

How to write a book for Language Science Press

Guidelines for authors and L^AT_EX
recommendations

Stefan Müller

DRAFT
of December 13, 2013, 19:32

Lecture Notes in Language Sciences,
No ??



How to write a book for Language Science Press

This book contains the guidelines for Language Science Press authors. For those who want to help keeping the production costs low and therefore decided to use \LaTeX it also contains descriptions of packages that can be used for typesetting trees, Attribute Value Matrices, OT-tableaux, Categorical Grammar proofs, LFG analyses, and much more. The setup of typesetting script with special fonts as for instance right to left scripts like Arabic is explained. The \LaTeX chapter also contains sections concerning the efficient workflow in professional typesetting environments using \LaTeX .

Stefan Müller is an experienced \LaTeX user who has typeset four published books and several book manuscripts and journal articles.

DRAFT
of December 13, 2013, 19:32

Stefan Müller

How to write a book for Language Science Press



Lecture Notes in Language Sciences

General Editors: Martin Haspelmath and Stefan Müller

In this series:

0. Stefan Müller: How to Write a Book for Language Science Press

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recommendations

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DRAFT
of December 13, 2013, 19:32

Language Science Press
Berlin, Leipzig

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langsci-press.org

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This book is dedicated to everybody who cannot afford to
buy books by profit oriented publishers.

Preface

The purpose of this book is twofold: it contains a guideline with some style recommendations for all authors. The second part is for authors who use \LaTeX or who want to learn \LaTeX in order to support Language Science Press. The second part is also a reference for those who volunteered to help typesetting manuscripts that were not submitted in \LaTeX . See Müller 2012 and Müller & Haspelmath 2013 for an overview of the general setup of the project.

Acknowledgements

This book is typeset with \XeLaTeX . We thank the \LaTeX developers for their work and the members of the German *German Language TeX Users Group Communication List* and those replying at <http://tex.stackexchange.com> for many usefull hints and suggestions.

I thank Matthias Hüning for comments on an earlier version of this document and Corinna Handschuh and Francesco Cangemi for being the first ones using the new \LaTeX classes and providing feedback to us.

Berlin, December 13, 2013

Stefan Müller

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1 General Information on Language Science Press

1.1 Background and Motivation

1.2 Set Up and Responsibilities

1.2.1 Advisory Board

1.2.2 Series and Editorial Boards

1.2.3 Open Monograph Press and ZEDAT/CEDIS

1.2.4 The Library of the Freie Universität Berlin

2 Guidelines for authors

The following sections describe the layout of various items that play a role in typesetting.

2.1 Headings

Please provide the headings of chapters and sections in normal spelling. If you are writing English, please do not capitalize content words unless capitalization is required by orthographical rules.

Your document may use structures up to six levels, that is there may be a section with the number 1.2.3.4.5.6.¹ However, such elaborated structures may be difficult for the readers, so there should be a good motivation for going beyond four levels.

2.2 Emphazizing

If you want to *emphazize* terms, please use *italics*. Bold face has to be avoided under any circumstances. The only place where boldface is used is section headings.

2.3 Glossed examples

Please gloss all examples and provide them with translations. The glossing should be done according to the Leipzig Glossing Rules. If you need special abbreviations that are not defined by the Leipzig Glossing Rules², put them in a table immediately before the first chapter of a monograph. In case of edited volumes the tables with abbreviations should be placed immediately before the references.

Martin: provide an example

¹ See page 22 for an actual use of subsubsections.

² <http://www.eva.mpg.de/lingua/resources/glossing-rules.php>. 27.10.2013.

2.4 Figures and tables

Figures and tables should come with a caption. Captions are set below figures and above tables. The caption should be in normal spelling, that is without capitalization of content words. Please number figures and tables. The number should consist of the chapter number and a number that starts with one for every new chapter. There has to be one counter for figures and another one for tables. Figure 2.1 is an example of a figure and Table 2.1 is an example of a table.

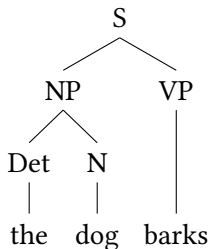


Figure 2.1: An example of a figure: Analysis of the sentence *The dog barks*.

