Test font setup for Greek with inputenc/luainputenc

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2020/10/30

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1 LICR input

The LaTeX internal character representation (LICR) is a verbose, fail-safe 7-bit ASCII encoding that can be used unaltered under both, 8-bit TeX and XeTeX/LuaTeX. Use cases are macro definitions and generated text.

See the source of this document, test-inputenc.tex for the input used in the examples below.

1.1 Greek alphabet

Greek letters via LICR macros:

\text{Α Β Γ Δ Ε Ζ Η Θ Ι Κ Λ Μ Ν Ξ Ο Π Ρ Σ Τ Υ Φ Χ Ψ Ω}
\text{α β γ δ ε ζ η θ ι κ λ μ ν ξ ο π ρ σ τ υ φ χ ψ ω}

The small sigma is set with a different glyph if it ends a word:

\text{σ textsigma}
\text{ς textfinalsigma}
\text{or textvarsigma}

The \text{\textautosigma} macro, which automatically chooses the glyph according to the position, is not implemented for Unicode fonts.

1.2 Diacritics

Greek accents are tonos = oxia, varia, psili, dasia, dialytika, and perispomeni. Greek diacritics can be input by named macro or symbol macro:

\text{΄ α ΄ x´ x ¨ ι ¨ x¨ x ῀ α ῀ x˜ x Ὴ α‘ α‘ x’ x Ὴ x῾ x῾ x῾ x῾ x῾ x῾ x῾ x῾}

Diacritics as spacing characters:

- with empty argument: \text{x` x´ x¨ x¨ x¨ x¨}
- with space as argument: \text{x` x´ x¨ x¨ x¨ x¨}
- with protected space: \text{x` x´ x¨ x¨ x¨ x¨}
- with nobreakspace: \text{x` x´ x¨ x¨ x¨ x¨}

1.2.1 sub-iota

The sub-iota is input after the base letter.

- \text{\prosgegrammeni} sets a spacing GREEK PROSGEGRAMMENI (ι): \text{Αι, Kι}.
- \text{\ypogegrammeni} sets a COMBINING GREEK YPOGEGRAMMENI (ͺ): \text{αͺ kͺ}.

A Greek capital letter followed by COMBINING GREEK YPOGEGRAMMENI is normalized to the corresponding Greek capital letter WITH [...] PROSGEGRAMMENI, if a mapping exists in the Unicode standard: \text{Α, but K,}

\text{ΑΑ,αά ΑΑ,}
\text{ΛΛ,λΛ ΛΛ,}
\text{αα,αά ΑΑ,}
<table>
<thead>
<tr>
<th>Text</th>
<th>Mathematics</th>
<th>Text</th>
<th>Mathematics</th>
</tr>
</thead>
</table>
| \textpi
\textvarpi
\textpisymbol       | π
\varpi                  | \pi
π                  | \pi
π                  |
| \textrho
\textvarrho
\textrhosymbol       | ρ
\varrho                  | \rho
\varrho                  |
| \texttheta
\textvartheta
\textthetasymbol      | θ
\vartheta                  | θ
\vartheta                  |
| \textepsilon
\textvarepsilon
\textepsilonsymbol   | ε
\varepsilon              | ε
\varepsilon              |
| \textphi
\textvarphi
\textphisymbol       | φ
\varphi                  | φ
\varphi                  |
| \textbeta
\textvarbeta
\textbetasymbol      | β
\varbeta                  | β
\varbeta                  |
| \textkappa
\textvarkappa
\textkappasymbol     | κ
\varkappa                 | κ
\varkappa                 |
| \textTheta
\textvarTheta
\textThetasymbol    | Θ
\varTheta                 | Θ
\varTheta                 |

Table 1: Macros for Greek symbol variants

1.3 Additional Greek symbols

1.3.1 Symbols for Greek numbers

\textkoppa
\textKoppa
\textqoppa (archaic koppa)
\textQoppa (archaic Koppa)
\textstigma
\textStigma (Sigma-Tau-Ligature in CB-fonts)¹
\textsampi
\textSampi
\textdigamma
\textDigamma
\textdexiakeraia
\textaristerikeraia

¹the name “stigma” originally applied to a medieval sigma-tau ligature, whose shape was confusingly similar to the cursive digamma
1.3.2 generic text symbols

LICR macros for some symbols from the 8-bit font encoding LGR that are not confined to Greek but not defined in tuenc.def [2018/08/11 v2.0j].

; textsemicolon
μ textmicro
ə textschwa

The SI unit prefix MICRO SIGN is not upcased with MakeUppercase:

; textmu: μ → M but textmicro: μ → M.

2 LICR command input

2.1 0374 ʹ , , ; ʹ ʹ A·E·H·I·O·Y·Ω
2.2 0391 AΒΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ
2.3 03AA ΙΫάξηιο
2.4 03B1 αβγδεζηθικλμνξοπρςτυφχψω
2.5 03%A ιουώβθφπϩτόFΓΔΗΔΑΧΡΘΞ

Currently, there is no hyperref support for LICR input with non-standard accents or combined diacritics characters.
2.6 1Φ00 ἀἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἁἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀἀInputElement DIMENSIONS: 595.3 x 841.9