

# L<sup>A</sup>T<sub>E</sub>X style file for the *Suśrutasaṃhitā* Incremental Translation

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## 1 Load various local standard macro packages

`packages (env.)` Load my standard Xe<sub>La</sub>TeX macros. They are maintained and published here: <https://github.com/wujastyk/xelatex> They do things like set up Polyglossia, choose fonts and languages, load bib<sub>La</sub>TeX and point to my bibliography, etc.

```
1 \usepackage{%
2   xelatex-generic,
3   xelatex-biblatex,
4   xelatex-indexing,
5   booktabs, % better-looking tables
6 }
```

`hyperref (env.)` Here we load hyperref and set the colours we want for hyperlinking.

We put it at this position *after* loading the index/glossaries package, `xelatex-indexing`, to avoid clashes. See the documentation to `indextools` on this topic of priority.

```
7 \usepackage[
8   final=true, % so it doesn't get turned off by "draft"
9   linkcolor = indigo(dye),
10  anchorcolor = indigo(dye),
11  citecolor = indigo(dye),
12  filecolor = indigo(dye),
13  urlcolor = indigo(dye),
14  menucolor = indigo(dye),
15  % pagecolor = indigo(dye),
16 ]{hyperref}
```

`xelatex-glossaries` Load `xelatex-glossaries` *after* `hyperref`, so that indexed words in the main text get linked to the glossary.

```
17 \usepackage{xelatex-glossaries}
```

`\definecolor` And define our desired colours for `hyperref` above, with the help of <http://latexcolor.com/>.

This needs to be stated here, not earlier, because `\definecolour` is depends on the `xcolor` package loaded in the main incremental\_SS\_Translation.tex file.

```
18%\definecolor{darkbrown}{rgb}{0.4, 0.26, 0.13}
19\definecolor{indigo(dye)}{rgb}{0.0, 0.25, 0.42}
```

## 2 Running headers and page numbering

`fancyhdr` (*env.*) Use the `fancyhdr` package to set up the running headers.

```
20\usepackage{fancyhdr}
21\pagestyle{fancy}
22\setlength{\headheight}{14.49998pt} % as instructed by log file
23% manual p.18
24\fancyhf{}%
25\renewcommand{\chaptermark}[1]{\markboth{#1}{}}
26\renewcommand{\sectionmark}[1]{\markright{#1}}
27%
28\fancyhead[LE]{\thepage}
29\fancyhead[RE]{\nouppercase{\emph{\leftmark}}}
30\fancyhead[LO]{\nouppercase{\emph{\rightmark}}}
31\fancyhead[RO]{\thepage}
```

`\seccounter` We don't want huge CHAPTER 1 headings

```
32\setcounter{secnumdepth}{-2}
```

`plain` (*env.*) We don't want page numbers on a `\part` page. Redefine `pagestyle plain` as

`empty` (*env.*) empty. This code is taken from [Stack Exchange](#).

```
33\let\ps@plain\ps@empty
```

## 3 Some more packages

`pdfpages` (*env.*) `pdfpages` helps us to include pdfs in our document; `wasysym` loads a wide

`wasysym` (*env.*) range of special symbols that can be useful.

```
34\usepackage[final]{pdfpages}
35\usepackage[nointegrals]{wasysym}%for the blob symbols in the table
```

## 4 More formatting macros

`\hangfootnotes` Nice formatting for footnotes. Defined in my xelatex-generic style file.

```
36 \hangfootnotes
```

`penalties (env.)` Make nicer pages.

```
37 \widowpenalty 1500 % default 150
38 \clubpenalty 1000 % default 150
39 \brokenpenalty 2000 % default 100
```

`raftwatermark (env.)` Options for adding a watermark to the whole document; currently switched off.

```
40 % \usepackage[
41 % text={Draft of \today\ for private study only},
42 % color={[gray]{0.95}},
43 % scale=.27]{draftwatermark}
```

`itemsep (env.)` Use the itemsep package to improve the spacing of lists.

```
44 \setlist[enumerate]{noitemsep} % enumitem global setting for \items
45 \setlist[itemize]{noitemsep}
```

`qtree (env.)` Use the qtree package to draw tree-diagrams (see the snakes diagrams in kalpasthāna 4).

```
46 \usepackage{qtree}
```

`quoting (env.)` Use the quoting package for more flexible quote environments:

```
47 \usepackage[vskip=0pt]{quoting}
```

We can now say `\begin[<options>]{quoting} ... \end{quoting}` and use the `<options>` for better control. The default here is set to have no space above or below the quotation.