Table 2.1: An example of a table taken from Croft 2003: 214

	Low categoriality unit	Unit with wich it clusters
'Noun'	low referentiality NP	forgrounded verb
	attached body part noun	forgrounded verb
	anaphoric NP	forgrounded verb, emphasized element
'Verb'	tense/aspect/mood auxiliary	forgrounded verb

2.5 Footnotes

Please use footnotes rather than endnotes. Footnotes go to the end of the clause after punctuation unless they refer to a specific word or phrase.³

Please do not use footnotes in tables or figures⁴ but attach them to the text preceeding or following them.

³ This is an example of a footnote that refers to the whole clause.
⁴ This is a footnote that refers to the word *figures*. If only there was something interesting to say about figures apart from the fact that they are floating objects.

2.6 Quotations

If long passages are quoted, they should be indented and the quote should be followed by the exact reference:

Precisely constructed models for linguistic structure can play an important role, both negative and positive, in the process of discovery itself. By pushing a precise but inadequate formulation to an unacceptable conclusion, we can often expose the exact source of this inadequacy and, consequently, gain a deeper understanding of the linguistic data. More positively, a formalized theory may automatically provide solutions for many problems other than those for which it was explicitly designed. Obscure and intuition-bound notions can neither lead to absurd conclusions nor provide new and correct ones, and hence they fail to be useful in two important respects. I think that some of those linguists who have questioned the value of precise and technical development of linguistic theory have failed to recognize the productive potential in the method of rigorously stating a proposed theory and applying it strictly to linguistic material with no attempt to avoid unacceptable conclusions by ad hoc adjustments or loose formulation. (Chomsky 1957: 5)

Short passages should be quoted inline in italics: Chomsky (1957: 5) stated that *[o]bscure and intuition-bound notions can neither lead to absurd conclusions nor provide new and correct ones*.

If you quote text that is not in the language of the book provide a translation. Short quotes should be translated inline, long quotes should be translated in a footnote.

2.7 Crossreferences in the text

Please use the crossreferencing mechanisms of your text editing/type setting software. Using such crossreferencing mechanisms is less error-prone when you shift text blocks around and in addition all these crossreferences will be turned into hyperlinks between document parts, which makes the final documents much more useful.

If you have numbered example sentence, please start with (1) for every new chapter.

Please use capitals if you refer to specific sections, tables, or figures: *As we have shown in Section 3.1, As Figure 3.5 shows*. Do not capitalize without a number: *In the following section we will discuss*.

What about footnotes? I usually do not capitalize. Seems inconsistent.

2.8 References

If books or larger articles are cited, exact page numbers should be provided. This is both good for authors since it helps them to keep track of their source and enables them to find and reread the referenced passages and it is a good service to the readers.

We use the *Unified Style Sheet for Linguistics*, which is described here: <http://celxj.org/downloads/UnifiedStyleSheet.pdf>. The \LaTeX file is contained in the \LaTeX classes that are used for typesetting Language Science Press books. Please deliver a \LaTeX file with all your references together with your submissions. \LaTeX can be exported from all common bibliography tools (We recommend BibDesk for the Mac and JabRef for all other platforms).

The references in your \LaTeX file will be typeset correctly automatically. So, provided the \LaTeX file is correct, authors do not have to worry about this. But there are some things to observe in the main text. Please cite as shown in Table 2.2.

Table 2.2: Citation style for Language Science Press

citation type	example
author	As Maling & Zaenen (1985: 215) have shown As Maling & Zaenen (1985: 215) and Bloomfield (1933) have shown
work	As was shown in Saussure 1916: 215, this is a problem for theories that ...
work	This is not true (Saussure 1916; Bloomfield 1933).

If you have an enumeration of references in the text as in *As X, Y, and Z have shown*, please use the normal punctuation of the respective language rather than special markup like ‘;’.

Say something about decapitalization.

2.9 Edited volumes

Papers in edited volumes should start with an abstract.

2.10 Checklist

The following is a general checklist for authors. Author who use \LaTeX should also consult the checklist for advanced authors/typesetters in Section 3.8.

3 L^AT_EX

3.1 Installation of the `langsci` class

The L^AT_EX class for typesetting Language Science Press books was developed by Timm Lichte with help be Berthold Crysmann and me. It can be downloaded from the GitHUB repository at: <https://github.com/langsci/latex> You can download the classes directly from the given web page or use the following git commands to create a local copy of the repository:

```
git init
git clone https://github.com/langsci/latex.git
```

If you are using `git`, you can update your installation by executing the following command:

```
git pull origin
```

Place all files and subdirectories from this repository into your local working directory.

