

L^AT_EX class and style files for my own local use

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This file started to look like this in about 2016-04-01

1 XeLaTeX stuff

Normalize any residual Unicode combining accents, and write out error messages, if any:

XeLaTeX internals

```
1 \XeTeXinputnormalization=1
2 \tracinglostchars=1
3 \tracingonline=1
4 \XeTeXgenerateactualtext=1
```

2 Used at different times

Commented out.

hyperref

```
pdfx 5%\usepackage[final=true]{hyperref}
      6%\usepackage[a-1b]{pdfx} % get an archival PDF
```

3 Multilingual macros

from: [Stackexchange](#).

etex Not used

```
7%\usepackage{etex}
8%\reserveinserts{28}
9%\usepackage{xcolor}
```

polyglossia Set up various fonts and languages.

```
10 \usepackage{polyglossia}
11 \defaultfontfeatures{%
12   Mapping=tex-text,
13   %Color=red,
14   Numbers=OldStyle,
15   %Renderer=ICU
16 } % not Harfbuzz yet
17
18 \setmainlanguage[variant=british]{english}
```

Main document font:

```
19% \setmainfont[AutoFakeBold=1.5]{EB Garamond 12}
20\setmainfont%[BoldFont = * Bold] % t1pretest 2019
21% (See https://tug.org/pipermail/tex-live/2019-March/043211.html)
22% {Linux Libertine 0} % lovely, but use Libertinus
23% {fbb} % also lovely - Bembo, but no underdot
24% {Tinos} % a croscore font; good diacritics
25{TeX Gyre Pagella}
26% {IndUni-P}
27% {Lucida Sans Unicode}
28% {Libertinus Serif} % something funny with overlapping chars in bold 2019-05
```

4 Packages that Polyglossia now auto-loads

polyglossia automatically loads: fixltx2e, etex, xunicode, fontspec. But we still need metalogo for the definitions of logos like `\XeLaTeX`.

```
29\usepackage{metalogo}
30% \usepackage{xunicode} % get unicode encoding in PDF even when using
31% \= etc. Not needed at present.
```

Getting properly-hyphenated Sanskrit:

```
32\setotherlanguage{sanskrit} % for transliterated Sanskrit
33\newfontfamily\sanskritfont
34 [Script=Latin]
35% [Script=Devanagari]
36% {Linux Libertine 0} %Transliteration only in this font
37{TeX Gyre Pagella} %Transliteration only in this font
38% {IndUni-P} %Transliteration only in this font
39% {Brill} %Transliteration only in this font
40% {Sanskrit 2003} % Roman and Devanagari
```

Define `\sansk{}` which is the same as `\emph{}`, except that it causes appropriate hyphenation for Sanskrit words. Use `\sansk{}` for Sanskrit and `\emph{}` for English.

```
41\newcommand{\sansk}[1]{\emph{\text{sanskrit}{#1}}}
42\let\ias=\sansk %better name for it
43\let\rsan=\sansk
```

Now define the Devanagari font: input using standard IAST transliteration

```
44\newfontfamily\devanagarifont
45 [Script=Devanagari,
46% FakeStretch=1.05,
```

```

47 Mapping=RomDev, %prefer slightly to iast
48 ]
49 % {Sahadeva}
50 % {Sanskrit 2003}
51 {Tiro Devanagari Sanskrit}

52 % \newcommand{\dev}[1]{\textdevanagari{#1}} % test this 2018-10
53 \newcommand{\dev}[1]{\textsanskrit{\devanagarifont #1}} % test this 2020-01
54 \let\dsan=\devanagarifont
55 \let\dn=\devanagarifont
56
57 \setotherlanguage{bengali}
58 \newfontfamily\bengalifont
59 [Script=Bengali]
60 % {Sahadeva}
61 {Noto Serif Bengali}

```

Use: \textbengali{ }

And other languages

```

62 \setotherlanguage{german}
63 \setotherlanguage{french}

```

will call appropriate hyphenation.

Chinese, Japanese, Korean

```

64 \newfontfamily\cjkkfont{Noto Sans CJK SC} %
65 % [Script=CJK,Mapping=tex-text,Scale=MatchLowercase]
66 % {IPAexMincho}
67 % {TakaoPGothic}
68 \let\cjkkfont

```

<https://tex.stackexchange.com/questions/376420/>

[include-chinese-characters-into-article-in-xelatex](#)

Classical Greek:

```

69 \setotherlanguage{greek}
70 \newfontfamily\greekfont[Script=Greek,Mapping=tex-text]{GFS Didot}
71 % {GFS Porson}
72 % {GFS Philostratos}

```

End of polyglossia stuff.

