To:   UTC and ISO/IEC JTC1/SC2 WG2

Title:  Proposal to encode GREEK CAPITAL LETTER YOT

From: Michael Bobeck

Date:  12 December 2010


I wish to propose the addition of this character to the "Greek and Coptic" block in isolated U+037F codepoint.

Notes

•isolated U+03F3 is already used by small GREEK LETTER YOT

•U+0378 & U+0379; U+0380 & U+0381; U+0382 & U+0383 are more suitable for contiguous cased pairs

•isolated U+03A2 is reserved for basic Greek alphabet charting purposes

•semiisolated U+038B & U+038D are more suitable for semicontiguous cased pair

**Proposed Characters**

|   | 037 |
|---|-----|
| 0 |     |
| 1 |     |
| 2 |     |
| 3 |     |
| 4 |     |
| 5 |     |
| 6 |     |
| 7 |     |
| 8 |     |
| 9 |     |
| A |     |
| B |     |
| C |     |
| D |     |
| E |     |
| F | J   |

**Character Names**

| 037F | GREEK CAPITAL LETTER YOT |
|------|--------------------------|
|      | • Lowercase is U+03F3 |

**Annotation additions**

| 03F3 | GREEK LETTER YOT |
|------|------------------|
|      | • Uppercase is U+037F |

**Unicode Character Properties**

Properties for the new character:

```
037F;GREEK CAPITAL LETTER YOT;Lu;0;L;;;;;N;;;;03F3;
```

Properties for U+03F3 should now reference the new uppercase letter:

```
03F3;GREEK LETTER YOT;Ll;0;L;;;;;N;;;037F;;037F
```

**Other Information**

*Greek and Coptic*

The creators of fonts like Vusillus and New Athena Unicode had since 2003/2004 established implementations of GREEK CAPITAL LETTER YOT, which were put into **Private Use Area** block. These precarious implementations include both cases of Yot. Each user of these fonts is prone to nonstable codepoint value of capital Yot, which thwarts interoperation between Greek text creators, if they use mutually incompatible codepoints. Capital Yot is the part of the etymological Greek orthography, and is required for at least ALL CAPS typesetting of the Greek language at least in chapter titles and in epigraphic specimens when Greek language is subjected to the etymological treatment. The lowercase Yot is already in Unicode at the U+03F3. ALL CAPS spelling of Greek language as used both in chapter titles and in etymologically treated epigraphy, obviously needs to have the uppercase variant of the U+03F3 and could theoretically use this proposed uppercase Yot if it would to be accepted into Unicode. Currently, etymologies of Greek epigraphy are using other options, such as Latin J (jay) or Cyrillic J (je) for the uppercase equivalent to U+03F3, but at expense of frequent typographic errors in processed text. It is obvious that people are searching for solutions to uppercase, and since there are existing at least two fonts which are actually using the GREEK CAPTAL LETTER YOT, this missing uppercase should be added to the Unicode Standard into still unallocated U+037F codepoint. Examples of unofficial implementation and usage are in figures below.

