

## **How to Install and Use the Demotic Egyptian Input (v. 2) (Mac OS X)**

The Demotic Egyptian Unicode input for Mac OS X is made freely available by the Center for the Tebtunis Papyri, University of California, Berkeley. It is a modification of the US Extended input for use by those who are typing transliteration of Demotic Egyptian or of Hieroglyphs (and also serves Arabic transliteration).

NOTE: Version 2 gives the user the choice of continuing to use a number of Private Use Area (PUA) assignments made in 2005 in order to facilitate Unicode-based transliteration in Word 2004. With the acceptance in Unicode of some additional characters and the new capability in Word 2008 to use OpenType ligatures, however, the user can now avoid the use of PUA, and that is highly advisable whenever possible. PUA is unsuitable for use on the internet and should be regarded as an interim expedient, until it is widely possible to use more sophisticated fonts that comply strictly with official Unicode assignments.

### **HOW TO INSTALL**

[NOTE: if you previously installed the 2005 version of this input, then for smoothest upgrade, FIRST turn off the Demotic Egyptian input in System Preferences: International: Input menu pane [new name in 10.6: System Preferences: Languages & Text: Input Sources], and move the old version out of /Library/Keyboard Layouts (or out of ~/Library/Keyboard Layouts) to some other location as a backup copy; THEN proceed as below.]

The input is contained in “demotic.bundle.” The whole bundle file is to be placed in the Keyboard Layouts folder in either the top-level Library folder (/Library/Keyboard Layouts) or the user’s own Library folder (~/.Library/Keyboard Layouts). After moving or copying the bundle to one of those locations, log out and log back in, or simply restart, so that the OS will recognize the presence of the input and process it. Then activate the input by opening System Preferences:International and selecting the Input menu pane [new name in 10.6: System Preferences: Languages & Text: Input Sources]. Check the box in front of the name “Demotic Egyptian” and close System Preferences.

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### HOW TO USE

When more than one input is activated, you will see an icon for the current input in the menu bar at the right end, near the day and time. The default US input has the US flag as its icon. The icon for Demotic Egyptian is a tiny view of the great pyramids. You can use this menu to select a different input with the mouse, or use the keyboard shortcut command-option-command-spacebar to cycle through the available inputs (or command-spacebar to toggle between the two most recently used). [If the input menu is not visible in the menu bar, open the Input menu pane of System Preferences: International and check the option to “Show input menu in menu bar.” The traditional keyboard shortcuts have been usurped in recent versions of OS X by Spotlight keyboard shortcuts; use the Keyboard System Preference to reassign the commands relevant to Spotlight and to activate on the commands for the input menu.]

All letters and punctuation on the US keyboard retain their normal values when no modifier keys are used or when the shift key is used. So you can type normal English with the Demotic input activated.

If you continue to use the PUA code points for special letters that do not have standard Unicode code points, you must use New Athena Unicode font (version 3.50 or later is recommended). If you opt to avoid PUA and take advantage of OpenType ligatures, some but not all of the combinations will be available on system fonts or fonts supplied with MS Word, but for the complete set to support transliteration of Demotic Egyptian or Arabic use version 3.50 or later of New Athena Unicode font (Arabic transliteration was not fully supported before version 3.50).

**Special features use the option key or shift and option keys together. These are “deadkeys” (enter the diacritic first, then type the main character), unless otherwise indicated.**

Where two methods are listed, “strict” means the output will be in accordance with the Unicode 5.1 standard, while “PUA” means that the output will contain Private Use Area assignments

ā ū ō	type option-a, then type the vowel
î	(strict) type shift-option-8, then i

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ỉ	(PUA) type option-i
Ⲁ	(strict) type shift-option-8, then u
Ⲁ	(PUA) type option-u
ỉ ʾI (yod) <sup>1</sup>	(strict) type option-5, then i (or capital I)
ỉ ʾI (yod)	(strict: alternate 1) type option-t, then i (or capital I)
ỉ ʾI (yod)	(strict: alternate 2) type option-y, then i (or capital I)
ỉ (yod)	(PUA) type shift-option-i
Ⲁ (alef)	type option-3
Ⲁ (Alef)	type option-7
Ⲁ (ayin)	type option-4
Ⲁ (Ayin)	type option-8
ⲀⲀⲀⲀ	type shift-option-2, then type the letter (alternative: type the letter first, then option-period)
šŠčč	type shift-option-1, then type the letter

