

# Word Processing in Ancient Greek and Hebrew

## *WinGreek For MS Windows*<sup>™</sup>

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**1.0** *WinGreek* is a software package to enable *IBM* Personal Computers or compatibles running *Microsoft Windows* to use ancient Greek and Hebrew fonts. It consists of two parts: fonts and utilities.

**1.1** *Fonts*. The fonts are available for EGA, VGA, super-VGA (800 × 600) and 8514 (1024 × 768) monitors/screens, *Epson* 9-Pin and printers, and *HP LaserJet* Series II/III Laser printers or compatibles. For Greek, 8, 10 and 12 Point Sizes are available; for Hebrew, only 10 and 12 Points. Recently both *PostScript* and *TrueType* versions of the Greek font were also released with *WinGreek* (Version 1.6). Using our *PostScript* Greek under *Adobe Type Manager*<sup>™</sup> or *TrueType* Greek with *Windows* 3.1 allows **scalable** point sizes and provides support for the other printers such as the *HP DeskJet*, indeed for all printers supported by *Microsoft Windows*<sup>™</sup>. The *PostScript* Greek may be downloaded to a *PostScript* printer as a soft font using the *PostScript* driver in *Windows* 3.0/3.1. Both *PostScript* and *TrueType* versions of the Hebrew font are being developed for the next version of *WinGreek*.

**1.1.1.** The Greek font contains a full set of diacritics (diaeresis, Aristarchian signs) and also Accent/Breathing combinations, together with archaic Greek characters such as digamma, koppa and sampi. The Hebrew font contains consonants and vowel points (*niqqud*) which can be combined using a macro in *Word* for *Windows*.

**1.1.2.** Since the Greek and Hebrew fonts are attached to the operating system of *Microsoft Windows*<sup>™</sup> and are not part of a particular word processor,

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they are available to any and all *Windows* executable programs which allow for full font selection. So far *WinGreek* Fonts have been tested with *Windows Write*™, *Word For Windows*™, *AmiPro*™ and *WordPerfect For Windows*™. One can even use them in a data-base program which allows for font selection or a spreadsheet software like *Microsoft Excel*™. Thus one need not be committed to or limited by particular software. Many new programs for the *Windows* graphical environment are being developed either for desktop publishing or data retrieval/storage and searching texts.

1.1.3. The *Windows* operating system is a WYSIWYG graphical environment or interface (What You See Is What You Get). Thus *WinGreek* allows for creation of documents using European languages in combination with ancient Greek and Hebrew and one can see on screen exactly how the final product will print out. The Greek bolds, italicizes, subscripts or superscripts on screen matching what will print. This is an advantage in creating complex documents.

1.2. *Utilities*. There are two main utilities provided with *WinGreek*.

1.2.1. First, there is a keyboard handler, called BETA, which allows for easy insertion of accented characters in Greek, Hebrew and European fonts. For example, in Greek you may type an *omega*. If you type a forward slash (/) next, this will produce an acute accent on the *omega*. Accents and breathings may be combined on a vowel. The same procedure is used for entering accents in European languages like the grave accent in French or the *umlaut* in German. All accents in the ANSI character set are supported. In Hebrew, right to left typing is available (but not left word wrap as this is a function of the word processor). A set of macros is provided for *Word for Windows* which greatly eases the task of switching between Greek, Hebrew and European fonts/languages within the same document. With only a single keystroke one may switch functions in BETA and fonts in *WinWord* at the same time. There are also some specialized macros (for *Word For Windows*) which permit quick correcting of accents on a vowel in Greek or adding underdotting for epigraphical or papyrological publications.

