

Greek diacritics with standard accent macros

`lgrxenc.def` is a comprehensive font encoding definition file. Diacritics can be input using an extension of the standard macro commands. Composite diacritics are input as backslash followed by the LGR transliteration.¹

The example in `greek-usage.pdf`:

Τί φής; Ἴδὼν ἐνθῆδε παῖδ' ἐλευθέραν τὰς πλησίον Νύμφας στεφανο-
ῦσαν, Σώστρατε, ἔρῶν ἀπῆλθες εὐθύς;

is 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:

- Accents can be placed on any character:² ἄ ḷ ṽ ó ð ḡ ˘

- Kerning is preserved
- | | | | |
|------------------|-------|--------------|--------------|
| | roman | italic | cbleipzig |
| accent macro: | αὐτός | <i>aútós</i> | <i>aǔtós</i> |
| transliteration: | αὐτός | <i>aútós</i> | <i>aǔtós</i> |

Kerning only works with pre-composed glyphs: AŶA → AŶ̂A (like in any font encoding: AVA → AV̂A).

- Following Greek typesetting convention, diacritics (except the dialytika) are placed to the left of capital letters and and dropped by `\MakeUppercase`:

ἀντροπος ↦ ANTPOΠOΣ, ἄντροπος ↦ ANTPOΠOΣ,
Αχιλλέας ↦ AXIΛΛEΑΣ, Ἄχιλλεύς ↦ AXIΛΛEΥΣ.

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

ἀυλος ↦ AŶΛOΣ, ἄυλος ↦ AŶ̂ΛOΣ³ μάινα ↦ MAĬNA,
κέικ, ↦ KEĬK, ἄπνία ↦ AŶ̂ΠNIA.

Composite diacritics can be specified as backslash + LGR transliteration⁴ or combined accent macros, e. g. ἄ can be written as

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

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

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

Τί φής; Τί φής;
Ἴδὼν ἐνθῆδε παῖδ

¹This 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”.

²Babel's *polutonikogreek* option re-defines `\~` (even for Latin with `\textlatin`). This document reverts the babel definition in the preamble to make the tilde/perispomeni-accent work as usual in both, English (νῖῶ niῶ) and Greek (νῖῶ niῶ).

³Fails if written as `\>` in *polutonikogreek* (which changes the `\uccode` of `\>`): ἄυλος ↦ AΥΛOΣ

⁴However, `\MakeUppercase` fails, if a non-escaped tilde character (like in `\>~a`) is used in a document which does not define the *greek* or *polutonikogreek* language.