

The kanbun package

てらてふろルガ ヲためノぼつけ一ぢ
以羅蝶之作漢文訓讀用包

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1 Introduction

The kanbun package, like other *kanbun-kundoku* (漢文訓讀) \LaTeX packages (such as *gckanbun*), allows users to manually input macros for elements in a *kanbun-kundoku* paragraph.

More importantly, it accepts input with light markup in the “*kanbun* annotation” form when used with Lua \LaTeX , which allows typesetting *kanbun-kundoku* paragraphs efficiently¹.

2 Basic example with Lua \LaTeX

As seen in the following example, typesetting a *kanbun-kundoku* paragraph with the kanbun package requires only light annotations — it automatically transforms the annotated plain text into \LaTeX macros through Lua, rather than having users type in macros themselves.

```
\documentclass{ltjarticle}
\usepackage[kumi=aki, tateaki=1]{kanbun}
```

¹The idea comes from 漢文 HTML by UntPhesoca, which is a JavaScript and css implementation.

```

\begin{document}
\Kanbun
月落子烏啼キテ霜満ツ[レ]天ニ，
江楓漁火対ス[二]愁眠ニ[一]。
姑(こ)蘇(そ)城外ノ寒山寺，
夜半ノ鐘声到ル[二]客船ニ[一]。
\EndKanbun
\printkanbun
\end{document}

```

夜	姑 ^こ	江	月
半 ^ル	蘇 ^そ	楓	落 ^キ
鐘	城	漁	烏
聲	外 ^ノ	火	啼 ^キ
到 ^ル	寒	對 ^ス	霜
客	山	愁	満 ^ツ
船 ^ニ	寺	眠 ^ニ	天 ^ニ

Note that if you want to use this functionality, you have to run this document with Lua^ATeX.

3 Usage

3.1 Package options

Load the package with

```
\usepackage[<kanbun options>]{kanbun}
```

This package provides a variety of customisable features in *kanbun-kundoku*.

`scale`=*<ratio>*

Sets the ratio of the size of *kanji* to that of ruby texts. Default: 2.

`fontcmd`=**

Sets the font command to use for *kanji*. If `luatexja-fontspec` is loaded, it is set default to `\addjfontfeatures{RawFeature={+trad}}` to obtain traditional *kanji* if applicable.

`rubyfontcmd`= \langle *font command* \rangle

Sets the font command to use for ruby texts. If `luatexja-fontspec` is loaded, it is set default to `\addfontfeatures{RawFeature={+ruby}}` to obtain ruby glyphs when applicable.

`unit`= \langle *length* \rangle

Sets the dimensions of *kanji* (assuming it is a square). Default: `\kanbun_init_zw`, which is a length equal to 1em.

`yokoaki`= \langle *ratio* \rangle

Sets the horizontal space between *kanji* with respect to the size of ruby texts. Default: 2.

`tateaki`= \langle *ratio* \rangle

Sets the vertical space between *kanji* with respect to the size of ruby texts. Default: 2.

`okuriintrusion`= \langle *ratio* \rangle

Sets the intrusion of *okurigana* (how much *okurigana* should be vertically tucked into the space of *kanji*) with respect to the size of ruby texts, if that does not cause an overlap with *furigana*. Default: 1.

`kumi`=aki, beta

Sets whether to use *aki-gumi* (typeset with uniform inter-character spacing) or *beta-gumi* (typeset with no inter-character space between adjacent character frames). Or simply call `aki` or `beta` without `kumi=`. Default: `aki`.

After initialising the options, you can still change the option values through the command `\setkanbun`. For example, to switch to *beta-gumi*, you could use

```
\setkanbun{beta}
```

3.2 Basic usage without Lua \LaTeX (not recommended)

When not using the advanced *kanbun*-annotation functionality, it is possible to typeset *kanbun* with any engine with CJK support, such as using X \LaTeX with the `xeCJK` package, or using up \LaTeX with `utarticle` or other appropriate class.

```
\KANJIUNIT{ \FURIOKURI{<right furigana>}{<right okurigana> }
  {<left (top) punctuation (e.g. ‘ ’)}
  {<KANJI>}
  {<other punctuation>}
  {<kaeriten>}
  { \FURIOKURI{<left furigana>}{<left okurigana> } }
```

`\kanbunfont`

Sets the font size of *kanji*. Use when the unit option is set different to the document's default font size.