**3. ΜΕΤΑΘΕΣΗ ΤΟΥ j/ ΕΠΕΝΘΕΣΗ**
**Ορισμός:** Μετατόπιση του j σε άλλη θέση μέσα στη λέξη.

**Παρατηρήσεις:** Το j που βρίσκεται κανονικά ύστερα από τα **-αν-, -αρ-, -ορ-,** μετατίθεται πριν από το **ν** ή το **ρ** και ενώνεται με το προηγούμενο φωνήεν σε δίφθογγο (μαραν-jω>μαραjνω>μαραίνω).
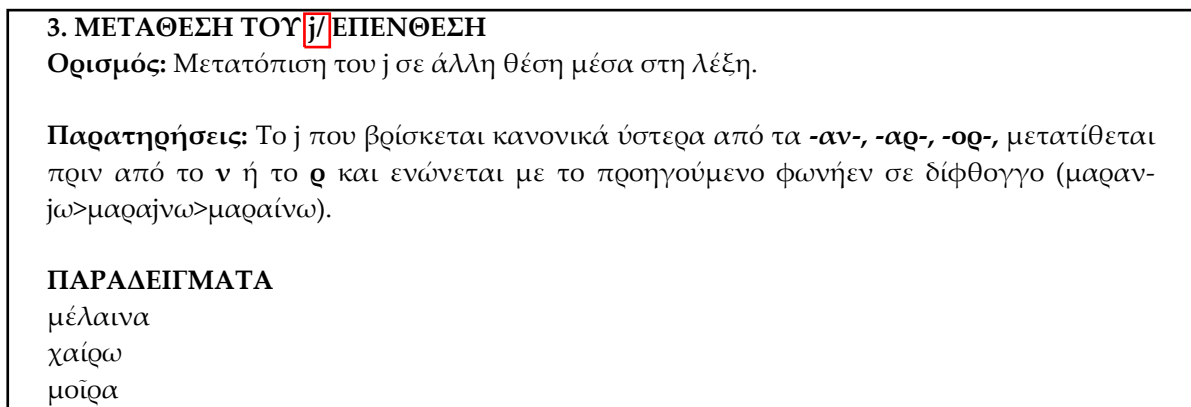
**ΠΑΡΑΔΕΙΓΜΑΤΑ**
μέλαινα
χαίρω
μοῖρα

Figure 1. GREEK CAPITAL LETTER YOT as it is not correctly rendered in ALL CAPS Greek text
Source: Εβίνα Σιστάκου, ΠΑΘΗ ΦΘΟΓΓΩΝ & Εβίνα Σιστάκου, ΧΕΙΜΕΡΙΝΟ ΕΞΑΜΗΝΟ
http://www-old.lit.auth.gr/public/aef-101-sistakou.pdf (page 7)
http://www.lit.auth.gr/sites/default/files/documents/AEF_101_SISTAKOU-Corpus_0.pdf (page 14)

# 3. ΜΕΤΑΘΕΣΗ ΤΟΥ J ΕΠΕΝΘΕΣΗ

Figure 2. GREEK CAPITAL LETTER YOT as it should be rendered correctly in ALL CAPS Greek text