3.2 Using the `langsci` class

Once you installed the classes in your system, you may look at the file `test.tex` to see how a book can be typeset. The code of this book is available in the directory `Guidelines`. Once you set up your L^AT_EX files you can compile them by calling

```
xelatex yourfilename.tex
```

3.2.1 Class options

A L^AT_EX document starts with a specification of a document class. Usually this is a class for books, articles, or technical reports. Language Science Press has a special class that is called `langsci` and is based on the book class from the KomaScript package. Several options can be passed to the class. The following code shows how the class is loaded and how options are set.

```

option!series\documentclass[series=labphon,
option!number      number=1,
option!isbn         isbn=978-3-944675-01-5,
                   url=http://langsci-press.org/catalog/book/16,
                   output=long]{langsci}

```

The options are explained in the following paragraphs.

3.2.1.1 **series**

The name of the series in which a book is published has to be passed to the `langsci` package. This will ensure that the name of the series is put on the cover and the right color for your series will be selected. Table 3.1 provides an overview of the series that are established as of December 13, 2013.

Table 3.1: Series of Language Science Press as of December 13, 2013

Option	Full Name
<code>eotms</code>	Empirically Oriented Theoretical Morphology and Syntax
<code>eotmsig</code>	Implemented Grammars
<code>sidl</code>	Studies in Diversity Linguistics
<code>algad</code>	African Language Grammars and Dictionaries
<code>tmnlp</code>	Translation and Multilingual Natural Language Processing
<code>lnls</code>	Lecture Notes in Language Sciences
<code>nc</code>	Monographs on Comparative Niger-Congo
<code>labphon</code>	Studies in Laboratory Phonology

3.2.1.2 **number**

Authors will be informed by their editor about the number that their book has in the series. This number is passed with the `number` option to the `langsci` class.

3.2.1.3 **isbn**

Once a manuscript is accepted, authors have to sign a publication agreement with the FU Library (see Chapter 4). Then they will get an ISBN, which has to be passed to the `langsci` class.

3.2.1.4 **url**

When a manuscript is submitted to Language Science Press the submission gets a number and there will be a corresponding URL. This URL has to be passed to the *langsci* class, since it will be part of the impressum of your book.

option!url
option!output
option!smallf
option!draftm
title@\title
subtitle@\subt

3.2.1.5 **output**

There are three options for output: *long*, *short*, and *inprep*. If you pass *long* to the *langsci* class, all pages are printed. This includes front and backpane of the cover and also its spine. If the option *short* is used, the cover pages are omitted. This document version is much more printer friendly since the colored pages are not included.

The option *inprep* suppresses everything that refers to Language Science Press. This gives authors the possibility to write their book using the Language Science Press classes and styles prior to submission. They may then distribute the manuscript without revealing their intention to submit to Language Science Press.

3.2.1.6 **smallfont**

Language Science Press books are typeset with an 11pt font. Those books that would be longer than 500 pages should be typeset with the *smallfont* option, which selects a 10pt font.

3.2.1.7 **draftmode**

Since Language Science Press does not have any commercial interest you can put your book on webpages and distribute it freely. We encourage authors to do this in order to discuss the work and improve it before final publication. If authors want to circulate prefinal versions, they can use the option *draftmode*. This prints a large watermark onto the first page and adds a footer to ever page that informs the reader about the fact that he is reading a draft and the date and time of the creation of the draft.

3.2.2 **Commands**

You can specify a title with the `\title` command (L^AT_EX standard). In addition the *langsci* class provides a command for specifying a subtitle (`\subtitle`). The

author@\author author of a book is specified by \author. A separate page with a dedication can be inserted by \dedication.
 option!dedication
 BackTitle@\BackTitle The title of the book that goes to the back of the book is specified by \BackTitle
 BackBody@\BackBody and the cover text on the back is provided by \BackBody.
 package!natbib
 bibtex@BIB-
 T_EX

3.3 Workflow

mex@\mex
 index{(
 aimention@\amention

3.3.1 Compiling the document

3.3.2 Makefiles

3.3.3 Using includes

3.3.4 Version control

3.4 Document structure

3.4.1 References

Language Science Press uses the natbib package together with B_BT_EX and the B_BT_EX style unified.bst.

3.4.2 Crossreferencing

You may use (\mex{1}) to refer to the following example and (\mex{0}) to the preceding example. You can also pass smaller numbers or larger numbers to \mex but I would suggest not to do this since often text blocks are inserted between the example and its description and then references are broken. Furthermore the standard referencing mechanism creates hyperlinks to the example sentences and depending on your viewer this gives you a nice preview of the referenced material, which you do not get with \mex. See Figure 3.1 on the next page for an example for such a preview.

