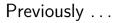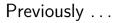*Hardcopy versions of the Unicode Standard have been among the most crucial and most-heavily used reference books in my personal library for years. Unicode allows me to celebrate the fact that computer science is a vast worldwide collaboration. And Unicode is perhaps the best tool I know to help bring understanding between people of different cultures.*

Donald E. Knuth

Previously . . .

- Implement case mappings for Unicode engines

Previously . . .

- Implement case mappings for Unicode engines
- . . . then partial support for 8-bit engines

Previously . . .

- Implement case mappings for Unicode engines
- . . . then partial support for 8-bit engines
- Context-sensitive mappings, for example lowercasing sigma
- Language-dependent mappings, *e.g.* Turkish dotless-i

Previously . . .

- Implement case mappings for Unicode engines
- . . . then partial support for 8-bit engines
- Context-sensitive mappings, for example lowercasing sigma
- Language-dependent mappings, *e.g.* Turkish dotless-i
- Auto-escape math mode
- Handle \cite, \label, \ref, . . .
- \NoCaseChange

Further improvements

- Automatic locale switching: \BCPdata

Further improvements

- Automatic locale switching: \BCPdata
- Full Unicode support for pdfTeX
  (using two-stage tables)

Further improvements

- Automatic locale switching: `\BCPdata`
- Full Unicode support for pdfTeX
  (using two-stage tables)
- Tailoring of codepoints: `\DeclareUppercaseMapping`, etc.

Further improvements

- Automatic locale switching: \BCPdata
- Full Unicode support for pdfTeX
  (using two-stage tables)
- Tailoring of codepoints: \DeclareUppercaseMapping, etc.
- Handle full Greek requirements for pdfTeX

Further improvements

- Automatic locale switching: \BCPdata
- Full Unicode support for pdfTeX
  (using two-stage tables)
- Tailoring of codepoints: \DeclareUppercaseMapping, etc.
- Handle full Greek requirements for pdfTeX
- ... refining details not covered properly in CLDR

Further improvements

- Automatic locale switching: \BCPdata
- Full Unicode support for pdfTeX
  (using two-stage tables)
- Tailoring of codepoints: \DeclareUppercaseMapping, etc.
- Handle full Greek requirements for pdfTeX
- . . . refining details not covered properly in CLDR
- . . . LICR input being looked at by Günter Milde

Further improvements

- Automatic locale switching: \BCPdata
- Full Unicode support for pdfTeX
  (using two-stage tables)
- Tailoring of codepoints: \DeclareUppercaseMapping, etc.
- Handle full Greek requirements for pdfTeX
- ... refining details not covered properly in CLDR
- ... LICR input being looked at by Günter Milde
- Low-level Unicode general category support
  (\codepoint_to_category:n)

Ongoing

– True titlecasing (and sentence casing):
  may need some more complex word division

Ongoing

– True titlecasing (and sentence casing):
  may need some more complex word division
– Better detection of non-letters

Ongoing

- True titlecasing (and sentence casing):
  may need some more complex word division
- Better detection of non-letters
- Character token generation using general category

Graphemes

- Think Spɪñal Tap:
  nine letters, one space

Graphemes

- Think Spıňal Tap:
  nine letters, one space
- A *grapheme* is a human-perceived character

Graphemes

- Think Spıňal Tap:
  nine letters, one space
- A *grapheme* is a human-perceived character
- Fully implemented for mapping

Graphemes

– Think Spɪñal Tap:
  nine letters, one space
– A *grapheme* is a human-perceived character
– Fully implemented for mapping
– Likely next is \text_item:nn
  (or \text_char:nn or \text_grapheme:nn or …)

Thanks

- Javier Bezos
- Jürgen Spitzmüller
- Peter Kankowski
- Günter Milde