(A) ὅτε τὰ(ν) πτόλιν Ἐδάλιον κατέϝοργον Μᾶδοι κὰς Κετιῆϝες
ἰ(ν) τῶι Φιλοκύπρῶν ϝέτει τῶ Ὀνασαγό|ραυ, βασιλεὺς Στασίκυπρος
κὰς ἀ πτόλις Ἐδαλιῆϝες ἄνῶγον Ὀνάσιλον τὸν Ὀνασικύπ|ρῶν τὸν
ἰjατῆραν κὰς τὸς κασιγνέτος ἰjασθαι τὸς ἀ(ν)θρῶπος τὸς ἰ(ν) τᾶι
μάχαι ἰγ|μαμένος ἄνευ μισθῶν· κὰς παι εὐϝρετάσατυ βασιλεὺς κὰς
ἀ πτόλις Ὀνασί⁵λοι κὰς τοῖς κασιγνέτοις ἀ(ν)τὶ τῶ μισθῶν κὰ ἀ(ν)τὶ
τᾶ ὑχέρῶν δοϝέναι ἐξ τῶι | ϝοίκῶι τῶι βασιλῆϝος κὰς ἐξ τᾶι πτόλιϝι
ἀργύρῶ τά(λαντον) α΄ τά(λαντον)· ἒ δυϝάνοι νυ ἀ(ν)τὶ τῶ | ἀργύρῶν
τόδε, τῶ ταλά(ν)τῶν, βασιλεὺς κὰς ἀ πτόλις Ὀνασίλοι κὰς τοῖς κα-
σι|γνέτοις ἀπὺ τᾶι ζᾶι τᾶι βασιλῆϝος τᾶ ἰ(ν) τῶιρῶνι τῶι Ἀλα(μ)-
πρ[ij]άται τὸ(ν) χῶρον | τὸν ἰ(ν) τῶι ἔλει τὸ(ν) χραυόμενον Ὄ(γ)κα(ν)τος
ἄλϝῶ κὰς τὰ τέρχνι[j]α τὰ ἐπιό(ν)τα ¹⁰πά(ν)τα ἔχεν πανῶνιον ὐϝαις
ζαν ἀτελέν. ἒ κέ σις Ὀνάσιλον ἒ τὸς | κασιγνέτος ἒ τὸς παῖδας
τῶ(ν) παίδῶν τῶν Ὀνασικύπρῶν ἐξ τῶι χῶρῶι τῶιδε | ἐξ ὀρύξῆ, ἰδέ
παι ὂ ἐξ ὀρύξῆ, πείσει Ὀνασίλοι κὰς τοῖς κασιγνέτοι|ς ἒ τοῖς παισὶ
τὸν ἄργυρον τό(ν)δε, ἀργύρῶ τά(λαντον) α΄ τά(λαντον). | κὰς Ὀνα-
σίλοι οἰϝῶι ἄνευ τῶ(ν) κασιγνέτῶν τῶν αἴλῶν ἐϝρετάσατυ βασιλεὺ¹⁵ς
κὰς ἀ πτόλις δοϝέναι ἀ(ν)τὶ τᾶ ὑχέρῶν τῶ μισθῶν ἀργύρῶ πε δ΄ πε | β΄
δι Ἐ(δάλια)· ἒ δόκοι νυ βασιλεὺς κὰς ἀ πτόλις Ὀνασί(Β)λοι ἀ(ν)τὶ
τῶ ἀργύρῶ τόδε ἀπὺ τᾶι ζᾶι τᾶι βασιλῆϝος τᾶ ἰ(ν) Μαλαν[ij]α|ι τᾶι
πεδ[ij]αι τὸ(ν) χῶρον τὸ(ν) χραυζόμενον Ἀμενί[j]α ἄλϝῶ κὰς τὰ τέρ-|
χνι[j]α τὰ ἐπιό(ν)τα πά(ν)τα, τὸ(ν) ποεχόμενον πὸς τὸ(ν) ῥόϝο(ν) τὸ(ν)
Δρύμιον κὰς πὸ²⁰ς τὰν ἱερέϝ[j]αν τᾶς Ἀθάνας, κὰς τὸ(ν) κᾶπον
τὸν ἰ(ν) Σίμιδος ἀρούρα|ι, τὸ(ν) Διϝείθεμις ὁ Ἀρμανεὺς ἔχε ἄλϝο(ν),
τὸν ποεχόμενον πὸς Πα(ν)σαγόρα|ν τὸν Ὀνασαγόραυ κὰς τὰ τέρ-
χνι[j]α τὰ ἐπιό(ν)τα πά(ν)τα ἔχεν πανῶνίος ὐϝαις ζαν ἀτελ[ij]α ἰό(ν)τα.
ἒ κέ σις Ὀνάσιλον ἒ τὸς παῖδας τὸς Ὀ|νασίλῶν ἐξ τᾶι ζᾶι τᾶιδε
ἲ ἐξ τῶι κάπῶι τῶιδε ἐξ ὀρύξῆ, ἰ²⁵δὲ ὂ ἐξ ὀρύξῆ, πείσει Ὀνασίλοι ἒ
τοῖς παισὶ τὸν ἄργυρον τό(ν)δε, ἀργύρῶ|ν πε δ΄ πε β΄ δι Ἐ(δάλια).
ἰδὲ τὰ(ν) δάλτον τά(ν)δε, τὰ ϝέπ[ij]α τάδε ἰναλαλισμένα | βασιλεὺς

Figure 3.  GREEK LETTER YOT rendered in mixed case Greek text derived from original ancient ALL CAPS
          Cypriot inscription (Tituli Cyprii)
          In case of ALL CAPS verbatim etymological rendition of source epigraph,
          GREEK CAPITAL LETTER YOT is needed
Source:   Eduard Schwyzer, Dialectorum Graecarum exempla epigraphica potiora, Lipsiae, in aedibus
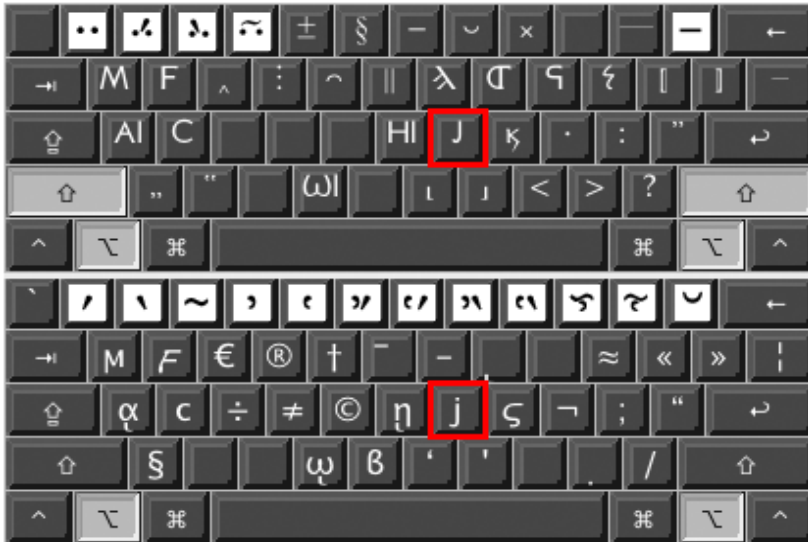          Salomonis Hirzelii, 1923. (page 679)

