LaTeX tutorial

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1 Some basic stuff

LaTeX doesn't pay very much attention to the way you line things up on the screen. One space between words is the same as many.

Two carriage returns will tell LaTeX to start a new paragraph.

The % sign comments things out.

1.1 Special characters

The following are special characters in LaTeX, so you have to do something special to get them to actually appear:

$ & % # _ { }

\ ~ ^

The characters |, <, and > only come out in math mode.

1.2 Quotes

‘single quotes’ “double quote” ”backwards quotes“

Notice that the normal quote character (shift-’) doesn't get used.

1.3 Type styles

SMALL CAPS **bold face** *italics*

1.4 Accents and subscripts

ā á ă à â ñ ç ŏ ı í
themselves$_i$

2 Some sort of fancy stuff

2.1 Numbering things and referring to them

The sentence in (1) is a numbered sentence.

(1) This is a numbered sentence.

I can also refer to other sections, such as §2.3.

It is also possible to have examples formatted like:

(2) a. First sentence fragment.

b. Another sentence fragment.

In this case, you have to do some of the reference by hand, as in (2a).

2.2 Quotation and description

The quotation and description environments may also be useful.

> A little acolyte on Mount Hiei, fresh from the country, arrived when the cherry trees were in full bloom. When a cruel wind sent the petals flying, the boy burst into tears.
>
> "What makes you cry so, my dear?" a monk gently comforted him. "Are you sorry to see the flowers fall? But flowers never last, you know. They always fall. You shouldn't cry!"
>
> "Who cares whether they fall or not!" the boy sobbed. "Not me! But if the barley flowers in Daddy's fields blow away there'll be no crop and that'd be *awful*!" He bawled all the harder.
>
> So much for *that* sweet child's sensitive feelings. [Royall Tyler, *Japanese Tales*, p.224]

- Point one.

(2) Point two.

(2) Point two again.

2.3 Footnotes

LaTeX does footnotes.[1]

Sometimes the regular `\footnote` command won't work inside of other commands. In those cases, use `\footnotemark` and `\footnotetext`:

(3) An example with a footnote[2]

3 Fancy things that are useful to linguists

3.1 Your basic table

(4)

	Numeral	Number of σ	Alphabetical?
French	deux	1	Yes
English	two	1	No
Japanese	hutatu	3	No

3.2 Glossed examples

`\shortex` and related macros are defined in lingmacros.sty.

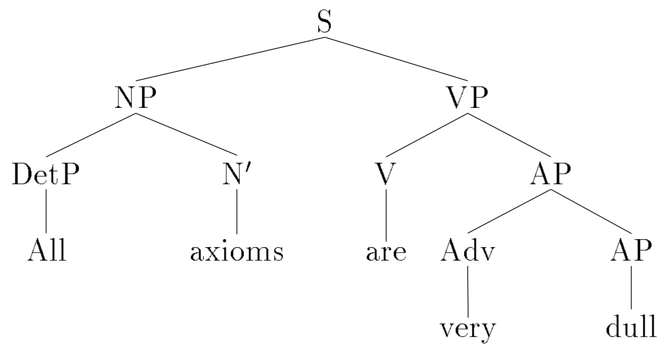
(5) Kore-wa omosirokuna-i reibun desu.
This-TOP interesting.NEG-NONPST example.sentence cop
'This is an uninteresting example sentence.'

[1] Like this one.
[2] This is another footnote.

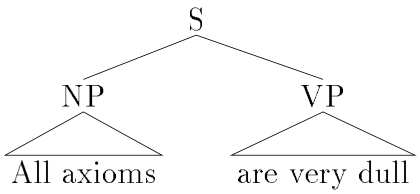
3.3 Trees from first principles

The relevant macros for this are defined in tree-dvips.sty.

(6)



(7)



There are also other macro packages which make trees more intuitive.

NB: If you just print the .dvi file, your trees will not come out. In order to see the trees, you must convert the file to the ps format first. To do the conversion and print the file all in one step, use dvips, as in:

    dvips -Pvalkyr tutorial.dvi

If you want to make a .ps file without printing it, use the -o option:

    dvips -o tutorial.ps tutorial.dvi

You can also use dvips to print only some pages of a document, using the -p and -l options. The following command will print only pages 2 and 3 of this document.

    dvips -Pvalkyr -p2 -l3 tutorial.dvi

4 Math mode

LaTeX was originally developed for mathematicians who wanted to typeset their stuff. This means it has extensive support for formatting formulas and the like. To use this stuff, you need to put LaTeX in math mode. There are at least two ways to do this. One is to open and close math mode with $. The other (for when you have longer passages in math mode) is the pair of commands `\begin{math}` and `\end{math}`. Another command that is useful when you have formulas in running text is `\mbox`.

5 A note on style files

All of the macros packages mentioned so far are siting in an appropriate place on turing. To use them, all you need to do is declare them in the `\documentstyle` command. If you want to use your own style files or other ones that otherwise aren't in the right place on turing, you need to put them somewhere where LaTeX can find them.

The way to do this is to make a directory called TEX in your home directory. Then add the line:

setenv TEXINPUTS /user/<yourlogin>/TEX/:

to your .login. LaTeX will be able to access any .sty or .bst files you put there.

6 Bibliographies

Imagine never having to enter the bibliographical information for a particular work more than once, or having the computer make sure that every work you refer to in the text shows up in the bibliography, or not having to keep track of which of two things by the same author in the same year you called 'a' and which 'b'... Such are the luxuries of bibtex.

Bibtex comes with the standard commands `\cite` and `\nocite`. There are several packages extending those commands, including lsabib.bst/lsabib.sty, which I recommend. In order to use these, you need to save a copy of each in your TEX directory.

Here are some examples:

Lamport 1994 is a very approachable beginner's guide to LaTeX. Goossens *et al.* 1994 is a companion text to Lamport 1994 that has more advanced stuff. It's a little harder to read because it leaves out everything that is in Lamport 1994. Another text is Kopka and Daly 1995. This one has both beginning and advanced stuff in the same text. It is less approachable than Lamport 1994 but more approachable than Goossens *et al.* 1994.

Dai (1992a, 1992b) provides interesting insight into Chinese syntax.

Also, there are some other interesting works that I'm not going to say anything explicit about in the text.

References

CHOI, HYE-WON. 1996. Optimizing structure in context: the case of scrambling. Stanford University dissertation.

DAI, JOHN XIANG-LING. 1992a. The head in *wo pao de kuai*. Journal of Chinese Linguistics 20.84–119.

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GOOSSENS, MICHEL, FRANK MITTELBACH, and ALEXANDER SAMARIN. 1994. The LaTeX companion. Reading, MA: Addison-Wesley.

KOPKA, HELMUT, and PATRICK W. DALY. 1995. A guide to LaTeX 2_ε. Reading, MA: Addison-Wesley, second edition.

LAMPORT, LESLIE. 1994. LaTeX: A document preparation system. Reading, MA: Addison-Wesley, second edition.