

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; Ἰδὼν ἐνθ' ἔδε παῖδ' ἐλευθέρων τὰς πλησίον Νύμφας στεφανο-
ῦσαν, Σώστρατε, ἔρῳ 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 ᾑ ᾒ ᾓ ᾔ ᾕ ᾖ ᾗ ᾘ ᾙ
 - 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: $\text{A}\tilde{\Upsilon}\text{A} \rightarrow \text{A}\tilde{\Upsilon}\text{A}$ (like in any font encoding: $\text{AVA} \rightarrow \text{A}\tilde{\text{V}}\text{A}$).

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

άντροπος \mapsto ANTPOΠOΣ, ᾗντροπος \mapsto ANTPOΠOΣ,
Αχιλλέας \mapsto AXIΛΛEΑΣ, ᾗχιλλεύς \mapsto AXIΛΛEΥΣ.

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

αὐλος \mapsto AŦΛOΣ, ᾗυλος \mapsto AŦΛOΣ³ μάινα \mapsto MAĬNA,
κέικ, \mapsto KEĬK, ᾗυπνία \mapsto AŦΠNIA.

Composite diacritics can be specified as backslash + LGR transliteration⁴ or combined accent macros, e. g. ᾑ 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;
Ἰδὼν ἐνθ' ἔδε παῖδ'

¹This 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”.

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 (νῖῑῑ ñiñō) and Greek (νῖῑῑ ñiñō).

³Fails if written as `\>` in *polutonikogreek* (which changes the `\uccode` of `\>`): ᾗυλος \mapsto 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.