Citations and the bibliography

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1 The basics

- LATEX comes with built-in support for citing references from a bibliography. This is done by using the \cite{cite_key} command at the place in the text where the citation is supposed to occur.
- The *cite_key* is the unique (often mnemonic) identifier of a particular reference listed in the bibliography.
- There are two ways to put together a bibliography:
 - 1. In-document bibliography using the environment thebibliography
 - 2. External bibliography using BibTeX
- Additionally, there are many ways to modify the in-text citations using a variety of \cite{...} commands that come with the natbib package
- This package also enables author-year style citations instead of LaTeX's native numerical citations (e.g. as used in the natural sciences).
- But first things first ...

2 The in-document bibliography

• The in-document bibliography is an evironment like the itemization or enumeration environments. Hence, it is invoked by ¹

\begin{thebibliography}{99}
 ...
\end{thebibliography}

• It creates its own unnumbered section heading "References" (or "Literatur" depending on the document's language) in the usual style specified for section headings in the document.

¹The number 99 sets the width of the numerical label of the single reference entries in numerical citation styles to two digits (because 99 itself has two digits, 57 would have worked in the same way). Since linguistics makes use of the author-year citation style, this parameter will not play a role here.

• An entry in the bibliography is created by using the command \bibitem[ShortName(Year)LongName] { cite_key }. Hence

\bibitem[Adger(2003)Adger]{adger2003}
Adger, David (2003). \textit{Core Syntax: A Minimalist Approach}.
Oxford University Press, New York.

will output the following in the References section

Adger, David (2003). Core Syntax: A Minimalist Approach. Oxford University Press, New York.

• All in all, a very short bibliography consisting of only three entries might be typed in as

\begin{thebibliography}{99}

\bibitem[Adger(2003)Adger]{adger2003}

Adger, David (2003). \textit{Core Syntax: A Minimalist Approach}. Oxford University Press, New York.

\bibitem[Embick{\&}Marantz(2008)Embick,Marantz]{embick+marantz2008} Embick, David {\&} Alec Marantz (2008). Architecture and Blocking. \textit{Linguistic Inquiry 39}, 1--53.

\bibitem[Haupt~et~al.(2014)Haupt,Schnorr,Poetsch,Mansel,Handke,Kersting] {haupt-et-al2014}

Haupt, Sebastian, Ren\'e Schnorr, Maria Poetsch, Alexander Mansel, Marcel Handke {\&} Berthold Kersting (2014). Extraction properties of 25,27-bis(carbonylmethoxy)calix[4]arenes towards Sr\$^{2+}\$: competitive extraction in a synthetic groundwater. \textit{Journal of Radioanalytical and Nuclear Chemistry 300}, 779--786. \end{thebibliography}

which will output

References

Adger, David (2003). Core Syntax: A Minimalist Approach. Oxford University Press, Oxford.

Embick, David & Alec Marantz (2008). Architecture and Blocking. *Linguistic Inquiry* 39, 1–53

Haupt, Sebastian, René Schnorr, Maria Poetsch, Alexander Mansel, Marcel Handke & Berthold Kersting (2014). Extraction properties of 25,27-bis(carbonylmethoxy)calix[4]-arenes towards Sr²⁺: competitive extraction in a synthetic groundwater. *Journal of Radioanalytical and Nuclear Chemistry 300*, 779–786.

• However, the entries will not be ordered alphabetically unless you do it by hand and the formatting of every entry has to be done by hand too. Plus this way of creating a bibliography involves lots of typing for each and every document you write, even if you cite the very same literature over and over again. Fortunately, there is a much easier way to create and manage your bibliography and have all the entries formatted the same way...

3 The external bibliography with BibT_EX

- Basically, BibTeX allows you to store all your bibliographical information in one central place: the .bib file.
- This file consists of all your reference entries. Every entry starts with the declaration of the reference type (e.g. article, book, inproceedings, etc.) and the cite key. The specific information of each reference is assigned to certain data fields within its entry (e.g. title, author, year, publisher, journal, etc.). An entry for an article might look like this

• In your LATEX document you just specify the name of the .bib file and the formatting style. If you wanted to use your lingu.bib file and have the references formatted according to the American Psychologists Association you would type

```
\bibliography{lingu} (Note: Do not put .bib in the brackets.)
\bibliographystyle{newapa} (More on the different bibliography styles below.)
```

- Both the .bib file and the bibliography style file (which has the extension .bst) need to be in the same folder as the .tex document you're compiling. This is quite inconvenient if you want to use the same library of references for all your written work in linguistics². Therefore you can also put the files in a place where they're accessible for all LATEX documents: the bibtex subdirectory of your local texmf directory. If you're using TeX Live on Windows this can be found here: C:\texlive\texmf-local\bibtex; if you're working on a Mac: ~/Library/texmf/bibtex (if it doesn't exist, create it!). You'll have to put your .bib file into the folder bib and your .bst file into the folder bst which are both subfolders of the above mentioned bibtex folder.
- After compiling your document once with LaTeX you have to run BIBTeX. This will look up all the references that you cited using \cite{...} in your document, extract the relevant information from your .bib file and write it into a .bbl file that is named like your document. This .bbl file is basically the classic thebibliography environment outsourced into its very own file with alphabetical ordering and all the formatting done according to the bibliography style. After this you need to run LaTeX twice to get nice and proper citations and a beautiful bibliography. In TeXstudio, clicking the Build & View button will do all the work for you. The same three references as above will now be output as

²which you want to do because you don't want to go through the hassle of typing in the same often cited literature for every single paper you write

References

Adger, D. (2003). Core Syntax: A Minimalist Approach. New York: Oxford University Press.