There should not be a linebreak in something like *Section 4*. This is achieved by using an explicit whitespace: Section~\ref{sec-examples} This also makes sure that L^AT_EX is not inserting too much space when material is distributed in a line.

3.4.3 Indexes

The Language Science Press class is set up in a way that an author index is created automatically. If you want to add an author that is not cited (for instance in the acknowledgements), you can do this by calling \aimention{Zappa, Frank}.

Author	As Maling & Zaenen (1985: 215) has shown
	As Maling & Zaenen (1985: 215) and Bloomfield (1933) have shown
Work	As was shown in Saussure (1916: 113)
Work	This is not true (Saussure 1916: 113)

Table 2.1: Citation style

If you have an enumeration of references in the text as in *As X, Y, and Z have*

feature!COMPS
Mann
Besprechung
Lesung
Sitzung
Vorlesung

Figure 3.1: Hyperlinked reference allow a preview in some viewers

You may enter items into the subject index by calling `\is`, for example

```
\is{word}
```

Regions can be specified by appending `| (` to the keyword at the beginning of a region and `|)` at the end of the region. For instance this section has the index entry `\is{index| (}` after the first word of this section and `\is{index|)}` at the very end of this section. If this rather brief section happens to be set on one page, \LaTeX enters one page number into the index. If there is a pagebreak in the middle of this section, a region is entered into the index.

If you mention a language, you may add it to the language index:

```
\il{Mandarin Chinese}
```

If you are working in a theory that uses features (like LFG or HPSG), you may use `\isfeat` to enter features into the subject index. `\isfeat{comps}` would enter the COMPS feature into the subject index. The typesetting of the feature name in SMALL CAPS will be done automatically.

Words (or stems) can be entered into a special index by using `\iw`. For instance, `\iw{Mann}` enters the word *Mann* in to the index of expressions.

Authors working in the area of morphology may find a reverse index of expressions useful. For instance, if one wants to find all references to words ending on *-ung* (as for instance *Besprechung*, *Lesung*, *Sitzung*, or *Vorlesung*), one can look them up in the reverse index of expressions easily.

All these index commands can also be used in footnotes.¹

All index entries are hyper-linked to the respective pages.

¹ The commands are set up in a way that automatically distinguishes between index entries in footnotes and outside of footnotes. For instance the call of `\iw{Mann}` for the word *Mann* causes a special marking in the expression index.

`proofmodetrue@\proofmodetrue`
`option!draftmode`
`index)`

Indexes are inserted at the end of the document by specifying a subset of the following calls:

```
\clearpage
\pdfbookmark[0]{Index}{Index}
\pdfbookmark[1]{Expression index}{Expression index}
\printindex[wrđ]
\pdfbookmark[1]{Reverse expression index}{Reverse expression index}
\printindex[rwrđ]
\pdfbookmark[1]{Name index}{Name index}
\printindex[aut]
\pdfbookmark[1]{Language index}{Language index}
\printindex[lan]
\pdfbookmark[1]{Subject index}{Subject index}
\printindex
```

While working at a manuscript it can be practical to see index entries in the margins. Index entries may be switched on by specifying `\proofmodetrue` in the preamble of the document. The following specification checks whether the option `draftmode` of the `langsci` is used and displays the index entries in the margin if this is the case:

```
\iflsDraft
\proofmodetrue
\fi
```

3.4.4 Hyphenation

There is a special draft mode that can be used for the preparation of manuscripts. It can be enabled by passing the option `draftmode` to the `langsci` class. In `draftmode` words that could not be hyphenated automatically stick out in the right margin. Such problematic words are marked with a black box so that they can be detected easily. You can fix such problems by inserting explicit hyphenation rules in a word. This is done by `\-`, for example `weath\er`. However, this method is dispreferred since it only affects one occurrence of the word rather than all occurrences in the current and further documents. The right way to deal with hyphenation issues is to put your hyphenation preferences into a file and include this file in all your publications.

```
\hyphenation{
Ajd-ukie-wicz
Prze-piór-kow-ski
To-ma-sel-lo
To-ron-to
trans-for-ma-tions-gram-ma-ti-sches
Tü-bing-en
```

```
Um-welt-ver-gif-tung
Ver-lags-buch-hand-lung
West-deut-scher
Wis-sen-schaft-liche
weath-er
}
```

```
glossing|(
package!lsp-
gb4e|(
package!gb4e
Mann
schlafen
Linguist
Nobelpreis
glauben
```

3.5 Packages specific for linguistics

There is a huge amount of packages that can be used for various purposes. Mittelbach & Goossens 2013 is a good reference book. This section discusses some aspects of some packages that are relevant for linguistics. Every \LaTeX package comes with a documentation and users should consult these documentations too. The purpose of this section is to point users to the packages that we think serve their purpose best and that are compatible with other packages and the Language Science Press classes, as this book proves.

