## Writing you dissertation with LaTeX

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### **Abstract**

This guide provides a gentle introduction to writing your linguistics dissertation using LTEX. For best results, copy the entire project and then open in a LTEX compiler to compare the source code and the compiled typeset document. Source code can also be accessed at <a href="https://github.com/gmholton/DissertationWriting">https://github.com/gmholton/DissertationWriting</a>.

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### Chapter 1: Introduction

This document is intended as a simple introduction to writing linguistics dissertations using LTEX. Individual chapters are stored as separate files in the chapters folder and then included in the main.tex document. This is just a simple quick-start guide. For good tutorial see the guide on Overleaf.com.

ETEX is not a WYSIWYG (what you see is what you get) word processor. Instead you enter instructions ("source code") which tell the ETEX how to compile your document. In most cases, ETEX does exactly what you tell it to do, though it can sometimes be difficult to make it do what you want it to do.

To make the most of this document, copy the project into Overleaf (or any other LATEX compiler) and compare the raw code with the compiled result. Play around with the code and see how your changes compile.

#### 1.1 First Section

ETFX ignores extra white space, so don't worry about spaces.

However, you can use \hfill

to force text to the right side of the page.

Separate paragraphs with at least two carriage returns. If you want extra space following a paragraph, end it with double backslash \\.

If you don't want a paragraph to indent, place the \noindent command before it.

Be careful with special characters such as &, %, \$, etc. These have special functions in  $\LaTeX$ , so to use them as regular characters you need to escape them with a backslash, i.e., \&, \%, \\$, etc.

The percent sign is used for comments. This can be particularly useful as you are writing, as instead of deleting text you can just "comment it out."

Note that by default Lagrange plain apostrophes ( ' and " ) into "smart" or "curly" quotes ( ' and " ). To get left side quotes ( ' and " ) you'll need to use the backtick ( ` ).

#### 1.1.1 My subsection

The itemize environment is useful for creating bulleted lists:

• Use \subsection{} to mark second level headings

- Use \subsubsection{} to mark third level headings
- Use \paragraph{} to mark fourth level headings

Label all of your sections, subsection, paragraphs, etc. with a mnemonic label useing \label{} following the section. This facilitates cross-references to other parts of the document, such as the discussion of figures in §3.3.

#### 1.1.2 My second subsection

Never have just one subsection.

#### 1.2 Second Section

Label all your sections and subsections so that you can make use of cross-referencing. For example, formatting of interlinear examples is discussed in §3.1.

### **Chapter 2: Literature Review**

This chapter provides a thorough review of previous research ....

#### 2.1 Previous Research

The study of spatial orientation systems in the Oceanic subgroup of Austronesian languages is well advanced (François 2004, 2015, Palmer 2015, Bennardo 2002, Senft 2004). Building on the pioneering work of Adelaar (1997), .... Block quotes can be added with the quote environment.

"The question remains whether the above directional terms are used in the same way in Madurese dialects spoken in the northern and north-western parts of Madura, which do not have the sea to the south or the interior to the north. In other words, are the directions still linked to local geography, or have they become independent from it so that the system now has a 'fixed' set of terms for cardinal directions?" (Adelaar 1997: 57)

It's easy to manage footnotes in LTEX. Unlike most word processors, the footnote location and the footnote text are stored together. Just put the footnote text inside the \footnote{} command.<sup>1</sup>

### 2.2 Second section

Always good to have a second section. If you somehow find yourself with only one section, then delete that and promote the subsections to sections.

<sup>&</sup>lt;sup>1</sup>It's good practice to place footnotes immediately following the end of the sentence, even if the reference is only to one word in the sentence. Footnotes following individual words may be justified in interlinear glosses.

### Chapter 3: Data

### 3.1 Interlinear Examples

Format interlinear examples using the shorthand codes \ea and \z. Each instance of \ea must be closed with \z. The following codes results in the example formatted as (1). If you need to align multiple words with a single gloss, put the words in curly braces { }.

```
\ea Example heading \label{ex:example label} \\
\gll example text \\
interlinear gloss \\
\glt 'free translation'
\z
```

Note the double backslashes \\ (line break) following the label and following both the example and gloss lines. There is *no* double backslash following the free translation line.

