

XeTeX/LuaTeX with LGR fonts

Günter Milde

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The babel option «greek» activates the support for the Greek language defined in the file «greek.ldf» (source «greek.dtx»).

Typesetting Greek texts requires a font containing Greek letters. With the XeTeX or LuaTeX engines, the user must ensure that the selected font contains the required glyphs (the default Latin Modern fonts miss them).

Latin Modern can be combined with the matching CB-Greek 8-bit font. For the setup, see the preamble of this document `test-unicode-lgr.tex`

Caveat: Currently, hyphenation does not work with this setup. Use it only for short Greek quotes or as a last resort.

1 Language Switch

The declaration `\selectlanguage` switches between languages. With XeTeX or LuaTeX and LGR, Unicode input is not possible. Instead, use the Latin transliteration or LICR macros:

```
Τί φής; Ἰδὼν ἐνθ' ἔδε παῖδ' ἐλευθέρων  
τὰς πλησίον Νύμφας στεφανοῦσαν, Σώστρατε,  
ἔρων ἀπ' ἡλθεῖς εὐθύς;
```

The macro `\foreignlanguage` sets its second argument in the specified language. This is intended for short text parts like Βιβλιοθήκη.

2 Font Encoding

Switching to a font encoding supporting the Greek script is possible without switching the text language using the declarations `\greekscript` or `\greektext` (always LGR) and the macros `\ensuregreek` or `\textgreek`. These commands do not start a new paragraph.

The Babel core defines the declaration `\latintext` and the command `\textlatin` to switch to the T1 or OT1 font encoding or typeset the argument using this encoding. `greek.ldf` adds a test for the Unicode font encodings TU, EU1, and EU2. Here, `\latinencoding` is TU.

With Unicode fonts, the macros `\greektext` and `\textgreek` are only defined, if the LGR font encoding is loaded via the `fontenc` package (see `test-unicode-lgr.tex`).

With LGR, Latin characters in Greek text parts are typeset as Greek characters according to the Latin transcription defined in LGR.

Φίλων τοῦ TeX (ΕΦΤ) – Friends (Φίλων) of TeX.

3 MakeUppercase, MakeLowercase

Capital Greek letters have diacritics (except the dalytika and sub-iota) to the left (instead of above) and drop them in uppercase.

Tonos and dasia mark a *hiatus* (break-up of a diphthong) if placed on the first vowel of a diphtong (άι, άυ, έι, άι, έυ, έι). A dalytika must be placed on the second vowel if they are dropped. (Αἶ, Αῖ, Εἶ, Αἷ, Αῖ, Εἷ).

4 LICR Macros

Babel defines macros for several autogenerated strings so that they may appear in the choosen language. *babel-greek* uses LICR macros in order to let the string macros work independent of the font encoding.

If `fontspec` is loaded before `babel`, `babel-greek` loads Greek LICR for EU1 or EU2 from the file `greek-euenc.def` provided with *greek-fontenc* since version 0.10.

4.1 Hiatus

The «hiatus» feature works with macro input:

άυλος \mapsto Αῦλος, άυλος \mapsto Αῦλος, μάινα \mapsto ΜΑῖΝΑ, κέικι \mapsto ΚΕῖΚ, άυπνία \mapsto ΑῦΠΝΙΑ.

4.2 Captions

Πρόλογος, Αναφορές, Περίληψη, Βιβλιογραφία, Κεφάλαιο, Παράρτημα, Περιεχόμενα, Κατάλογος Σχημάτων, Κατάλογος Πινάκων, Ευρετήριο, Σχήμα, Πίνακας, Μέρος, Συνημμένα, Κοινοποίηση, Προς, Σελίδα, βλέπε, βλέπε επίσης, Απόδειξη, Γλωσσάρι

Test correct upcasing (dropping of accents):

ΠΡΟΛΟΓΟΣ, ΑΝΑΦΟΡΕΣ, ΠΕΡΙΛΗΨΗ, ΒΙΒΛΙΟΓΡΑΦΙΑ, ΚΕΦΑΛΑΙΟ, ΠΑΡΑΡΤΗΜΑ, ΠΕΡΙΕΧΟΜΕΝΑ, ΚΑΤΑΛΟΓΟΣ ΣΧΗΜΑΤΩΝ, ΚΑΤΑΛΟΓΟΣ ΠΙΝΑΚΩΝ, ΕΥΡΕΤΗΡΙΟ, ΣΧΗΜΑ, ΠΙΝΑΚΑΣ, ΜΕΡΟΣ, ΣΤΥΝΗΜΜΕΝΑ, ΚΟΙΝΟΠΟΙΗΣΗ, ΠΡΟΣ, ΣΕΛΙΔΑ, ΒΛΕΠΕ, ΒΛΕΠΕ ΕΠΙΣΗΣ, ΑΠΟΔΕΙΞΗ, ΓΛΩΣΣΑΡΙ

4.3 Months

21 Ιανουαρίου 2020

21 Φεβρουαρίου 2020

21 Μαρτίου 2020
21 Απριλίου 2020
21 Μαΐου 2020
21 Ιουνίου 2020
21 Ιουλίου 2020
21 Αυγούστου 2020
21 Σεπτεμβρίου 2020
21 Οκτωβρίου 2020
21 Νοεμβρίου 2020
21 Δεκεμβρίου 2020

5 Greek Numerals

See greek.pdf for the formation rules of Greek numerals. Some examples:

α', β', γ', δ', ε', ς', ζ', η', θ', ι', ια', ιβ', κ', τμε', φ', ,αλφζ', ,βιγ',

A', B', Γ', Δ', E', Γ', Z', H', Θ', I', IA', IB', K', TME', Φ', ,ΑΛΦΖ', ,ΒΙΓ',

Enumerated lists use Greek characters/numerals in the second and fourth level:

1. item 1
 - (α') item 1.1
 - i. item 1.1.1
 - A'. item 1.1.1.1
 - B'. item 1.1.1.2
 - ii. item 1.1.2