3.5.1 Glossed examples

Glossed examples are typeset with a modified version of the `gb4e` package by Craig Thiersch. The modified package is called `lsp-gb4e`. It is contained in the styles directory that is delivered with the Language Science Press \LaTeX classes. It differs from the original package in loading a version of `gloss` that was modified by Alexis Dimitriadis in order to be compatible with `jambox` (see Section 3.5.2).

Simple examples like (1) can be typeset as shown below.

- (1) Der Mann schläft.
 the man sleeps
 ‘The man sleeps.’

```
\ea
\gll Der Mann schläft.\
      the man   sleeps\
\glt ‘The man sleeps.’
\z
```

Lists of examples can be typeset with `\eal` and `\zl` respectively. The example in (2) shows how the sentences can be aligned properly:

footnote(
footnote)

- (2) a. Ich glaube dem Linguisten nicht, einen Nobelpreis gewonnen zu haben.
I believe the linguist not a Nobel.prize won to have
'I don't believe linguist's claim that he won a Nobel prize.'
- b. * Dem Linguisten einen Nobelpreis glaube ich nicht gewonnen zu haben.
the linguist a Nobel.price believe I not won to have
have

```
\eal
\ex[] {
\gll Ich glaube dem Linguisten nicht, einen Nobelpreis gewonnen zu haben.\\
      I believe the linguist not a Nobel.prize won to have\\
\glt 'I don't believe linguist's claim that he won a Nobel prize.'
}
\ex[*] {
\gll Dem Linguisten einen Nobelpreis glaube ich nicht gewonnen zu haben.\\
      the linguist a Nobel.price believe I not won to have\\
}
\zl
```

If you want to add a footnote that provides the source of an example as in (3), you can do this as follows:

- (3) Piloten fik frataget sit certifikat²
pilot.DEF got deprived.of his license
'The pilot was deprived of his license to fly.'

```
\ea
\gll Piloten fik frataget sit certifikat\footnotemark\\
      pilot.{\sc def} got deprived.of his license\\
\footnotetext{KorpusDK.}
\glt 'The pilot was deprived of his license to fly.'
\z
```

Please call the `\footnotetext` command before the translation, since otherwise the `footnotetext` may be typeset on a page that is different from the one where the `footnotemark` is set.

For the typesetting of an additional line with the original script, one may use `\glll` rather than `\gll`. (4) shows a Chinese example:

² KorpusDK.

(4) 狗 叫 了。

gou3 jiao4 le

dog bark ASP/CRS

‘The dog is barking.’/‘The dogs are barking.’

glossing|)
package!lsp-
gb4e|)
package!jam-
box|(
Maltese

```
\ea
\glll 狗      叫      了。\\
      gou3    jiao4    le\\
      dog     bark     ASP/CRS\\
\glt ‘The dog is barking.’/‘The dogs are barking.’
\z
```

In some subdisciplines of linguistics (e. g. typology) the examples are written in italics as in the following example:

(5) *Piloten fik frataget sit certifikat*³

pilot.DEF got deprived.of his license

‘The pilot was deprived of his license to fly.’

Authors do not have to care for this. The code for typesetting this is exactly the same as for the variant without italics. The series editor decided whether italics is used or not.

3.5.2 **jambox**

The package `jambox` by Alexis Dimitriadis can be used to provide information about the language of an example or about a certain other aspect to be highlighted.