(1) Balantak elevational deixis (Busenitz and Busenitz 1992: 134) *I-ro'o*na intu-na woo' i-ya'a

extension-Low prep under-3sg:Poss areca extension-DEM

'that person down there underneath that areca palm'

Format an example with subexamples as follows by embedding another ea command followed by ex for subsequent subparts.

```
\ea Example title \label{ex:label} % note no \\ here
\ea \gll example text \\
interlinear gloss \\
\glt 'free translation'
\ex \gll example text \\. % note \ex not \ea here
interlinear gloss \\
\glt 'free translation'
\z\z
```

You can reference just one part of the example by supplying the letter(s) referring to the example part in square brackets with the \REF[]{} command. Note this only works with uppercase \REF, not lowercase \ref. Thus, \REF[b]{ex:busang} produces a reference to (2b) below.

(2) Busang cardinal direction terms (Barth 1910: 29)

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- a. Bèh ulé mata n dó muun side left eye GEN sun rise 'north' (literally, 'left of the rising sun')
- b. Bèh ulé mata n dó uli side left eye GEN sun return 'south' (literally, 'left of the setting sun')

#### 3.2 Tables

Use the table environment to create simple tables. Specify the columns and alignment as arguments of the tabular environment. Table 3.1 has 6 columns. The first is left-aligned, the others are center-aligned. Note that you can use the [h] option to ask ETEX to try to place your tables (and figures) inline, but the resulting table may not always be inline. This can be one of the most frustrating features of ETEX for users coming from a word processing background. There are various workarounds.

	prefix	PROX	MID	DIST	AND
'seaward'	lu-	lune	lupa	luma	lua
'landward'	li-	line	lipa	lima	lia
ʻup, out'	i-	ine	ipa	ima	ia
'down'	pu-	pune	pupa	puma	pua
'front'	ta(y)-	tane	tapa	tama	taya
ʻin, back'	mu-	mune	mupa	muma	mua
'side'	pa(y)-	pane	papa	pama	paya

Table 3.1: Directional terms in Ambel (Waigeo) (Arnold 2018: 489).

\multirow and \multicolumn can be used to span rows and columns, respectively, as in Table 3.2.

	LOC	TRANS	CIS
similar level	pai	tamai	damahi
back-, inland-, somewhat upward	dala	tarai?	indai?
upward	dasi?	tararr	HIII
front-, coast-, somewhat downward	dade?	tanae?	innae?
downward	baβa	tanaer	illiaei
seaward	_	sasae?	insae?

Table 3.2: Sangir elevational terms, showing forms for a stationary entity (LOCATIVE), movement away from speaker (TRANSLOCATIVE), and movement toward speaker (CISLOCATIVE) (after Jukes and Utsumi 2015).

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### 3.3 Figures

Place image files in the figures folder. Then insert them into the document using the figure environment. Specify the width of the figure using the width option. This can be a measurement such as 4cm or 5in, but it is often convenient to use a fraction of the \textwidth on the page, as in Figure 3.1.

```
\begin { figure } [h]
\centering
\includegraphics [width=mywidth] { myfig }
\caption {My Caption}
\label { fig:my_label }
\end { figure }
```

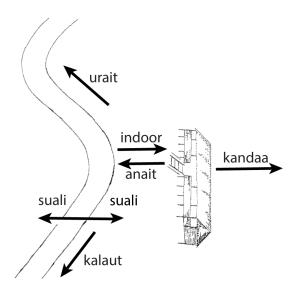


Figure 3.1: Embaloh riverine directional terms (after Adelaar 1997: 70).

### Chapter 4: Analysis

### 4.1 Reasons not to use LaTeX

ETEX is a typesetting tool. It's purpose is to provide pretty formatted documents. As such, it is a very appropriate tool for dissertation writing. Dissertations are single-authored documents, and while the Graduate Division may review the document to ensure that it meets university formatting guidelines, the author is typically responsible for achieving that formatting. The onus is on the author to take care of the creation of a table of contents, formatting and numbering of linguistic examples, internal cross-referencing, management bibliographic references—and many other tasks which would typically be handled by a publisher. With no publisher (and editor!) to intervene, ETEX fills the gap. For shorter documents, similar results can be achieved using word processors such as Microsoft Word. However, the use of word processors does not scale well for typesetting large documents such as dissertations.

### 4.1.1 Lagrange 4.1.1

Many linguistic publishers still make use of proprietary typesetting tools and workflows which require authors to submit final copies of manuscripts as a word processing document (often MS Word or RTF). While these publishers may permit authors to submit manuscripts for review as PDF's, once the review process is complete and final edits have been approved, they will request a word processing version of the document. Typically, this version will be required to have minimal formatting, e.g., no automatic numbering, interlinear examples tab-separated or in tables, etc. This version will then be used by the publisher to create the final layout. The problem for Lagent users is that there is no reliable method to export from Lagent to a word processing format such as MS Word. It is possible to use Adobe Acrobat to export the Lagent pdf to .docx, but extensive cleanup of the exported document may be required.