5 Sanskrit hyphenation

hyphenations A cumulative hyphenation exception file, `sanskrit-hyphenations.tex`, adds numerous hand-tuned hyphenation points to the default Polyglossia

hyphenation rules for Sanskrit. This file needs to be `\input` after the start of the document. Normally, we'd do this with `\AtBeginDocument`, but for obscure reasons, that doesn't work. So we have to add the `\input` statement by hand at the start of every document, immediately after `\begin{document}`.

```
73%\AtBeginDocument{\input{sanskrit-hyphenations.tex}} % this doesn't work :-(
```

6 Misc.

```
csquotes
graphicx 74\usepackage[style=british]{csquotes} % error in log if not included
          75\usepackage{graphicx}
```

7 Marginal note hacks

Not used:

```
76% \usepackage{marginfix}
      simple marginal query, now superseded:
77% \newcommand{\q}[1]{%
78%     \marginpar{%
79%%         \rlap{%
80%             \fbox{\vtop{\hsize 0.2\textwidth\raggedright\tiny#1}}}}
81%         %}
```

Actually, `todonotes` makes nicer marginal comments:

```
todonotes
82\usepackage[colorinlistoftodos,
83%     disable,
84textsize=tiny,
85obeyDraft,
86textwidth=.11\textwidth,
87loadshadowlibrary,
88shadow,
89backgroundcolor=yellow
90]{todonotes}
91    \setuptodonotes{fancyline}
92
93% Now renew the \q command to use \todo:
94\newcommand{\q}[1]{\todo{#1}}
95% \AtEndDocument{\newpage\listoftodos } %print the todo list
96% at the end,
97% when in draft mode
```

8 Stacked diacritics

`\diatop` `\diatop`, by Christina Thiele, used for r underdot overbar (\bar{r} , F6, 246) See Conference Proceedings, TeXniques no. 5, p.11.

```
98 \def\diatop[#1|#2]{\leavevmode{\setbox1=\hbox{#1}}\setbox2=\hbox{#2}}}%
99     \dimen0=\ifdim\wd1>\wd2\wd1\else\wd2\fi%
100     \dimen1=\ht2\advance\dimen1by-1ex%
101     \setbox1=\hbox to1\dimen0{\hss#1\hss}%
102     \rlap{\raise1\dimen1\box1}%
103     \hbox to1\dimen0{\hss#2\hss}}}%
```

E.g. of use: `\diatop[\ 'ō]` gives u macron acute

9 Private abbreviations

`\AD`

```
etc. 104 \newcommand{\AD}{\textsc{ce}}{}
105 \newcommand{\BC}{\textsc{bce}}{}
106 \newcommand{\BCE}{\textsc{bce}}{}
107 \newcommand{\CE}{\textsc{ce}}{}
108 \providecommand{\Cs}{\emph{Caraka\ -sam\ -hitā}}
109 \providecommand{\Ss}{\emph{Suśruta\ -sam\ -hitā}}
110 \let\CS\Cs
111 \let\SS\Ss
112 \providecommand{\AH}{\emph{Aṣṭāṅga\ -hrdaya\ -sam\ -hitā}}
113 % \newcommand{\saneng}[2]{#2 (\sansk{#1})} % now in
114 % xelatex-indexing-xindex.sty
115 \newcommand{\PYS}{\PYŚ} % {Pātañjala\ -yoga\ -śāstra}
116 \newcommand{\YSV}{\sansk{Yogasūtravivaraṇa}}
117 \newcommand{\sutra}[1]{\textbf{\large #1}\par}
```

10 Nice hanging-indent footnotes

`\hangfootnotes` LaTeX Companion, p.73. Not used.

```
118 % \def\hangfootnotes{%
119 % \renewcommand{\@makefnmark}[1]{\setlength{\parindent}{0pt}%
120 % \begin{list}{}{\setlength{\labelwidth}{1.5em}%
121 % \setlength{\leftmargin}{\labelwidth}%
122 % \setlength{\labelsep}{3pt}\setlength{\itemsep}{0pt}%
123 % \setlength{\parsep}{0pt}\setlength{\topsep}{0pt}%
124 % \footnotesize}\item[\hfill\@makefnmark]##1%
125 % \end{list}}%
```

```
126 %}
```

But the above is broken by bigfoot (too much vertical space)

