

# Greek diacritics with standard accent macros

Günter Milde

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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 *alphabeta* packages define the symbol macros `\<` and `\>` as alias for the breathings (Dasia and Psili).<sup>1</sup> With these packages, all Greek diacritics can be input as backslash followed by the LGR transliteration.<sup>2</sup>

The example in `babel/contrib/greek/usage.pdf`:

```
T\'i φήις; Ιδών ἐνθέδε παῖδ' ἐλευθέραν τὰς πλησίον Νύμφας στεφανοῦσαν, Σώστρατε, ἐρῶν  
ἀπῆλθες 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:<sup>3</sup>  $\hat{x}$   $\check{\lambda}$   $\acute{\mu}$   $\check{v}$   $\acute{o}$   $\check{\pi}$   $\grave{z}$
- Kerning is preserved
  - roman      italic      cbleipzig
  - accent macro:  $\alpha\breve{\tau}\delta\varsigma$        $\alpha\acute{\tau}\delta\varsigma$        $\alpha\grave{\tau}\delta\varsigma$
  - transliteration:  $\alpha\breve{\tau}\delta\varsigma$        $\alpha\acute{\tau}\delta\varsigma$        $\alpha\grave{\tau}\delta\varsigma$
- Compatible with hyperref (see `greekhyperref.pdf`).
- Following Greek typesetting convention, diacritics (except the dialytika) are placed to the left of capital letters and dropped by `\MakeUppercase`:  
 $\acute{\alpha}\breve{\tau}\rho\pi\o\varsigma \mapsto \text{ΑΝΤΡΟΠΟΣ}$ ,  $\acute{\alpha}\breve{\tau}\rho\pi\o\varsigma \mapsto \text{ΑΝΤΡΟΠΟΣ}$ ,  
 $\acute{\alpha}\chi\acute{\i}\breve{\i}\lambda\acute{\i}\breve{\i}\epsilon\acute{\i}\varsigma \mapsto \text{ΑΧΙΛΛΕΑΣ}$ ,  $\acute{\alpha}\chi\acute{\i}\lambda\acute{\i}\breve{\i}\lambda\acute{\i}\breve{\i}\epsilon\acute{\i}\varsigma \mapsto \text{ΑΧΙΛΛΕΥΣ}$ .

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

```
άυλος \mapsto ΑΪΛΟΣ, ǎυλος \mapsto ΑΪΛΟΣ, μάνα \mapsto ΜΑΪΝΑ,  
χέικ, \mapsto ΚΕΪΚ, ǎυπνία \mapsto ΑΪΠΝΙΑ.
```

<sup>1</sup>The 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`.

<sup>2</sup>This makes it easy to follow the advise 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”.

<sup>3</sup>In babel-greek versions < 1.4, Babel’s *polotonikogreek* 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 ( $\check{v}\check{v}\check{o}$   $\check{n}\check{i}\check{n}\check{o}$ ) and Greek .

Composite diacritics can be specified as named macro, backslash + LGR transliteration, or combined accent macros, e.g. ã 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 `poltonikogreek` language with Babel (which fixes the uicode 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>):

Tί φήις; Tί φήις;  
Ίδων ἐνθέδε παῖδ