## 5 Fonts and languages

These are all macros from the Polyglossia package (which uses Fontspec).

`\fontfamily` Set up a Devanagari font.

```
48 \renewfontfamily\devanagarifont
49 [Script=Devanagari,
```

```

50     FakeStretch=1.05,
51     Mapping=RomDev, %prefer slightly to iast
52 ]
53% {Murty Sanskrit}
54% {Sahadeva}
55% {Tiro Devanagari Sanskrit} % pretty good, with excellent roman
56%     {Sanskrit 2003} % hard to beat, but poor roman
57{Tiro Devanagari Sanskrit} % as good as Sanskrit 2003, better roman, less
58% contrast with Latin text.

```

Set up Tamil.

```

59 \newfontfamily\tamilfont
60     {Maduram}
61%{Noto Serif Tamil}
62 \setotherlanguage{tamil}

```

Set up Malayalam.

```

63 \newfontfamily\malayalamfont{Noto Serif Malayalam}
64 \setotherlanguage{malayalam}

```

Set up Bengali.

We say `\renew...` because Bangla is already defined in the file `xetex-generic.sty`. We renew the definition here in case we want to choose a different Bengali font just for this document. Note that we explicitly state the Script.

```

65 \renewfontfamily\bengalifont[Script=Bengali]{Tiro Bangla}
66 \setotherlanguage{bengali}

```

## 6 Bibliography magic

`\DeclareFieldFormat` Here are some hacks for Bib<sub>La</sub>T<sub>E</sub>X that make the hyperlinks for URLs and DOIs pretty in the bibliography.

First, option to just print hyperlinked “URL” in the bibliography, not the long, ugly URL.

```

67 \DeclareFieldFormat{url}{%
68     \ifhyperref
69     % {\textsc{url: }}\href{#1}{URL}}
70     {\href{#1}{\textsc{url}}}
71     {\textsc{url: }}\nolinkurl{#1}} %DW bug here

```

Now a macro to make the ARK links do the right thing.

```
72 \DeclareFieldFormat{eprint:ark}{%
73   %   \textsc{ark:}\space
74   \ifhyperref
75     {\href{https://n2t.net/#1}{\nolinkurl{#1}}}
76     {\nolinkurl{#1}}}
```

## 7 Layout of the translation texts

`translation` (*env.*) Make a new environment for the translation with tweaked spacing. The old-fashioned LaTeX way, but this is legacy code that we're not actually using:

```
77% \newenvironment{translation}
78%   {\begin{itemize}[noitemsep,
79%     left=0pt .. \parindent]}
80%   {\end{itemize}}
```

This is what we are actually doing. Make a new environment for the translation with tweaked spacing, the `enumitem` way:

```
81 \newlist{translation}{enumerate}{2}
82 \setlist[translation]{%
83   label=\textbullet,
84   noitemsep,
85   left=0pt .. \parindent}
```

## 8 Home-made commands for general convenience and consistency

### 8.1 Referring to standard editions

`\Su` This creates references to the *Suśrutasamhitā* vulgate text, like this:

`\Su{2.5}{564}` generates “2.5 (Su 1938: 564)”

#1 = the canonical reference (sthāna, adhyāya, verse)

#2 = page number in Ācārya’s third edition

Later, when we’ve got our own numbers for our Nepalese edition, we may decide to add them as a third argument.

Here’s the definition:

```
86 \newcommand{\Su}[2]{#1 \parencite[#2]{vulgate}}
```

`\SuComma` And here’s a variant that does the same thing but without parentheses. For example:

`\SuComma{2.5}{564}` generates “2.5, Su 1938: 564”

Here’s the code:

```
87 \newcommand{\SuComma}[2]{#1, \cite[#2]{vulgate}}
```

`\Ca` The same idea, for the *Carakasamhitā* vulgate:

```
88 \newcommand{\Ca}[2]{#1 \parencite[#2]{cara-trikamji3}}
```

`\As` The same idea, for the *Aṣṭāṅgasaṅgraha* vulgate by Aṭhāvale and other standard editions:

```
\Cakra 89 \newcommand{\As}[2]{#1a \citep[#2]{atha-1980}}
```

`\Dalhana` #1 = canonical

#2 = page of Aṭhāvale’s edition

```
90 \newcommand{\Ah}[2]{#1 \citep[#2]{kunt-1939}} % references to the  
91 %\emph{Hṛdaya},
```