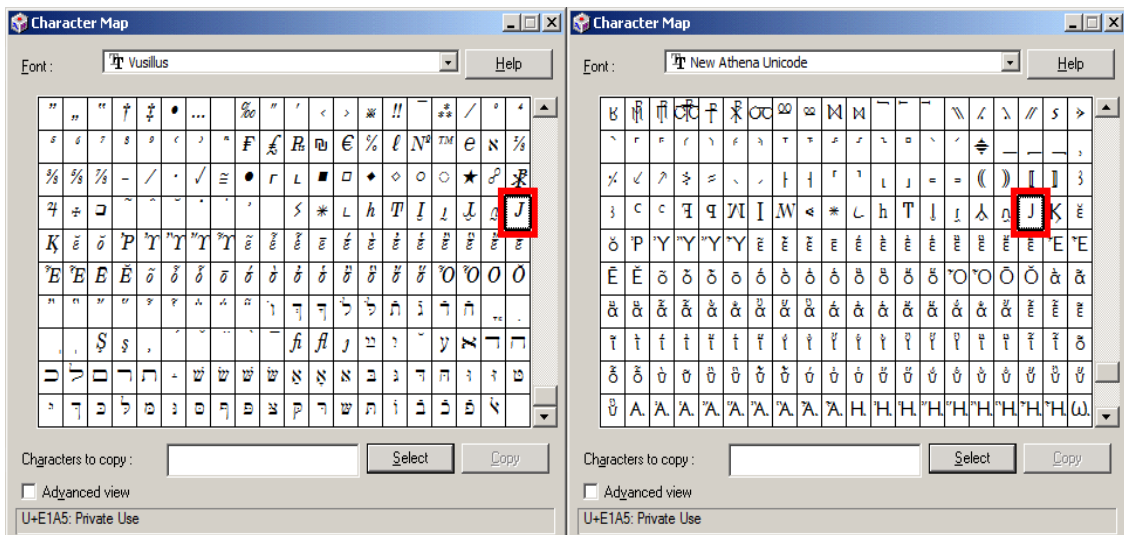Figure 4. GREEK CAPITAL LETTER YOT and GREEK LETTER YOT in GreekKeys Unicode keyboard and font package



Figure 5. GREEK CAPITAL LETTER YOT in New Athena Unicode and Vusillus fonts

**Technical references**

http://apagreekkeys.org/NAUdownload.html
http://apagreekkeys.org/fonts/NAU3_71.zip/NAU3_71/newathu.ttf (New Athena Unicode font inside this ZIP)
http://www.users.dircon.co.uk/~hancock/antioch.htm
http://www.users.dircon.co.uk/~hancock/an2setup.exe/vu3i____.ttf (Vusillus font inside this SFX CAB)
http://ist-socrates.berkeley.edu/~pinax/greekkeys/AboutGK2008.html
http://ist-socrates.berkeley.edu/~pinax/greekkeys/technicalDetails.html
http://isites.harvard.edu/fs/docs/icb.topic537340.files/GKUKeyboard.pdf
http://omega.enstb.org/yannis/pdf/boston99.pdf (section 1.2.2)
http://www.tlg.uci.edu/~opoudjis/unicode/yot.html
http://www.tlg.uci.edu/~opoudjis/unicode/unicode_gaps.html (section 2.2.3)
http://www.tlg.uci.edu/~opoudjis/unicode/unicode_mixing.html (section 5)
http://www.tlg.uci.edu/~opoudjis/unicode/maybes.html

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**ISO/IEC JTC 1/SC 2/WG 2**
**PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS**
**FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646**[1]
**Please fill all the sections A, B and C below.**
**Please read Principles and Procedures Document (P & P) from**
http://www.dkuug.dk/JTC1/SC2/WG2/docs/principles.html **for guidelines and details before filling this form.**
**Please ensure you are using the latest Form from**
http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html**.**
**See also** http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html **for latest** *Roadmaps*.

