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
Exploring Unicodeland

- *The Unicode Standard*
- UnicodeData.txt
- EastAsianWidth.txt
- LineBreak.txt
- SpecialCasing.txt
- CaseFolding.txt
- ...

Setting up characters

- Collect all of the relevant data
- Text: \catcode, \lccode, \uccode
- Maths: \Umathcode
- XeTeX and LuaTeX in sync but ...
- ... include up \XeTeXintercharclass data
- Clear relationship between UCD and resulting set up
Unicode case terms

**Lowercasing** Convert all code points to their lowercase mapping if defined, otherwise leave alone; apply context and language rules

**Uppercasing** Convert all code points to their uppercase mapping if defined, otherwise leave alone; apply context and language rules

**Titlecasing** Convert the first letter to (almost always) uppercase and the rest to lowercase; some code points have a different upper- and titlecase mapping; complicated by language conventions

**Case folding** Remove case information for *non-text* uses: similar to lower casing but not identical; no context/language dependence
Case changing: expl3 approach

- Implement all Unicode case-related changes
- Context-sensitive mappings
- Language-dependent mappings
- (If possible) Avoid \lccode and \uccode
- (If possible) Implement expandably
- (If possible) Handle math mode
- (If possible) Escape mechanism
LaTeX-L List
TeX-StackExchange chat
joseph.wright@morningstar2.co.uk
https://github.com/latex3/
...