Use `\multifuriokuri` instead of `\furiokuri` if you are putting *furigana* to multiple kanji.

```
\MULTIFURIOKURI[<length by which ruby is raised>]{<furigana>}{<okurigana>}
```

For example, the code

```
% example text from https://phesoca.com/kanbun-html/
\kanbunfont
\KANJIUNIT{}{}{}{子}{}{}{}
\KANJIUNIT{\FURIOKURI{}{}{ク}{}{}{曰}{, }{}{}
\KANJIUNIT{\FURIOKURI{}{}{ゾ}{}{}{盍}{}{}{三}{\FURIOKURI{}{}{ル}}
\KANJIUNIT{}{}{}{各}{ゞ}{}{}{}
\KANJIUNIT{\FURIOKURI{}{}{ハ}{}{}{言}{}{}{二}{}
\KANJIUNIT{\FURIOKURI{}{}{ノ}{}{}{爾}{}{}{}
\KANJIUNIT{\FURIOKURI{}{}{ヲ}{}{}{志}{。 }{}{-}{}
\par
```

outputs

```
爾ノ子
志ヲ曰ク
ル盍ノ
各ゞ言ハ
```

with `tateaki` set to 1.

3.3 Usage with Lua^AT_EX

Kanbun annotation uses the following brackets to mark different elements in *kanbun-kundoku* (as described in [漢文 HTML](#) by UntPhesoca).

- (): *furigana* (振仮名)
- { }: *okurigana* (送仮名) (these brackets can be omitted)
- ‹ ›: *furigana* (振仮名) of *saidoku-moji* (再読文字)
- ‹›: *okurigana* (送仮名) of *saidoku-moji* (再読文字)
- []: *kaeriten* (返点)
- ‘ ’: multiple *kanji*, potentially with *tateten* inserted, as a ruby base; group ruby (グループルビ)
- no annotation: *kanji* (漢字) and punctuation

Tateten (豎点) can be input with either — (U+2015), ー (U+2014) or | (U+3198).

`\Kanbun`
`\EndKanbun`

Write the annotated *kanbun* between the commands `\Kanbun` and `\EndKanbun`, and it will be processed and saved, ready to be used later.

`\printkanbun`

Where you would like to use the most recently saved *kanbun-kundoku* paragraph, use `\printkanbun`. It automatically calls `\kanbunfont` and `\par` to set the font size and line spacing and make paragraphs.

`\printkanbuncode`

If you wish to make modifications on the result or to use the result with a non-LuaTeX engine, it is possible to obtain the macros using `\printkanbuncode` (prints in the terminal), and continue to work from there.

`\printkanbunnopar`

The no-paragraph counterpart of `\printkanbun`, which does not invoke `\kanbunfont`, and uses `\par` instead of `\par`.

`\printkanbunoparcode`

The no-paragraph counterpart of `\printkanbuncode`.

You can always save `\printkanbun` to a macro for use later and start a new annotated *kanbun* block, as in the following example.

```
% example text from https://phesoca.com/kanbun-html/  
\documentclass{ltjtarticle}  
\usepackage[kumi=beta]{kanbun}  
  
\Kanbun  
此レ乃チ信(しん)之‘所一[三]以’(ゆゑん)為ル[二]陛下ノ禽(とりこ)ト[一]也。  
\EndKanbun  
\let\信\printkanbun  
  
\Kanbun  
孤之有ルハ[二]孔明[一]，猶ホ<ごと>«キ»[二]魚之有ルガ[一レ]水也。  
\EndKanbun  
\let\孔明\printkanbun  
  
\begin{document}  
\孔明\par\bfseries\信  
\end{document}
```

此レ乃チ信(しん)之‘所一[三]以’(ゆゑん)為ル[二]陛下ノ禽(とりこ)ト[一]也。
孤之有ルハ[二]孔明[一]，猶ホ<ごと>«キ»[二]魚之有ルガ[一レ]水也。