

Greek diacritics with standard accent macros

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The font encoding definition file `lgrenc.def` defines LICR macros for all non-ASCII characters in the LGR font encoding. Greek accent macros have names starting with `\acc` followed by the Greek accent name as used in the Unicode standard (e.g. `\acctonos`). The standard symbol accents `\' \' \~` behave according to Greek typography if used in the LGR font encoding.

The *textalpha* or *alphabetalpha* packages define the symbol macros `\<` and `\>` as aliases for the breathings (Dasia and Psili).¹ With these packages, all Greek diacritics can be input as backslash followed by the LGR transliteration.²

The example in greek-usage.pdf:

Τί φηεις; Ἰδὼν ἐνθ' ἔδε παῖδ' ἔλευθέραν τὰς πλησίον Νύμφας στεφανοῦσαν, Σώστρατε, ἔρῳ ἀπῆλθεις εὐθύς;

can be input as

T\`i f\`hic? <Id\`wn >enj\`ede pa\~id\`
 \>eleuj\`eran t\`ac plhs\`ion N\`umfac stefano\~usan,
 S\`wstrate, >er\~wn \`ap\~hljec e>uj\`uc?

Improvements over the ligature-based approach in LGR:

- Accents can be placed on any character:³ ῥ ῖ ῗ Ῐ Ῑ Ὶ Ί
- Kerning is preserved

	roman	italic	cbleipzig
accent macro:	αὐτός	<i>αὐτός</i>	<i>αὐτός</i>
transliteration:	αὐτός	<i>αὐτός</i>	<i>αὐτός</i>

Like in any font encoding, kerning only works with pre-composed glyphs:
 $\text{A}\ddot{\text{Y}}\text{A} \neq \text{A}\check{\text{Y}}\text{A}$, $\text{A}\text{V}\text{A} \neq \text{A}\acute{\text{V}}\text{A}$.

- Compatible with hyperref (see greekhyperref.pdf).
- Following Greek typesetting convention, diacritics (except the dilytika) are placed to the left of capital letters and and dropped by `\MakeUppercase`:

άντροπος \mapsto ΑΝΤΡΟΠΟΣ, ἄντροπος \mapsto ΑΝΤΡΟΠΟΣ,
 Αχιλλέας \mapsto ΑΧΙΛΛΕΑΣ, Ἀχιλλεύς \mapsto ΑΧΙΛΛΕΥΣ.

The dialytika is printed even in cases where it's not needed in lowercase:

ἄυλος \mapsto AÏΛΟΣ, ἄυλος \mapsto AÏΛΟΣ, μάϊνα \mapsto MAÏNA,
 χείκ, \mapsto KEÏK, ἄυπνία \mapsto AÏPNIA.

¹The definition of the macros `\<` and `\>` was moved from the font definition file `greek-fontenc.def` to `textalpha.sty` in order to avoid clashes with local definitions of this macros in documents using the LGR font encoding via `fontenc` or `babel`.

²This makes it easy to follow the advice in *teubner-doc*: “typeset your paper with the regular accent vowel ligatures and [...] substitute them in the final revision with the accented vowel macros only in those instances where the lack of kerning is disturbing”.

³In babel-greek versions < 1.4, Babel's *polutonikogreek* option re-defined \~(even for Latin with \textlatin). This document reverted the babel definition in the preamble to make the tilde/perispomeni-accent work as usual in both, English (νῖϝō niñō) and Greek.

Composite diacritics can be specified as named macro, backslash + LGR transliteration, or combined accent macros, e.g. $\tilde{\alpha}$ can be written as

`\accpsiliperispomeni{a}`, `\~>a`, `\>~a`, `\~\>{a}`, or `\~\>a`.

However, braces in composite accents (`\~{\>a}`, `\~{>a}`, or `\~{\>{a}}`) lead to errors.

`\MakeUppercase` works with most input variants but fails with a tilde in a document which does **not** define the `greek` or `polutonikogreek` language with Babel (which fixes the ucode for characters used in the LGR transliteration). Combining “symbol macros” (`\>\~`) or reversing the order (`\~>`) is safe.

Accent macros can start with `\a` instead of `\` when the short form is redefined, e.g. inside a *tabbing* environment. This also works for the new-defined Dasia and Psili shortcuts (`\a<` and `\a>`):

Τί φής; Τί φής;
Ἰδὼν ἐνθέδε παῖδ