

Greek and hyperref

July 3, 2012

On 2010-11-05, Heiko Oberdiek wrote in comp.text.tex:

```
\pdfstringdef (converting TeX code to PDF strings for bookmarks)
supports NFSS2 and needs active characters. Encoding stuff based
on the internal font machinery of TeX (letters with catcode 11 or
12, ligatures) does not work, because the strings don't reach TeX's
stomach.
```

The *lgrx* bundle allows input of Greek characters that work in both, the main document as well as in PDF strings (e.g. bookmarks).

1 Transcription: λογος, λογος

`\textgreek + LGR` transcription or Greek language (babel) + LGR transcription: In the PDF-bookmark are Latin letters instead of Greek ones.

2 Macros: λογος, λογος, λογος

`textalpha` package with `\textgreek*` macros, `alphabetalpha` package with `\alpha ... \Omega` macros, and literal Greek Unicode characters (using `\textgreek*` macros internally).

Works, if the "unicode" option is given to hyperref. (With xpdf, Greek letters are not shown in PDF bookmarks.)

The generic short macros from the *alphabetalpha* package result in hyperref warnings:

```
Package hyperref Warning: Token not allowed in a PDF string (Unicode):
(hyperref)                removing '\TextOrMath ' on input line 44.
```

```
Package hyperref Warning: Token not allowed in a PDF string (Unicode):
(hyperref)                removing '\mathlambda' on input line 44.
```

However, the warnings can be ignored and the output is OK.

3 Kerning: AΥΛ AΥΛ AΥΛ

Kerning is impossible if the font encoding is switched for every single character. Wrap the Greek part in a command switching to LGR font encoding to fix this, either `\TextGreek{...}` (with package `textalpha`) or `\foreignlanguage{greek}{...}` (with `babel`).

4 Testing supported Unicode chars

4.1 '., "A'E'HTO'Y'ΩtABΓΔEZHΘIKΛMNΞOPΣTYΦXΨΩİŸıƆFΛ

4.2 άέήίύαβγδεζηθικλμνξοπρςστυφχψωϊϋόύώ8ε9ζ7λ

[illegible][illegible][illegible]

4.6 ဖံဖံဖံဖံဖံဖံဖံ'ဇ'ဇ'ဇ'ဇ'ဇ'ဇ'ဇ'ဇ' ၵၵၵၵၵၵၵၵၵၵၵၵၵၵၵၵၵၵၵၵၵၵၵၵၵၵၵ

[illegible][illegible]

4.9 ၵိုၵ်းၵ်းၵ်းၵ်း'E'E'H'HH* ၶိၶိၶိၶိၶိၶိ

[illegible]

5 Conclusion

For Greek text parts in section headers use either literal Unicode characters or macros.

For proper kerning in the main document, combine this with the `\textgreek` or `\foreignlanguage{greek}` macros.