need.

The third and final panel, the Analysis Window, includes a number of supplementary tools and further viewing options. Word lists from the Search panel populate the Words tab. The Context tab provides lists of words in the pericope, chapter and book the user navigates to. There is a tab for viewing Version Info. The Browse tab is a nice improvement in BW8. It duplicates the Display Window so that you can compare a passage in different versions and in the context of one version if one so desires. The Analysis tab provides parsing and lexical information. The Resources tab offers a summary of what the various reference tools that come with the software offer, including lexica, grammars and a few other tools such as Matthew Henry’s commentary and Nave’s Topical Bible. I like to ‘uncheck’ most of the resources in this latter category (and quite a few in the first two) so that my display is not cluttered with sources I have no need to consult. These actions can be conveniently executed through the relevant sub-tabs under the Resource tab. The Notes and Editor tabs provide the user with a fairly robust word processor in which documents can be produced with (Notes) or without (Editor) associated to a particular verse. The X-References tab populates data from the Treasury of Scripture Knowledge and/or several other cross reference databases (including a master database), a feature likely useful for pastors or those wishing to locate parallel passages. Finally, the Stats window provides helpful comparative data, including graphing options. In the screenshot above, I have graphed the results for the discontinuous articular participles.
So the interface has a nice intuitive flow to it. The only problem I find here is that the command line is not as forgiving as I would hope. For example, if I type `.αλη` with GNT as the active version, a pull-down menu comes up and highlights `αληθεια`, which in this example is the word I want to search on. Intuitively, I want to hit enter, thinking that it will perform the search on the highlighted word, but it doesn’t. When I hit enter, it clears the search panel and makes me start over, giving me a message that says ‘The following word cannot be found in the current search version: `.αλη`.’ Not only does this not accord with my intuitions about how the search should work, but it makes the user start over completely. This needs to be fixed. The user should press enter to search on the highlighted term and keep typing letters until the pull down menu provides the word they are looking for. And the command line should not be cleared. The user should pick back up where they left off, even if a mistake is made when entering the search terms.

Finally, we come to BibleWorks’s vision for its product: ‘Focus on the text’. If there is anything that distinguishes BibleWorks from its competitors, it is focus on the text. The goal is to appeal to people working with the biblical text in its original languages and not too many beyond that. This makes things clear and easy. Their program comes almost exclusively with texts and tools to assess the biblical text (see [http://www.bibleworks.com/content/full.html](http://www.bibleworks.com/content/full.html) for complete contents). In other words, they virtually exclude secondary literature in their collection. And in my opinion, the few randomly selected secondary kinds of (mostly public domain) sources they do include—for example: Matthew Henry’s commentary, Schaff’s Church History, several historical confessions, Nave’s Topical Bible—only dilute this focus and take away from the program’s central virtue.

Beyond these few oddities, the collection of resources has been carefully selected to support serious analysis of the biblical text in its original languages. In terms of resources, it comes with a number of biblical texts, including translations, various versions and editions. In addition to several non-English modern language versions useful for
Review: Bible Works 8

translators, BW8 comes with all the standard English language translations anyone could want and more, most notably: the NASB, NASB95, NET, RSV, NRSV, NIV, ESV, AV, KJV, NKJV, YLT, JPS, HCSB, NLT. Editions of the New Testament include: Nestle-Aland\textsuperscript{27}/UBSGNT\textsuperscript{4}, Robinson-Pierpont's Byzantine text as well as older editions like Westcott and Hort, Scrivener, Stephanus, Tischendorf and Von Soden (new to BW8), most of which are morphologically tagged. Tischendorf, however, is the only one of these eclectic editions that comes with the accompanying apparatus. Important editions of the Old Testament include: the Groves-Wheeler Westminster Hebrew Old Testament, Rahlf's LXX, as well as the Leningrad Codex, and several significant Aramaic Targumim (e.g. Onkelos, Pseudo-Jonathan, Neofiti). In my view, the BHS and N-A\textsuperscript{27} apparatuses should be a stock feature of a program with the kind of focus that BibleWorks boasts of.

Perhaps the most impressive feature of BW8 is its base collection of important extra-biblical primary texts. These include: Philo (Borgen, Fuglseth and Skarsten), Josephus (Niese), the Old Testament Pseudepigrapha (OTP) (editions by Evans and Charles), and the Apostolic Fathers (Lightfoot), all in Greek (morphologically tagged) and in English. The excellent recent editions of Philo and the OTP enhance the value of these texts in BW8 all the more. And Niese and Lightfoot remain standard editions for Josephus and the Apostolic Fathers. In English, BW8 comes equipped with Rodkinson's Mishnah and Babylonian Talmud, leaving a conspicuous chronological gap in the Rabbinic material by not including the Jerusalem Talmud. And, unfortunately, the Babylonian Talmud is not accessible through the main interface, but only in the Resource tab of the Analysis window or through a Help file (see below). The inventory only includes English versions of the New Testament Apocrypha (editions by Hone and James) as well. But still, BW8 provides the user with a nice assortment of primary texts, especially considering the price.