Increasingly, many publishers are using LeTeX for their in-house typesetting, and these publishers may accept and even encourage submissions in LeTeX (with a pdf for review). Moreover, the move toward open-access publishing has resulted in publishers placing more of the typesetting burden on authors. For example, Language Sciences Press strongly encourages LeTeX submissions. Bottom line: check with the publisher before you get too far along in the writing process. If the publisher requires submission in a word processing format, then you may find it easier to use a word processor to write your article. Use the right tool for the job.

#### 4.1.2 Co-authoring and collaboration with LaTeX

Collaboration is the norm these days, both within Linguistics and across the sciences more broadly. While the dissertation is a single-authored document, it is likely that many if not most of your publications will be co-authored. The emergence of online ETEX compilers such as Overleaf has made it much easier to collaborate—even incorporating commenting and tracked changes. However, co-authoring with ETEX generally requires all authors to be proficient in the use of ETEX. If one or more authors are new to ETEX, then depending on the length of the collaboration, bringing them up to speed may be impractical. The team may find it easier to adopt a common word processing platform instead.

One occasionally encounters the reverse scenario, where one or more authors profess an inability to use a word processor and insist on using ETeX. I find that such claims typically a philosophical stance rather than statements about ability. In general, it is easier for a ETeX user to learn to use a word processor than the other way around. However, there may be ulterior motives, such as a word processor user expressing a desire to learn ETeX. In this case the co-authoring process may represent an excellent learning opportunity. Bottom line: adopt a writing tool which will work for all members of the team. In many cases this tool will not be ETeX. Co-authorship requires compromise.

### 4.2 Citations and bibliography management

LETEX interfaces with very powerful bibliographic management tools. See the file references.bib for an idea of how citations are stored. There are many tools available for managing citations, such as BibDesk. You can also export from common tools such as Zotero. There are many examples of the use of citations within this document.

Next to the formatting of linguistic examples, the ability to efficiently manage references is probably the most powerful reason to use ETeX for writing your dissertation.

### References

- Adelaar, K. Alexander. 1997. An exploration of directional systems in West Indonesia and Madagascar. In Gunter Senft (ed.), *Referring to space: Studies in Austronsian and Papuan languages*, 53–82. Oxford: Oxford University Press.
- Arnold, Laura. 2018. *A grammar of Ambel: An Austronesian language of Raja Ampat, West New Guinea*: University of Edinburgh dissertation.
- Barth, J.P.J. 1910. Boesangsch-Nederlandsch woordenboek. Batavia: Landsdrukkerij.
- Bennardo, Giovanni. 2002. Representing space in Oceania: Culture in language and mind (Pacific Linguistics 523). Canberra: Pacific Linguistics.
- Busenitz, Marilyn J. and Robert L. Busenitz. 1992. Spatial deixis in Balantak. In *Pan-Asiatic Linguistics: Proceeding of the Third Intermediary Symposium on Language and Linguistics, vol.* 1, 131–149. Bangkok: Chulalongkorn University.
- François, Alexandre. 2004. Reconstructing the geocentric system of Proto-Oceanic. *Oceanic linguistics* 43(1). 1–31.
- François, Alexandre. 2015. The ins and outs of up and down: Disentangling the nine geocentric space systems of Torres and Banks languages. In Alexandre François, Sébatien Lacrampe, Franijeh M. and Stefan Schnell (eds.), *The languages of vanuatu: Unity and diversity* (Studies in the Languages of Island Melanesia, 5), 137–195. Canberra: Asia Pacific Linguistics Open Access.
- Jukes, Anthony and Atsuko Utsumi. 2015. Relative height terms in Sangiric languages. Paper presented at the International Conference on Austronesian Linguistics, Taipei.
- Palmer, Bill. 2015. Topography in language: Absolute frame of reference and the topographic correspondence hypothesis. In Rik De Busser and Randy J. Lapolla (eds.), *Language structure and environment: Social, cultural, and natural factors*, 179–226. Amsterdam: John Benjamins. doi:10.1075/clscc.6.08pal.
- Senft, Gunter. 2004. *Deixis and demonstratives in Oceanic languages*. Canberra: Australian National University.

# Appendix A

# Appendix B