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<sup>1</sup> Egyptological yod presents a special problem. Unicode refused to approve a separate character for the yod modifier used with the letter I/i and is never likely to do so. The Unicode Technical Committee (UTC) has recommended the use of an existing modifier within a OpenType ligature (the modifier may of course be drawn in some particular desired comparable shape when a precomposed glyph is created). Originally (2005), UTC suggested that the scholarly community of experts choose between U+0313 COMBINING COMMA ABOVE [ ˊ ] (this is the diacritic used for the smooth breathing of polytonic Greek, among other things) or U+0357 COMBINING RIGHT HALF RING ABOVE [ ˆ ]. No consensus emerged, however, and a third option was proposed, U+0486 COMBINING CYRILLIC SMOOTH BREATHING. As of 2009 the UTC accepts that there are three options and still leaves it to the scholarly community to arrive at a consensus, if they wish to. The original Demotic input provided by the Center for the Tebtunis Papyri used a PUA code point. The newer one adopts the U+0357 code point for the modifier, but supplies the same precomposed glyph by ligature for I/i combined with either of the other two options just mentioned. The strict Unicode versions work only in Word 2008, not in Word 2004.

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č	(strict) type shift-option-1, then c, then option-period
č	(PUA) type shift-option-c
HhdDtT	(strict) type shift-option-4, then type letter
H	(PUA) type shift-option-;
Hh	type shift-option-3, then type h or H
thH	type shift-option-5, then type letter
śŚ	type option-e, then type s or S
=	type option-=
· (middle dot)	type option-;
ʀ (upper left corner bracket)	type option-1
ʁ (upper right corner bracket)	type option-2

### Summary of relevant option key assignments

option-1	ʀ
option-2	ʁ
option-3	ʒ
option-4	c
option-5	deadkey for yod modifier for i or I
option-semicolon	middle dot punctuation ·
option-i	PUA ĩ (but there is also a non-PUA method)
option-u	PUA ũ (but there is also a non-PUA method)
option-=	=
shift-option-c	PUA č
option-a	deadkey for macron (before vowel)
option-b	deadkey for breve (before vowel)
option-e	deadkey for acute
option-5	deadkey for yod modifier (before i or I)
option-t	alt. 1 deadkey for yod modifier (before i or I)
option-y	alt. 2 deadkey for yod modifier (before i or I)
shift-option-1	deadkey for caron above
shift-option-2	deadkey for dot below

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shift-option-3	deadkey for breve below
shift-option-4	deadkey for macron below
shift-option-5	deadkey for caret/circumflex below
shift-option-7	deadkey for inverted breve below (for i and u only)
option-period	dot under previous letter (but use shift-option-2 for specific letters)

**ALTERNATIVE:** if you prefer to enter diacritics after the letter to which they apply, this is also possible. See the keyboard charts and use the option and option-shift keys indicated by bold cell borders and the letter C (for combining character).

**KNOWN PROBLEMS:** (1) In a few cases, when you enter the character the system will change the font to a system font; work around this by selecting the unwanted font and reapplying New Athena Unicode to the selection. (2) MS Word 2008 may sometimes resist changing the font. I have seen this especially when typing = (U+2e17), but the problem is inconsistent. If simply trying to change the font fails, a workaround is to copy the character from the keyboard chart document included with this package (or another document in which the character appears) and to paste it in, specifying to keep source formatting. If that fails, then there is a more elaborate workaround. In this download is a document names “2e17workaround.doc.” It was created with Word 2004, which does not show the same problem. Open this document with Word 2008. To to see whether you can type U+2e17 in this document. Copy the entire content of the document that has been troublesome and paste it into this document, then save it under a new name. You should now be able to type and paste U+2e17 in the new document.

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Contact:

Donald Mastronarde, Professor of Classics; Director, Center for the Tebtunis Papyri; and GreekKeys font and input developer and support person

djmastronarde@berkeley.edu

Demotic input download page:

<http://ucbclassics.dreamhosters.com/djm/demotic.html>

Home page: <http://ucbclassics.dreamhosters.com/djm/>

New Athena Unicode download page:

<http://apagreekkeys.org/NAUdownload.html>

CTP home page: <http://tebtunis.berkeley.edu>

GreekKeys home page: <http://apagreekkeys.org/>