Typographic Letter Spacing Character Classes

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What is Typographic Letter Spacing?

Adjusts letter spacing for better readability of East Asian text

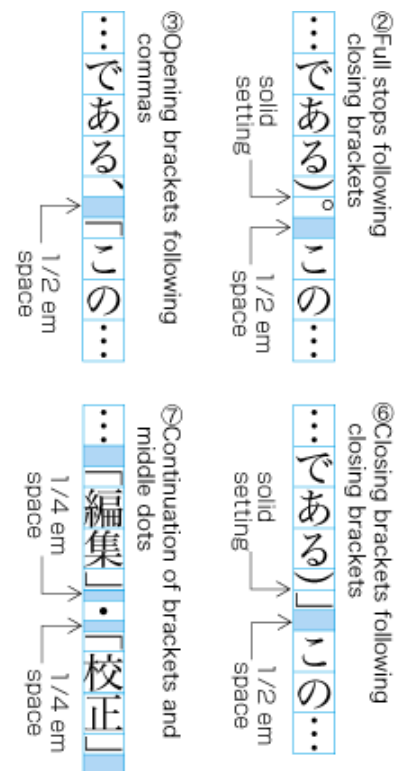Defined for pairs of classes; e.g.,
"）+." and "）+（" have different spaces

Similar to kerning, but different in:
Layout feature, not font feature
Does not depend on fonts
Authors may change spacing tables
Justification may have special rules

Who Use This Today?

Almost every printed materials in Japan today

MS Word, since 6.0 East Asian version (1994)
    And therefore Outlook too

JIS X4051-1995 and JLREQ (2009)

Every DTP software (PageMaker, QuarkXPress, InDesign)

Who Wants This?

CSS Text Level 4
- Level 3 had the "text-spacing" property in 2011, but deferred to future levels
  - *http://www.w3.org/TR/2011/WD-css3-text-20110901/#text-spacing-prop*
- CSS Text Level 3 is now in LC without this property
  - *http://www.w3.org/TR/css-text-3/*
- CSS Text Level 4 wiki
  - *http://wiki.csswg.org/spec/text4#text-spacing*

Helps applications to be compatible with W3C and EPUB specifications

How Can We Define This?

Code point level (Unicode):
  Define Character Classes to group code points

Layout application (such as CSS Text):
  Define spacing between two classes
  May define how justification algorithm manages such spaces
  May define how authors can change spacing between two classes
  May define how authors can tailor the character classes

JLREQ Character Classes

JLREQ has Character Classes for 3 purposes:
1. Line breaking
2. Typographic Letter spacing
3. Justification rules

But it has issues such as:

Japanese only, does not include other East Asian scripts

Based on conceptual code points (e.g., does not distinguish full-width)

Requires markups to distinguish Japanese text from Latin text

Widths never match to any real fonts

UTR#50 Character Classes

UTR#50 up to revision #2 had Character Classes for:

    Vertical orientation

    Not include particular choice of breaking rules or spacing rules

But we deferred it because some believed it's too complicated, and we wanted to finalize vertical orientation faster

Bring it back, or define in a new UTR?

Additional Possible Considerations

Maybe applicable to French spaces around punctuation?

Typographic rules to insert a thin space around some punctuation signs

http://unicode.org/udhr/n/notes_fra.html

Discussed once at CSS WG, recently revisited at W3C Digital Publishing IG

UK wants a thin space between "$" and "100,000"?

No consensus yet, needs more discussions