Footnotes with hanging indents adapted from <http://www.ceus-now.com/raggedright-in-footnotes-with-hanging-indent/>

```
127 \newcommand\hangfootnotes{%
128     \long\def\@makefnmark##1{\leftskip=1.8em\hskip-1.8em\hb@xt@1.8em
129     {\@thefnmark\hss}##1}}
```

11 Normal LaTeX settings now

```
130 \setcounter{secnumdepth}{0}
```

enumitem

```
131 \usepackage[inline]{enumitem}    % supersedes mdwlist: does it globally
132 \setlist{itemsep=.5em,
133     %labelindent=\parindent,
134     %leftmargin=*,
135 }
```

```
136 % \usepackage{makeidx} % leave this to xelatex-indexing.sty
```

multicol (env.)

longtable (env.) 137 \usepackage{multicol}

array (env.) 138 % \multicolsep = 12pt plus 4pt minus 3pt % default

```
139 \multicolsep = 1pt plus .25ex % like the starred environments
```

```
140 \usepackage{longtable}
```

```
141 \usepackage{array}
```

```
142 % \usepackage{index} % multiple indexes. Doesn't play well with Beamer
```

```
143 \widowpenalty 4000
```

```
144 \clubpenalty 300
```

```
145 \brokenpenalty 5000
```

```
146 \interfootnotelinepenalty 10 % lets notes break more easily
```

```
147 \vfuzz2pt % Don't report over-full v-boxes if over-edge is small
```

```
148 \hfuzz2pt % Don't report over-full h-boxes if over-edge is small
```

```
149 \emergencystretch .1\textwidth
```

```
150 \hyphenation{dharam-pal wuj-as-tyk never-the-less nutri-tive
```

```
151 asoka kerala Aristotle Alex-ander Majno manu-script manu-scripts}
```

Command to draw a box where the pictures will go:

```
152 \newcommand{\pretendpicture}
```

```
153 {\centering \fbox{\vrule width0pt height 2.5in depth0pt
```

```
154 \vrule width 4in height0pt depth0pt }\par }}
```

use as follows:

```
\begin{figure}[htp]
\begin{center}
\pretendpicture
\end{center}
\caption{}
\label{fig: }
\end{figure}
```

12 From article.cls

This isn't used.

```
155 % \typeout{Wujastyk: NB: Modified maketitle command, flush
156 % left and no array for authors.}
```

```
157 % \providecommand\@maketitle{%
158 %   \newpage
159 %   \null
160 %   \vskip 2em%
161 %%   \begin{center}%
162 %   \let \footnote \thanks
163 %   \noindent{\LARGE \@title \par}%
164 %   \vskip 1.5em%
165 %   \noindent {\large
166 %     \lineskip .5em%
167 %%     \noindent
168 %%     \begin{tabular}[t]{l} %DW
169 %       \@author
170 %%     \end{tabular}\par %DW
171 %   }%
172 %   \vskip 1em%
173 %   \noindent {\large \@date}%
174 %%   \end{center}%
175 %   \par
176 %   \vskip 3em} %DW was 1.5em
```

See <http://cs.wlu.edu/~necaise/refs/latex2e/env-list.4.html>

Not used:

```
177 % \newenvironment{sloka} % based on {verse}, from book.cls
178 %       {\let\\\@centercr
179 %       \list{}\itemsep \z@
180 %       \topsep .1\baselineskip}
```



```

181 % \parsep .25\baselineskip
182 % \itemindent -1.5em%
183 % \listparindent\itemindent
184 % \rightmargin \z@
185 % \leftmargin 3pc % = CUP's \SFB@indent
186 % \advance\leftmargin 1.5em}%
187 % \item\itshape\relax}
188 % {\endlist}

```

Here's another version from book.cls, based on quote

```

189 \newenvironment{sloka}
190 {\list{}{\rightmargin\leftmargin}%
191 \item\itshape\relax}
192 {\endlist}

```

`\PreliminaryNote` Preliminary numberless "footnote" for abbreviations, grant references, and other general initial statements.

```

193 \newcommand{\PreliminaryNote}[1]{%
194 {\def\thefootnote{\relax }%
195 \footnotetext{\hspace*{-2.3em} %only if not using \hangfootnotes
196 #1}}}

197 \newcommand{\doublespacing}{%
198 \renewcommand{\baselinestretch}{1.5}
199 \addtolength{\footnotesep}{0.5\footnotesep}}

```

The following not used.

```

200 % \usepackage{ccllicenses}
201 % \let\DWolddate\date
202 % \renewcommand{\date}[1]{\DWolddate{#1\\ \cc \ccby \ccnc \ccsa }}

```

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