

Greek diacritics with standard accent macros

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. `\accctonos`). 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 alias for the breathings (Dasia and Psili). With this, all diacritics can be input as backslash followed by the LGR transliteration.

The example in `greek-usage.pdf`:

Τί φής; Ἴδὼν ἐνθέδε παῖδ' ἔλευθέραν 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:³ ἄ ἕ ἶ ἷ Ἱ ἰ ἴ ἵ ἶ ἷ Ἱ ἰ ἴ ἵ ἶ ἷ Ἱ ἰ ἴ ἵ
 - 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: $A\tilde{\Gamma}A \neq A\tilde{\Gamma}A$, $AVA \neq A\tilde{V}A$.

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

άντροπος \mapsto ANTPOΠOΣ, ἄντροπος \mapsto ANTPOΠOΣ,
Αχιλλέας \mapsto AXIΛΛEΑΣ, Ἀχιλλεύς \mapsto AXIΛΛEΥΣ.

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

άυλος \mapsto AΨΛOΣ, ἄυλος \mapsto AΨΛOΣ, μάινα \mapsto MAΨNA,
κέικ, \mapsto KEΨK, άυπνία \mapsto AΨΠNIA.

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 (where the tilde is an active character denoting a `\nobreakspace`). Combining “symbol macros” (`\>\~`) or reversing the order (`\~>`) is safe: $\tilde{\alpha} \mapsto A$.

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;
Ἴδὼν ἐνθέδε 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”.

²The 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`.

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 (νῖδ̄ niñō) and Greek .