- | | | | |
|-----|----|---|-------|
| (6) | a. | Ingrid kiel-et il-mazzit-a. | (SVO) |
| | | Ingrid eat-3SG.F DEF-black.pudding-SG.F | |
| | | ‘Ingrid ate black pudding.’ | |
| | b. | Kielet ilmazzita Ingrid. | (VOS) |
| | c. | * Kielet Ingrid ilmazzita. | (VSO) |
| | d. | Ingrid ilmazzita kielet. | (SOV) |
| | e. | Ilmazzita Ingrid kielet. | (OSV) |
| | f. | Ilmazzita kielet Ingrid. | (OVS) |

The call of `\jambox` has to follow the linebreak after the gloss:

³ KorpusDK.

```

package!jam-\ex[]{\box}
\label{ex-ingrid-kielet-ilmazzita}
package!tikz\gll Ingrid kiel-et il-mazzit-a.\
qtree(
    Ingrid eat-3fsg def-black.pudding-fsg\ \jambox{(SVO)}
package!tikz\glt 'Ingrid ate black pudding.'
}

```

The distance from the right margin can be specified by passing the largest object to be placed in a jambox to `\settowidth`:

- | | | |
|-----|-----------------------------|-----------|
| (7) | a. The man reads the book. | (English) |
| | b. Manden læser bogen. | (Danish) |
| | c. Der Mann liest das Buch. | (German) |

```

\ea
\settowidth\jamwidth{(German)}
\ex The man reads the book. \jambox{(English)}
\ex Manden læser bogen. \jambox{(Danish)}
\ex Der Mann liest das Buch. \jambox{(German)}
\zl

```

3.5.3 Trees: `tikz-qtree`

Several tree-drawing packages are around and all have their advantages and disadvantages. I used `tree-dvips` for decades, but it is incompatible with X_YL^AT_EX, since it creates PostScript rather than PDF. Exploring the options I discovered `tikz-qtree`, which is a `tikz`-based reimplement of Alexis Dimitriadis' `q-tree` package. The syntax for drawing trees is rather simple and in comparison to `tree-dvips` drawing trees is considerably speeded up. Figure 3.2 shows a simple example.

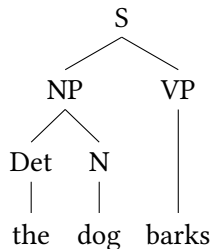


Figure 3.2: Tree for *The dog barks*. drawn with `tikz-qtree`

```

\begin{tikzpicture}
\tikzset{level 1+/.style={level distance=2\baselineskip}}
\tikzset{frontier/.style={distance from root=6\baselineskip}}
\Tree[.S
      [.NP
        [.Det the ]
        [.N   dog ] ]
      [.VP barks ] ]
\end{tikzpicture}

```

```

package!tikz-
  qtree)
package!drs(

```

The code below shows how words below a certain node can be put under a triangle as in Figure 3.3.

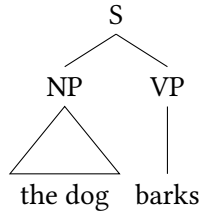


Figure 3.3: Tree for *The dog barks.* with abbreviated NP

```

\begin{tikzpicture}
\tikzset{level 1+/.style={level distance=2\baselineskip}}
\tikzset{frontier/.style={distance from root=5\baselineskip}}
\Tree[.S
      [.NP \edge[roof]; {the dog} ]
      [.VP barks ] ]
\end{tikzpicture}

```

3.5.4 DRSeS: **drs**

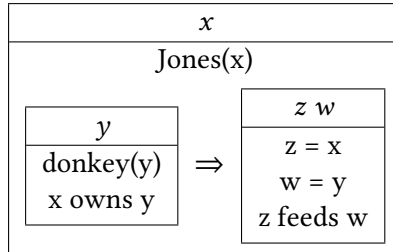
DRSeS can be typeset using the `drs` package by Alexis Dimitriadis. There are various commands that let you typeset simple DRSeS, ones with implications and DRSeS with quantifiers. Some examples from the manual are given below:

x y
Jones(x)
Ulysses(y)
x owns y

```

package!drs)\drs{x y}{Jones(x) \\\ Ulysses(y) \\\ x owns y}
package!avm(
package!avm)
Optimality
Theory|(
tabular

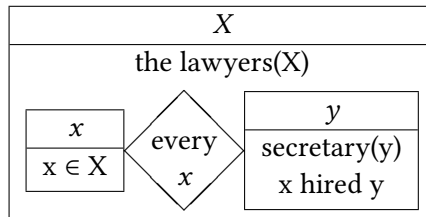
```



```

\drs{x}{Jones(x) \\\
  \ifdrs{y}{donkey(y)\x owns y}
    {z w}{z = x\\ w = y\\ z feeds w}}

```



```

\drs{X}{ the lawyers(X) \\\
  \qdrs{x}{x $\in$ X}
    {every}{x}
    {y}{secretary(y) \\\ x hired y}}