#1 = canonical

#2 = page of Kunte and Navare’s 6th edition

```
92 \newcommand{\Cakra}[2]{Cakrapāṇidatta on #1 \citep[#2]{acar-1939}} %
```

references to the 1939 ed, *Bhānumatī*

#1 = canonical

#2 = page of edition

```
93 \newcommand{\Dalhana}[2]{\Dalhana on #1 \citep[#2]{vulgate}}
```

references to the 1938<sup>2</sup> ed,

#1 = canonical

#2 = page of edition

## 8.2 Names of works

\AH Some simple shortcuts for the names of texts.

```
\AS 94 \renewcommand{\SS}{\emph{Suśrutasamhitā}}
```

```
\SS 95 \newcommand{\AS}{\emph{Aṣṭāṅgasāṅgraha}}
```

```
\AHS 96 \newcommand{\AHS}{\emph{Aṣṭāṅgahrdayasamhitā}}
```

```
97 \renewcommand{\AH}{\emph{Aṣṭāṅgahrdayasamhitā}}
```

```
98 \renewcommand{\CS}{\emph{Carakasamhitā}}
```

## 8.3 Citing Sanskrit words in the text

\se The main commands \saneng and \sanengdev are defined elsewhere. In

\sed xelatex-generic-xindex.sty, I believe. What we’re doing here is just making

\seEngOnly some convenient shortcuts, \se (“Sanskrit-English”) and \sed “Sanskrit-English-Use Devanagari”. These commands print the English word followed by the Sanskrit in parentheses.

They are used like this:

\se{vāta}{wind} generates “wind (*vāta*)”

\sed{vāta}{wind} generates “wind (वात)”

```
99 \let\se\saneng % just make typing a bit quicker
```

```
100 \let\sed\sanengdev % puts the Skt. in the text into Devanagari.
```

```
101 \providecommand{\seEngOnly}[2]{#2} % just print the English
```

Incidentally, they also send the words to the index at the back of the book.

This is set up in the file xelatex-indexes.sty.

## 8.4 Grammatical root

\root Just makes “\root bhū” do what you would expect.

```
102 \def\root{\ifmmode\surd\else$\surd$\fi }
```



## 8.5 Marginal notes

`\q` This short command stands for “query” and puts a comment or query into a yellow box in the margin of the text. It’s not defined here, but in `xelatex-generic.sty`. But just for information, here is how it is set up, using the `todonotes` package.

```
103 % \usepackage[colorinlistoftodos,  
104 %%      disable,  
105 %      textsize=tiny,  
106 %      shadow,  
107 %      backgroundcolor=yellow]{todonotes}  
108 %  
109 %\def\q#1{{}\todo{#1}}}
```

We put `\newpage\listoftodos` just before `\end{document}` to get a helpful index of these queries.

## 8.6 Marking differences

`\diff` Mark significant differences in the translation of the Nepalese text by putting a red changebar in the right margin. This is probably just for the draft text, to make interesting differences obvious so we can write about them later.

```
110 \usepackage{xetex,color,rightbars}{changebar}  
111 \cbcolor{red}  
112 \newcommand{\diff}[1]{\cbstart #1\cbend {}}
```

An older version of this command was  
`\newcommand{\diff}[1]{\textcolor{red}{#1}}.`

## 8.7 Auto-translation and Index of Materia Medica

`\gls` This is not defined here, but in `xelatex-glossaries.sty`. It is used like this:

`\gls{śatāvarī}` generates “wild asparagus”

The command looks up the Sanskrit item in our `plants.bib` database and replaces it with the English term. It also makes an entry for the *Index of Materia Medica*.

## 9 Legacy commands

### 9.1 For the old, four-argument plant command

`manyfoot` Calling the `manyfoot` package to use in the definition of `\plant`. It puts  
`\plant` notes about plants in a second layer of footnotes. This is a legacy command  
we don't use any more. It's here for historical reasons and in case there are  
any left over by mistake.

```
113 \usepackage[ruled]{manyfoot}
114 \DeclareNewFootnote{A}[roman]
```

### 9.2 Some undefined environments

`prose (env.)` These environments can be used, but they are currently defined to do nothing. We might want to do something in future.

`avanti phrase (env.)`

```
115 \newenvironment{prose}{\relax }\relax }
116 \renewenvironment{verse}{\relax }\relax }
117 \newenvironment{bhavanti}{\relax }\relax }
```

### 9.3 Load the xcolor package here, just before the document begins

```
xcolor
118 \usepackage{xcolor} % why here? Move it to the sty file?
```

# Index

Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

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