1.2.2. The second utility is a conversion program (GRKCONV). This program takes Greek and Hebrew files in the ASCII or DOS text format supplied by CCAT (Center for Computer Analysis of Texts, University of Pennsylvania) on their disks and CD-ROM, and converts them for use under *Windows*. (Similarly, *Pharos*, a program created by Randall Smith for searching TLG [Thesaurus Linguae Graecae] on CD-ROM uses *WinGreek* fonts). Thus one may convert, for example, a passage from the Bible to Greek or Hebrew and insert it into a document under *Word For Windows* without typing out the text. Since *Word For Windows* allows searches to be font specific, one can search texts containing

several languages and search, for example, in Greek only. One may wish to make notes on an ancient text. Simply import the text and add notes or edit as you like. The following is a citation from Job (MT/LXX) and briefly illustrates the typography:

19:28b אֲשֶׁר שָׁרַר דָּרָר נִמְצָא בִּי א

BHS App <sup>a</sup> mlt Mss Vrs בֹּ

19:28b ✕ καὶ ῥίζαν λόγου εὐρήσομεν ἐν αὐτῷ. ✓

Greek: αβγδεζηθικλμνξοπρστυφχψω αηω ηϊ  
ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ

Hebrew: תְּשִׁשׁוּ שְׁשִׁרְקוּ צִפְרֵי נֶמְסוּ מְלַךְ כִּי טוֹחַ זֶה הָאֵבָב

2.0. *WinGreek* is available as "Shareware". It may be examined, tested, and tried out for free. Anyone, however, who intends to use the product **must** pay a registration fee of £20.00 or \$35.00 per computer. Substantial discounts are available for multiple registrations or site licences. Cheques must be payable to Peter J. Gentry.

2.1. *WinGreek* requires *Windows* 3.0 or 3.1, and works best with *Word for Windows* 1.1 or 2.0 (*Winword*). There are two ways in which you can obtain it:

1. Download it from an FTP Site or Bulletin Board Service or Shareware Distributor. For example, an excellent ftp site is ftp.cica.indiana.edu (USA) or garbo.uwasa.fi (Finland).
2. Send a registration to either address below and you will receive the latest version. The address in England is a convenience for UK or European Registrations, and response is somewhat slower from there since all mail is eventually forwarded to Canada. For a quick response to inquires and support send email:

INTERNET: peter@artsci.utoronto.ca

Mailing address:

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Scarborough, Ontario  
Canada M1W 2Z6  
Cheques Payable to: Peter J. Gentry

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Sholing  
Southampton, England SO2 7NX  
Cheques Payable to: Dr. A.M. Fountain

### Update – Addendum

Version 1.8 of *WinGreek* is to be released March 1, 1993. The following important improvements have already been made in version 1.7.

1.0. Hebrew *PostScript* (*Adobe Type 1*) and *TrueType* were released. In addition ancient Coptic both *PostScript* (*Adobe Type 1*) and *TrueType* were released. Scholars desiring to present problems in textual criticism of ancient Greek texts may use the Coptic font for a style of writing which imitates early papyri.

1.1. Since all fonts are available in *TrueType*, all printers supported by *Windows 3.1* are now supported by *WinGreek*, including the increasingly popular *HP DeskJet*.

1.2. Certain bugs caused by conversion of macros from US *Word For Windows* to German *Word For Windows* which hindered overstriking Hebrew vowels have been solved.

1.3. There is a macro in *Word For Windows* for underdotting uncertain letters. This is useful for scholars providing editions of ancient manuscripts.

The following improvements are ready for release in version 1.8.

2.0. A major problem between BETA.EXE (the utility for entering accents, breathings and other diacritics in Greek, Hebrew and European languages) and non-US/UK keyboards has been overcome by allowing the user to configure as they wish. One may now choose which keys will be used for rough/smooth breathing, acute/grave accents in Greek. Thus different keyboard layouts can be accommodated and according to the preferences of each user.

2.1. Major improvements are being made in both *PostScript* (*Adobe Type 1*) and *TrueType* versions of the Greek font.

2.2. The conversion utility GRKCONV has been improved allowing choices in the conversion from the CCAT texts. For example, one may convert Hebrew texts with or without vowels, and decide where the breaks in the lines are to be made.