```

3.5.5 AVMs

$$\text{word} \rightarrow \left[\begin{array}{l} \text{MORPHS} \quad \boxed{e_1} \bigcirc \dots \bigcirc \boxed{e_n} \\ \text{MORSYN} \quad \boxed{0} \left(\boxed{m_1} \uplus \dots \uplus \boxed{m_n} \right) \\ \text{RULES} \quad \left\langle \begin{array}{l} \text{MORPHS} \quad \boxed{e_1} \\ \text{MUD} \quad \boxed{m_1} \\ \text{MORSYN} \quad \boxed{0} \end{array} \right\rangle, \dots, \left\langle \begin{array}{l} \text{MORPHS} \quad \boxed{e_n} \\ \text{MUD} \quad \boxed{m_n} \\ \text{MORSYN} \quad \boxed{0} \end{array} \right\rangle \right]$$

3.5.6 OT tableaux


This section just provides some examples of how Optimality Tableaux can be typeset.

Input	Cnstrnt 1	Cnstrnt 2	Cnstrnt 3
candidate 1	*!		
candidate 2		*	
 candidate 3			*


```
\begin{tabular}
  {|l|c|c|c|}\hline
    & \textbf{Input} & & Cnstrnt 1 & & Cnstrnt 2 & & Cnstrnt 3\\ \hline\hline
    & candidate 1 & & *! & & & & \\ \hline
    & candidate 2 & & & & * & & \\ \hline
\hand & candidate 3 & & & & & & * \\ \hline
\end{tabular}
```

`\hand` is defined as follows:

```
\usepackage{pifont}
\newcommand{\hand}{\ding{43}}
```

Input	Constraint 1	Constraint 2	Constraint 3
candidate 1	*!		
candidate 2		*	
 candidate 3			*

```
\begin{tabular*}{0.95\textwidth}
  {@{\extracolsep{\fill}}|rl|c|c|c|}\hline
    & \textbf{Input} & & Constraint 1 & & Constraint 2 & & Constraint 3 \\ \hline\hline
    & candidate 1 & & *! & & & & \\ \hline
    & candidate 2 & & & & * & & \\ \hline
\hand & candidate 3 & & & & & & * \\ \hline
\end{tabular*}
```

	/qi/	qi	qi
	[qi]		*
	[*qi]	*!	

```
\usepackage{pstricks,colortab}

\begin{tabular}[t]{r|c|c|c|}
\cline{2-4}
  & /qi/ & & qi & & qi & & \\ \hline
\LCC
  & & & & & \lightgray & & \\ \hline\hline
\hand & [qi] & & & & * & & \\ \hline
  & [*qi] & & *! & & & & \\ \hline
\ECC
\end{tabular}
```

Optimality
The-
ory))
font{(
Chinese
Chinese
Characters

	VO	OV
prefixing	Tagalog	Ma'a
suffixing	Kwakwala	Japanese

package!xeCJKLCC
Arabic
Script
Persian

```
\begin{tabular}{|l|c|c|} \hline
&VO&OV&& \hline\hline
&&&& \hline
prefixing &Tagalog&Ma'a&& \hline
\hline
&&&& \hline
suffixing &Kwakwala&Japanese&& \hline
\hline
\end{tabular}
```

3.5.7 Font issues and right to left scripts

Since we are using X_YL^AT_EX, all fonts that are installed in the canonical font directories can be used. We are using the font `Linux Libertine`, which is unicode-based and contains a lot of the characters linguists want to use.

3.5.7.1 Chinese

You can enter Chinese characters directly and mix them with ASCII text without any further markup provided you load the `xeCJK` package. We already saw an example in (4) on page 17. In order to type Chinese text, one has to load the `xeCJK` package with the option `indentfirst` set to `false` and select an appropriate font:

```
\usepackage[indentfirst=false]{xeCJK}
\setCJKmainfont{SimSun}
```

3.5.7.2 Arabic script

Arbaic script is the most challenging script for typesetting since it is written from right to left and contains ligatures. If you load the `bidirectional` package, you can mix right to left and left to right text.⁴

(8) او مرد را دوست نخواهد داشت.

⁴ Please have a look at the source code. The `verbatim` environment has difficulties to display Arabic text and hence the call to `\PRL` comes out scrambled.

او مرد را دوست نخواهد داشت. و مرد را دوست نخواهد داشت.
داشت. و مرد را دوست نخواهد داشت.
U mard rā dust naxāhad dāšt.
He/she man DOM friend NEG.want have
'He/she will not love the man.'

