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 ressort.

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 φήις; Ἰδὼν ἐνθέδε πα ιδ᾽ ἐλευθέραν
> τὰς πλησίον Νύμφας στεφανο υσαν, Σώστρατε,
> ἐρ ων ἁπ ηλθες 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 dialytika 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, ἄι, ἄυ, ἔι). A dialytika must be placed on the second vowel if they are dropped. (ΑΪ, ΑΫ, ΕΪ, ΑΪ, ΑΫ, ΕΪ).

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 ↦ ΑΫΛΟΣ, ἄυλος ↦ ΑΫΛΟΣ, μάινα ↦ ΜΑΪΝΑ, κέικ↦ ΚΕΪΚ, ἀυπνία ↦ ΑΫΠΝΙΑ.

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, ΣΥΝΗΜΜΕΝΑ, ΚΟΙΝΟΠΟΙΗΣΗ, ΠΡΟΣ, ΣΕΛΙΔΑ, ΒΛΕΠΕ, ΒΛΕΠΕ ΕΠΙΣΗΣ, ΑΠΟΔΕΙΞΗ, ΓΛΩΣΣΑΡΙ

4.3 Months

4 Ιανουαρίου 2016
4 Φεβρουαρίου 2016
4 Μαρτίου 2016
4 Απριλίου 2016
4 Μαΐου 2016
4 Ιουνίου 2016
4 Ιουλίου 2016
4 Αυγούστου 2016
4 Σεπτεμβρίου 2016
4 Οκτωβρίου 2016
4 Νοεμβρίου 2016
4 Δεκεμβρίου 2016

5 Greek Numerals

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

αʹ, βʹ, γʹ, δʹ, εʹ, ϛʹ, ζʹ, ηʹ, θʹ, ιʹ, ιαʹ, ιβʹ, κʹ, τμεʹ, φʹ, ͵αλϙζʹ, ͵βιγʹ,

Αʹ, Βʹ, Γʹ, Δʹ, Εʹ, Ϛʹ, Ζʹ, Ηʹ, Θʹ, Ιʹ, ΙΑʹ, ΙΒʹ, Κʹ, ΤΜΕʹ, Φʹ, ͵ΑΛϘΖʹ, ͵ΒΙΓʹ,

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

1. item 1
   (αʹ) item 1.1
       i. item 1.1.1
          Αʹ. item 1.1.1.1
          Βʹ. item 1.1.1.2
       ii. item 1.1.2