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**A. Administrative**

| | |
|---|---|
| 1. **Title:** | Proposal to Encode Greek Capital Letter Yot |
| 2. Requester's name: | Michael Bobeck |
| 3. Requester type (Member body/Liaison/Individual contribution): | Individual |
| 4. Submission date: | 12 December 2010 |
| 5. Requester's reference (if applicable): | |
| 6. Choose one of the following: | |
| This is a complete proposal: | Yes |
| or,     More information will be provided later: | No |

**B. Technical – General**

| | |
|---|---|
| 1. Choose one of the following: | |
|     a. This proposal is for a new script (set of characters): | No |
|         Proposed name of script: | |
|     b. The proposal is for addition of character(s) to an existing block: | Yes |
|         Name of the existing block: Greek and Coptic | |
| 2. Number of characters in proposal: | 1 |
| 3. Proposed category (select one from below - see section 2.2 of P&P document): | |

A-Contemporary   X   B.1-Specialized (small collection) _____    B.2-Specialized (large collection) _____
C-Major extinct _____    D-Attested extinct _____    E-Minor extinct _____
F-Archaic Hieroglyphic or Ideographic _____    G-Obscure or questionable usage symbols _____

| | |
|---|---|
| 4. Proposed Level of Implementation (1, 2 or 3) (see Annex K in P&P document): | 1 |
|     Is a rationale provided for the choice? | No |
|         If Yes, reference: | |
| 5. Is a repertoire including character names provided? | Yes |
|     a. If YES, are the names in accordance with the "character naming guidelines" in Annex L of P&P document? | Yes |
|     b. Are the character shapes attached in a legible form suitable for review? | Yes |
| 6. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard? | |
|     If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used: Use Latin J from Fiscella font already used inside existing Unicode PDFs for publishing purposes | |
| 7. References: | |
|     a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? | Yes |
|     b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached? | Yes |
| 8. Special encoding issues: | |
|     Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)? Suggested character properties are included. | |

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[1] Form number: N2652-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11)

## C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before?        No
    If YES explain

2. Has contact been made to members of the user community (for example: National Body,
    user groups of the script or characters, other experts, etc.)?        No
        If YES, with whom?
        If YES, available relevant documents:

3. Information on the user community for the proposed characters (for example:
    size, demographics, information technology use, or publishing use) is included?        No
    Reference:   See proposal

4. The context of use for the proposed characters (type of use; common or rare)        common
    Reference:   See proposal

5. Are the proposed characters in current use by the user community?        Yes
    If YES, where?  Reference:   See proposal

6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely
    in the BMP?        Yes
        If YES, is a rationale provided?        Yes
          If YES, reference:    Both lettercases preferably should be inside the same block

7. Should the proposed characters be kept together in a
contiguous range (rather than being scattered)?   Now, both lettercases can be only scattered within the same block

8. Can any of the proposed characters be considered a presentation form of an existing
    character or character sequence?        No
        If YES, is a rationale for its inclusion provided?
        If YES, reference:

9. Can any of the proposed characters be encoded using a composed character sequence of either
    existing characters or other proposed characters?        No
        If YES, is a rationale for its inclusion provided?
        If YES, reference:

10. Can any of the proposed character(s) be considered to be similar (in appearance or function)
    to an existing character?        No
        If YES, is a rationale for its inclusion provided?
        If YES, reference:

11. Does the proposal include use of combining characters and/or use of composite sequences?        No
        If YES, is a rationale for such use provided?
        If YES, reference:
        Is a list of composite sequences and their corresponding glyph images (graphic symbols)
        provided?        No
        If YES, reference:

12. Does the proposal contain characters with any special properties such as
    control function or similar semantics?        No
    If YES, describe in detail (include attachment if necessary)

13. Does the proposal contain any Ideographic compatibility character(s)?        No
    If YES, is the equivalent corresponding unified ideographic character(s) identified?
        If YES, reference: