

TEST DOCUMENT

*a small sample of **R Markdown***

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Chapter 1

Overview

On the Subject of L^AT_EX

This article serves as a brief overview of the L^AT_EX document preparation system coupled with examples of the complex formatting it can help achieve. It must be emphasized that this is only a basic guide to help familiarize you with the power of using L^AT_EX as a means to prepare professional-level documentation.

Okay... so what can I, like, *do* with it?

Honestly? Whatever you want! You can do basically everything you could ever need to do when it comes to formatting a document in a professional and consistent way. This is one of the key benefits of using L^AT_EX; as long as you give the appropriate commands and syntax, your document will appear exactly as you specified. This is especially true when it comes to formatting items like equations. Have you ever tried to write a mathematical formula in something like Word? It can be an absolute nightmare to get the formatting correct without destroying the other text in the document.

Here's an example of a continued fraction, something that would be *exceptionally* difficult to write out in Word:

$$e = 2 + \frac{1}{1 + \frac{1}{2 + \frac{1}{3 + \frac{1}{4 + \frac{1}{5 + \dots}}}}}$$

Now, that may look like it would be complicated to input into your text editor, but I can assure you that L^AT_EX makes this quite easy; all it takes is learning some basic commands.

Chapter 2

Examples

“I will, in fact, claim that the difference between a bad programmer and a good one is whether he considers his code or his data structures more important. Bad programmers worry about the code. Good programmers worry about data structures and their relationships.”

— Linus Torvalds

This time we actually used another package that we grabbed within our root *R* environment (`sudo R`) followed by the subcommand `install.packages('tufte')`. It allows us to put neat little footers into our block quotes. Neat, huh?

As stated by Aissen (1999), blah blah blah words words words. As you can see, all of the information that will end up in our bibliography is here, including the names of editors, the publisher, and the year of publication. Using this format, we can now call our new entry by its name, which in this case is `@aissen99`. Names can be whatever you choose that is easy to remember for you. I chose to use the author’s last name and the year of publication.

$$\begin{array}{ccc} x_{11} & x_{12} & x_{13} \\ x_{21} & x_{22} & x_{23} \end{array}$$

$$X = \begin{bmatrix} 1 & x_1 \\ 1 & x_2 \\ 1 & x_3 \end{bmatrix}$$

$$\Theta = \begin{pmatrix} \alpha & \beta \\ \gamma & \delta \end{pmatrix}$$

$$\begin{vmatrix} a & b \\ c & d \end{vmatrix} = ad - bc$$

Look at this table

Model	MPG	Cyl	Disp	HP
Mazda RX4	21.0	6	160	110
Mazda RX4 Wag	21.0	6	160	110
Datsun 710	22.8	4	108	93
Hornet 4 Drive	21.4	6	258	110
Hornet Sportabout	18.7	8	360	175
Valiant	18.1	6	225	105

References

Aissen, J. (1999). External possessor and logical subject in tz'utujil. In Payne, D. and Barshi, I., editors, *External Possession*. John Benjamins Publishing Company.