Another set of resources needed for significantly engaging original language biblical texts is lexica and grammatical tools. BW8 includes both. For Greek, with the exception of Louw and Nida (and Lust for the LXX), it supplies the user with exclusively intermediate-level resources (e.g. Thayer, abridged LSJ). This should be corrected in the next edition. BDAG and LSJ can be added, however. Nevertheless, the more specialized papyri lexicon by Moulton and Milligan is included, which counts as an excellent improvement to the library from BW7. Wallace’s
intermediate grammar, which was not part of the base package for BW7, and Robertson’s reference grammar come with the program, as well as Burton’s Moods and Tenses. Beyond this, the BW8 inventory includes a few other elementary Greek textbooks, probably useful for the student. The Hebrew and Greek flashcard module will be helpful for the student as well—the best flashcard program of its kind that I have seen. You can retrieve vocabulary for a particular book, chapter or passage according to frequency in, say, the New Testament or Mark’s Gospel—very helpful pedagogically. The same situation persists with Hebrew grammars. BW8 stocks BDB and Holladay but not HALOT. The Hebrew grammars are excellent though, particularly Waltke-O’Connor and Joüon-Muraoka. They have added some standard grammatical resources in this new edition of BW, but the investment would have been spent better in providing more significant lexicons with the package.

If BW8 struggles anywhere, it is with the aesthetics of the display. I recognize that part of the reason the program moves so quickly and efficiently has to do, on the programming end, with keeping the display raw and simple so that the focus can remain upon functionality. That said, a few minor adjustments could enhance the overall feel of the program. The original language fonts should display in higher resolution. On my machine, they become pixelated at 14pts and do not look crisp at 12pts. Softer backgrounds for the texts would also help, as opposed to the bright white currently used. The biblical and primary texts could be better formatted to resemble the print editions as well. And the access you get to grammatical and lexical resources through Help files seems like a primitive way to display resources. Further, as pop-up displays they dislodge from the main research interface losing a sense of integration with the rest of the program. I choose not to view BW8 texts in this way, but if I had, say, BDAG in the BW8 format, I would want a more aesthetically pleasing way of viewing the resource, consistent with advancements in digital library technology (e.g. Kindle, Google Book, etc.). Perhaps figuring out a way to display all resources in their entirety within the Resource window and getting rid of the Help files altogether would allow BibleWorks to maintain their excellent streamlined focus while providing completely integrated, functional resources that help scholars, students and pastors focus on the text.

In terms of the resources themselves, BibleWorks has done a fine job of progressively adding quality texts to their base package. I am
Review: *Bible Works 8*

encouraged that they have chosen to focus on primary texts related to biblical study along with grammatical and lexical tools, but I still notice some gaps in what *BibleWorks* supplies its users with at this stage in their program. As far as primary texts go, there remains a disparity in all Bible Software of Greco-Roman materials, as we find, for example, in the Perseus project, the TLG or, in print form, the Loeb Classical Library. Many of these texts are in the public domain and have already been digitized (and morphologically tagged) in the original languages. The Greco-Roman world is becoming more and more a factor in contemporary New Testament interpretation, yet digital access to these texts remains restricted almost entirely to web-based applications. TLG has a CD Rom, but the highly primitive interface (and cost!) makes this option impractical for daily use by individuals. We have the main Jewish texts on all the major Bible software platforms, but we desperately need more Hellenistic primary texts in client based applications such as *BibleWorks*.

Concerning grammatical and lexical tools, continuing to stock the standard resources seems like a safe enough strategy, but what future editions must include are syntactic databases—resources that allow the user to assess the text beyond the word level. The KWIC (Key Word in Context) collection table constitutes a healthy step in this direction by allowing the user to analyze the frequency of the words that collocate with a particular form or lexeme. But even here, in terms of collocation, I typically want to move beyond mere word-based collocations to understand semantic domain collocations as well as collocations in terms of syntactic categories (predicator, complement, adjunct, etc.). Also, the Context pane provides lists of words but if this could highlight various customizable grammatical and/or syntactic patterns selected by the user, that would be more helpful. Of course, this depends upon annotating texts beyond the word level to include both phrase and clause level classifications. A limited range of lexical functions with domains can be performed from the Word List manger, which shows that *BibleWorks* is moving in a good
direction, but I hope to see more, specifically by way of syntactic search and analysis abilities, in future editions of the program.

So, overall: BW8 provides us with an outstanding piece of Bible software—fast, simple, intuitive, highly focused and very cost efficient. For those looking to enhance their productivity in working with the biblical text—whether students, pastors or scholars—BW8 offers a powerful tool that will almost certainly exceed their expectations.

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