Hebrew|(
Hebrew|)
IPA
symbols|(
font|)
IPA sym-
bols|)

```
\newfontfamily\ Parsifont[Script=Arabic]{XB Niloofar}
\usepackage{bidi}
\newcommand{\PRL}[1]{\RL{\Parsifont #1}}

\ea
\PRL{داشت. \X واهد دوست را او}
\gll U      mard rā      dust      naxāhad      dāšt.\X
      He/she man {\sc dom} friend {\sc neg}.want have\X
\glt 'He/she will not love the man.'
\z
```

3.5.7.3 Hebrew

Hebrew is also written from right to left. The characters are part of Linux Libertine, so no extra font has to be loaded to set examples like (9):

(9) האישה קוראת ספר.
 ha-'iša qore't sefer.
 DEF-woman read.PRES.F.SG book
 'The woman is reading a book.'

```

\ea
\glll \RL{קוראת האישה} \{\ספר.
      ha-'iša      qore't      sefer.\
      {\sc def}-woman read.{\sc pres}.\{\sc f}.\{\sc sg} book\
\glt 'The woman is reading a book.'
\z

```

3.5.7.4 IPA symbols

The IPA symbols are part of the Linux Libertine font and hence can be entered into the document directly. The IPA unicode symbols can be created online at <http://ipa.typeit.org/full/>. (10) shows some examples:

(10) b e k r j s θ t̃ t̃ s t̃ v ö u a v m w w x ʎ y y x z z z ? ʎ f ? ã o + j j j j j j j j

If you find symbols that are not covered by the font, please use the `tipa` package.

3.6 Bells and whistles

3.6.1 `varioref`

`varioref` is loaded by the Language Science Press class file. You can use `\vref` to refer to floating objects like figures and tables. L^AT_EX automatically determines whether the floating object is on the same page or further away. If the float is on the next page and the next page is to the right of the current page, L^AT_EX will insert an appropriate text like *on the facing page*. If we are on a right page, L^AT_EX will insert something like *on the next page* or *on the facing page*. If the float is further away, a page number will be provided.

3.6.2 `german` for hyphenation

If you write things like `head-driven` or very long pathes like `SNYSEM|LOC|CAT|HEAD|MOD|LOC`, L^AT_EX does not do hyphenation (in the part following the dash).

`german.sty` provides additional markup that allows for proper hyphenation:

```
head"=driven
{\sc snysem$|$""loc$|$""cat$|$""head$|$""mod$|$""loc}
```

With this markup even long pathes like `SNYSEM|LOC|CAT|HEAD|MOD|LOC|CAT|HEAD` are typeset properly. Alternatively you may write

```
{\sc snysem$|$\-loc$|$\-cat$|$\-head$|$\-mod}
```

which introduces a dash at the place of the linebreak: `SNYSEM|LOC|CAT|HEAD|MOD|LOC|CAT|HEAD`.

If you use `german.sty` for a book whose primary language is not German, do not forget to specify the language you are using. For example, if your book is in US English you have to specify the following:

```
\selectlanguage{USenglish}
```

Otherwise the section name for references comes out in German.

3.6.3 Resizing large objects

Trees and AVMs often are too big to fit onto one page. The `langsci` comes with commands for shrinking large objects. You may pass your complex object as an argument to `\and` and this will scale the object to `\linewidth` (the remaining space on the current line). There is a more clever version of this command: `\centerfit`.

This command checks whether there is enough space for an object and if this is the case it centers it in the line. If the object is larger than the `\linewidth`, it is resized to fit the line. This is very handy for typesetting figures. You may copy and paste figures to other documents with a different text width without any adaptations.

package!xspac
package!todon

3.6.4 Rotating figures and tables

3.6.5 **xspace** and abbreviations

3.6.6 **todonotes**

3.6.7 Style files and multiple projects

Pathes, shell variables ...

3.7 Things you should not do

- Please do not use explicit linebreaks to mark a new paragraph. Paragraphs are marked by an empty line in the text.

3.8 Checklist for typesetters/authors using **L^AT_EX**

4 Publication

Language Science Press books are published on the Document Server of the Freie Universität Berlin together with a Print on Demand option.

Authors have to sign a publication contract with the FU Library. The contract is available here in German: <http://edocs.fu-berlin.de/docs/content/main/autoren/vertraege.xml?lang=en>. This German contract has to be signed, but there is an English translation of it for reference.

Authors have to make sure that they have permission to use copyrighted material from journals or other books. A respective declaration is part of the contract with the FU Library.

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