

L^AT_EX tutorial

Emily M. Bender

January 20, 1997
updated January 20, 2005

1 Some basic stuff

L^AT_EX 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 L^AT_EX to start a new paragraph.

The % sign comments things out.

1.1 Special characters

The following are special characters in L^AT_EX, 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 â ã ä å ã ç ö 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 §2.7.

It is also possible to have examples formatted like:

- (2) a. First sentence fragment.
b. Another sentence fragment.

In this case, you can do some of the reference by hand, as in (2a). Or you can have it done automatically: (2a).

2.2 Quotation, description, itemize, enumerate

The quotation and description environments may also be useful.

2.3 Quotation

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]

2.4 Description

- Point one.

- (2) Point two.

- (2) Point two again.

2.5 Itemize

- Item one
- Item two
- * etc.

2.6 Enumerate

1. Uno
2. Due
3. Tre

2.7 Footnotes

L^AT_EX 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 footnote²

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`.

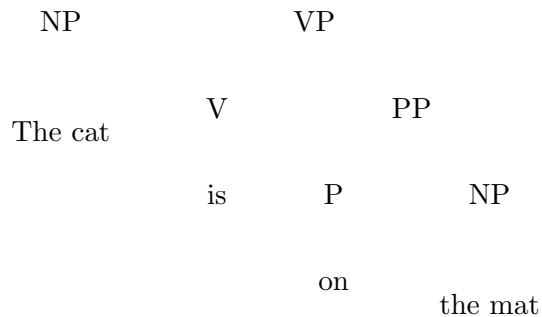
- (5) Kore-wa omosirokuna-i reibun desu.
This-TOP interesting.NEG-NONPST example.sentence cop
'This is an uninteresting example sentence.'

¹Like this one.

²This is another footnote.

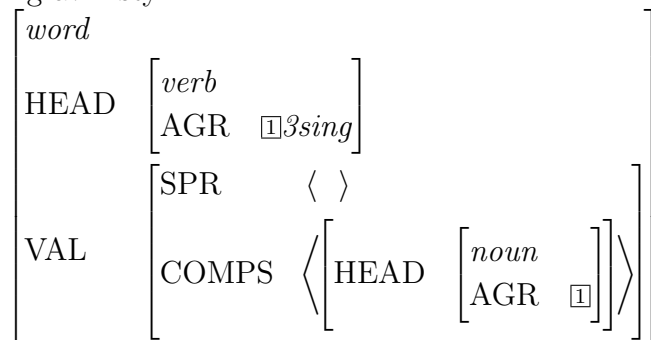
3.3 Trees

These trees are produced using Rob Malouf's `rtrees.sty` package.

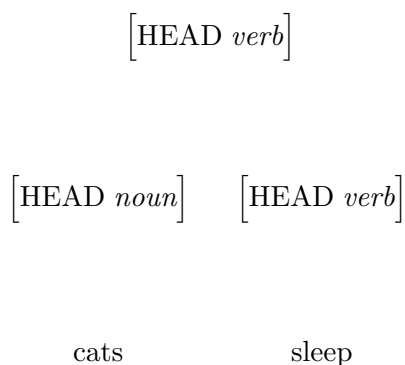


3.4 AVMs

Using `avm.sty`:



3.5 Trees with avms



4 A note on style files

Some of the commands you'll want to use come as part of the standard $\text{\LaTeX}$ distribution. Others are defined in style files (`.sty` files). If you want to use style files like `avm.sty` or

rtrees.sty, you'll need to put them in an appropriate directory so that L^AT_EX can find them.

In a linux/unix environment, one 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 .bashrc (if you're running bash) or equivalent. L^AT_EX will be able to access any .sty or .bst files you put there.

5 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 BIB_T_EX.

BIB_T_EX comes with the standard commands `\cite` and `\nocite`. There are several packages extending those commands, including robbib.bst/robbib.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 L^AT_EX. 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.

6 Debugging

When you run latex over your .tex file, it will try interpret all of your commands. If there's an error in your latex, the program will complain. Sometimes it will tell you something useful, like:

```
! Undefined control sequence.  
1.212 \latex
```

If you get an error like this, you've probably either misspelled the name of the command (in this case, it should have been L^AT_EX), or else you're using a command without including the style file which defines it. The '1.212' indicates that the offending command is on line 212 of your file. If you're using emacs as your text editor, you can get to line 212 like this:

M-x goto-line 212

Other times, the errors can be much less helpful, such as this one, caused by unbalanced square brackets in an avm:

```
! Missing \cr inserted.  
<inserted text>  
                                \cr  
1.199 \end{avm}
```

In this case, the actual problem was on line 198. If the particular line where L^AT_EX is complaining looks okay, try scanning upwards. Missing or unbalanced brackets, either the curly brackets of general L^AT_EX commands, or the \[-style brackets used in avm formatting are common culprits.

When latex reports an error, you can tell it to try to keep going by just hitting return. You may have to do this several times. If you're really impatient, try capital 'R', which means "don't stop to tell me about any more errors, just do your best." Sometimes, even when there are errors, you can still see something informative in the typeset file. This can be helpful in debugging.

References

- Choi, Hye-Won. 1996. *Optimizing Structure in Context: the Case of Scrambling*. PhD thesis, Stanford University.
- Dai, John Xiang-ling. 1992a. The head in *wo pao de kuai*. *Journal of Chinese Linguistics* 20(1):84–119.
- Dai, John Xiang-ling. 1992b. Rethinking case theory for constituency and word order in Chinese. *Journal of the Chinese Language Teachers Association* 27(1/2):85–110.
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- Kopka, Helmut, and Patrick W. Daly. 1995. *A Guide to L^AT_EX 2_ε*. Reading, MA: Addison-Wesley. Second edition.
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