Embick, D. & Marantz, A. (2008). Architecture and blocking. Linguistic Inquiry, 39, 1–53.

Haupt, S., Schnorr, R., Poetsch, M., Mansel, A., Handke, M., & Kersting, B. (2014). Extraction properties of 25,27-bis(carbonylmethoxy)calix[4]arenes towards sr²⁺: competitive extraction in a synthetic groundwater. *Journal of Radioanalytical and Nuclear Chemistry*, 300, 779–786.

• Quite a lot of bibliography styles come shipped with *TeX Live* and natbib some of which are mentioned and described in the natbib package documentation (https://www.ctan.org/pkg/natbib)³. Also, some journals and publishers offer a .bst file for download, just google! For example, there is a style file for formatting references like in *Linguistic Inquiry* called linquiry2 that can be found through Google. A few styles can be found here: http://kinglab.eeb.lsa.umich.edu/pub/biblios/bst/. With some more experience and effort you can also build your own style using the makebst program of the custom-bib package (http://www.ctan.org/tex-archive/macros/latex/contrib/custom-bib/).

Note: All bibliography styles that you add manually should be placed in C:\texlive\texmf-local\bibtex\bst (on Windows) and ~/Library/texmf/bibtex/bst (on Mac).

• The nice thing about using BIBTEX is that you don't have to code the .bib file directly. There are a bunch of user friendly programs out there that help you create and maintain your .bib file, link PDFs to specific entries, search for duplicates in your cite keys, etc. A very well-known commercial bibliography manager is *Citavi* (http://www.citavi.ch/en/index.html). One of the free ones is the easy to handle yet powerful program JabRef (http://jabref.sourceforge.net/).

Note: Some bibliography styles force all words of a book or article title (apart from the first one) to be lower case. If you want the upper case of certain letters preserved you need to put them into curly brackets in their entry in the .bib file. Also, you have to input special symbols such as umlauts with their respective LaTeX code. Thus, for example ö and å need to be input as \"o and \aa.

4 Citing with the natbib package

• The following commands only work if the **natbib** package is loaded. This is done by putting the following in the preamble:

\usepackage[options]{natbib}

Some options you might want to use are

- longnamesfirst: all authors of a reference are listed in the first citation, following citations list only the first author plus et al.
- sort: multiple citations are ordered into the sequence in that they appear in the list of references (i.e. for most cases this is an alphabetical order).

³You can also have a look at your LaTeX distribution to find out which styles are preinstalled. On Windows: C:\texlive\2014\texmf-dist\bibtex\bst; on Mac: /usr/local/texlive/2014/texmf-dist/bibtex/bst

Others can be found in the package documentation.

• The basic citation commands are \citet{...} for textual and \citep{...} for parenthetical citations. (Instead of \citet you may also use simple \cite.) They all also take two optional arguments: the first is for text that needs to appear before the actual citation, the second is for text that should show up after it. If only one optional argument is specified it is interpreted as if it were the second. Here's an overview of what each citation command's output looks like:

```
\citet{ba+jo+ro1989}
                                            Baker et al. (1989)
\citet[sec. 2]{ba+jo+ro1989}
                                            Baker et al. (1989, sec. 2)
\citep{ba+jo+ro1989}
                                            (Baker et al., 1989)
\citep[sec. 2]{ba+jo+ro1989}
                                        \rightarrow (Baker et al., 1989, sec. 2)
\citep[see][]{ba+jo+ro1989}
                                        \rightarrow (see Baker et al., 1989)
\citep[see][sec. 2]{ba+jo+ro1989}
                                            (see Baker et al., 1989, sec. 2)
\citet*{ba+jo+ro1989}
                                           Baker, Johnson, and Roberts (1989)
\citep*{ba+jo+ro1989}
                                            (Baker, Johnson, and Roberts, 1989)
```

• Multiple citations don't require multiple \cite commands. Instead, all cite keys can be put into one single \cite command separated by commas. If you put multiple citations of the same author(s), LATEX conflates them into one. Also, multiple same author citations of the same year are alphabetically distinguished.

```
\label{eq:citet} $$\operatorname{adger2007:LI,steriade1982}$ \to \operatorname{Adger}(2007a); Steriade (1982) $$\operatorname{adger2007:LI,steriade1982}$ \to $(\operatorname{Adger}, 2007a; Steriade, 1982) $$\operatorname{adger2003:LI}$ \to $(\operatorname{Adger}, 2003, 2007a)$$$$\operatorname{citep{adger2007:LI,adger2007:LA}}$ \to $(\operatorname{Adger}, 2007a,b)$$
```

• Citations without parentheses are achieved using \citealt and \citealp.

```
\citealt{ba+jo+ro1989} → Baker et al. 1989

\citealt*{ba+jo+ro1989} → Baker, Johnson, and Roberts 1989

\citealp{ba+jo+ro1989} → Baker et al., 1989

\citealp{ba+jo+ro1989,adger2003} → Adger, 2003; Baker et al., 1989

\citealp[pg. 32]{ba+jo+ro1989} → Baker et al., 1989, pg. 32
```

• Citing only the author or only the year of a particular reference is possible with \citeauthor and \citeyear.

```
\begin{tabular}{ll} $\land$ citeauthor{ba+jo+ro1989} $\to$ Baker et al. \\ $\land$ citeauthor*{ba+jo+ro1989} $\to$ Baker, Johnson, and Roberts \\ $\land$ citeyear{ba+jo+ro1989} $\to$ 1989 \\ $\land$ citeyearpar{ba+jo+ro1989} $\to$ (1989) \\ \end{tabular}
```

• Including a non-cited reference in the bibliography is actually bad scientific practice: only the references that you cite in the document should appear in the bibliography. However, there is a command that allows you to list a reference in the bibliography even if it is not cited. The command \nocite{...} adds the nocited reference to the bibliography but doesn't print any citation in the text.

5 Punctuation, spacing, and other stuff

• You can change the punctuation of citations using the command \bibpunct[optional]{1}{2}{3}{4}{5}{6} where

- 1 is the opening bracket symbol; default: (
- 2 is the closing bracket symbol; default:)
- 3 is the punctuation between multiple citations; default: ;
- 4 is a letter: 'n' for numerical style, 's' for numerical superscript style, any other letter for author-year; default: author-year
- 5 is the punctuation that comes between the author names and the year in parenthetical citations; default: ,
- 6 is the punctuation between years of same author citations; default:,
- the optional argument specifies the character before a postnote (i.e. the text of the second optional argument of a **\cite** command)

```
\bibpunct[: ]{[]}{],}{a}{ --}{/} would make the output of the following command \citep[p. 12]{adger2007:LI,adger2007:LA,steriade1982} look like [Adger - 2007a/b, Steriade - 1982: p. 12]
The new punctuation is applied to all citations following the command.
```

- Whether '&' or 'and' is used between two author names in two-author citations depends on the chosen bibliography style. Changing it by hand is possible but also depends somewhat on the style used. This would take us too far here. If you're desperate to change it, Google is your best friend!
- Usually there is a distance of one line between the entries in the bibliography. If you want to save space (or increase the distance) you can reset the value for \bibsep. Thus \setlength{\bibsep}{0pt} will output a bibliography like this

References

Adger, D. (2003). Core Syntax: A Minimalist Approach. New York: Oxford University Press. Embick, D. & Marantz, A. (2008). Architecture and blocking. Linguistic Inquiry, 39, 1–53. Haupt, S., Schnorr, R., Poetsch, M., Mansel, A., Handke, M., & Kersting, B. (2014). Extraction properties of 25,27-bis(carbonylmethoxy)calix[4]arenes towards sr²⁺: competitive extraction in a synthetic groundwater. Journal of Radioanalytical and Nuclear Chemistry, 300, 779–786.

- If you want to include some text after the 'References' heading but before the first entry, redefine \bibpreamble like this: \renewcommand{\bibpreamble}{Your text goes here}.
- You can also change the title of the bibliography using \renewcommand{\refname}{Your bibliography title} (For certain other document classes you need to put \bibname instead of \refname.)
- A good overview and some more information can also be found here: http://merkel.zoneo.net/Latex/natbib.php.

References

In contrast to the bibliography examples above, I used the style linquiry2 instead of newapa for this one. Also, I set \bibsep to 0.3\baselineskip

Adger, David. 2003. Core syntax: A minimalist approach. New York: Oxford University Press. Adger, David. 2007a. Pronouns postpone at PF. Linguistic Inquiry 38:343–349.

Adger, David. 2007b. Stress and phrasal syntax. Linguistic Analysis 33:238–266.

Baker, Mark, Kyle Johnson, and Ian Roberts. 1989. Passive arguments raised. *Linguistic Inquiry* 20:219–251.

Haupt, Sebastian, René Schnorr, Maria Poetsch, Alexander Mansel, Marcel Handke, and Berthold Kersting. 2014. Extraction properties of 25,27-bis(carbonylmethoxy)calix[4]arenes towards Sr²⁺: competitive extraction in a synthetic groundwater. *Journal of Radioanalytical and Nuclear Chemistry* 300:779–786.

Steriade, Donca. 1982. Greek prosodies and the nature of syllabification. Doctoral Dissertation, MIT, Cambridge, Mass.