

Introduction to $\text{BIB}\text{T}_{\text{E}}\text{X}$: reference management in $\text{X}_{\text{E}}\text{L}_{\text{A}}\text{T}_{\text{E}}\text{X}$

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What is BibTeX?

- ▶ BibTeX is a **reference management system** based on TeX
- ▶ it is also a **format** with which you write a bibliographical database
- ▶ so it is *both* a software (`bibtex` engine) and a format (BibTeX)
- ▶ to use it, you need
 - ▶ a `.bib` file, which contains your bibliographical database
 - ▶ a `.bst` file, which specifies the reference style

How does it work?

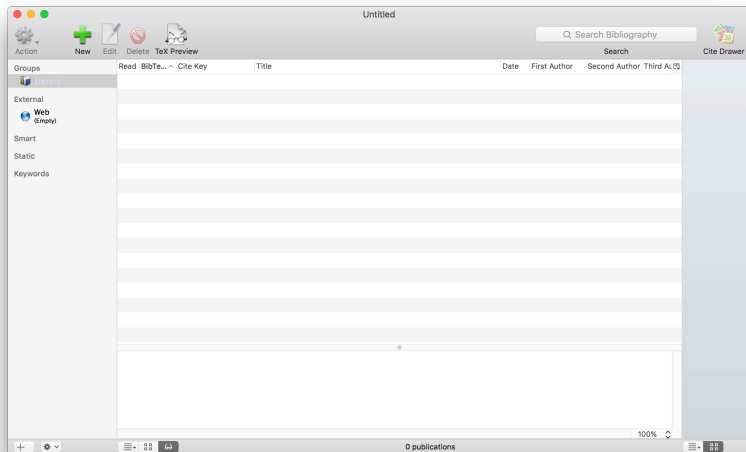
- ▶ you first insert your entries in the `.bib` file
- ▶ each entry has a unique cite key (like `asimov1951` for Asimov's *Foundation*)
- ▶ in your `.tex` file, you cite the references in your text using the `\cite` command and the cite key of the entry you are citing
- ▶ you compile using the `bibtex` engine
- ▶ `BIBTEX` takes care of inserting the citation and the reference list with the appropriate formatting, as specified in the `.bst` file

BibTeX front-ends

Creating your bibliographical database (`.bib`) can be facilitated using a front-end:

- ▶ BibDesk (Mac only)
- ▶ JabRef
- ▶ Mendeley Desktop
- ▶ EndNote
- ▶ Zotero

BibDesk



BibDesk

The screenshot shows the BibDesk application window titled "Empty Title". The window has a menu bar at the top with three colored buttons (red, yellow, green). Below the menu bar is a tabbed interface with four tabs: "BibTeX" (selected), "Annote", "Abstract", and "RSS-Description".

The main area is divided into two sections. The left section contains a form for entering bibliographic information:

- Cite Key:** A text field containing "cite-key" in red text, followed by a yellow warning icon and a dropdown menu showing "incollection".
- Author:** A text field.
- Title:** A text field.
- Booktitle:** A text field.
- Publisher:** A text field.
- Year:** A text field.
- Editor:** A text field.
- Volume:** A text field.
- Number:** A text field.
- Series:** A text field.
- Type:** A text field.
- Chapter:** A text field.

The right section is a large area with a dashed border and the text "Drop Files Here". Below this area is a horizontal bar with several small icons.

At the bottom of the window, there is a "Rating" section with a row of five dots and a "Read" checkbox.

BibDesk

The myth of language universals: Language diversity and its importance for cognitive science

BibTeX Annote Abstract RSS-Description

Cite Key

Author

Title

Journal

Year

Volume

Number

Pages

Month

Keywords

★★★★★ Rating ☒ Read

The myth of language universals: Language diversity and its importance for cognitive science

The myth of language univ...

N. Evans
S. C. Levinson

The natbib package

Load the `natbib` package in the preamble, with the option `numbers` for IEEE like style:

```
1 \usepackage[numbers]{natbib}
```

Set the bibliography style (`plainnat`) and `.bib` file at the end of your document, before `\end{document}`

```
1 \bibliographystyle{plainnat}  
2 \bibliography{mybib}
```


The natbib package

Call the `natbib` package in the preamble, with the option `numbers` for Harvard like style:

```
1 \usepackage{natbib}
```

Set the bibliography style (`dcu`) and `.bib` file at the end of your document, before `\end{document}`

```
1 \bibliographystyle{dcu}  
2 \bibliography{mybib}
```

The natbib package

According to **Darwin (1859)**, we have a common ancestor with [...]. However, it is more complex (**Asimov 1951**). As **Darwin (1859, p. 33–37)** said: “This is the ultimate proof that [..].”

The natbib package

In your document, you can use the `\cite` commands:

- 1 According to `\citet{darwin1859}`, we have a common ancestor with [...]. However, it is more complex `\citep{asimov1951}`.
- 2
- 3 As `\citet[p. 33--37]{darwin1859}` said: “This is the ultimate proof that [...]”

The output depends on the chosen style. A Reference section will be automatically added at the end of your compiled document (PDF).

Style: numeric

<code>\citet{jon90}</code>	\Rightarrow	Jones et al. [21]
<code>\citet[chap.~2]{jon90}</code>	\Rightarrow	Jones et al. [21, chap. 2]
<code>\citep{jon90}</code>	\Rightarrow	[21]
<code>\citep[chap.~2]{jon90}</code>	\Rightarrow	[21, chap. 2]
<code>\citep[see] []{jon90}</code>	\Rightarrow	[see 21]
<code>\citep[see] [chap.~2]{jon90}</code>	\Rightarrow	[see 21, chap. 2]
<code>\citep{jon90a,jon90b}</code>	\Rightarrow	[21, 32]

Style: author-year

<code>\citet{jon90}</code>	⇒ Jones et al. (1990)
<code>\citet[chap.~2]{jon90}</code>	⇒ Jones et al. (1990, chap. 2)
<code>\citep{jon90}</code>	⇒ (Jones et al., 1990)
<code>\citep[chap.~2]{jon90}</code>	⇒ (Jones et al., 1990, chap. 2)
<code>\citep[see][]{jon90}</code>	⇒ (see Jones et al., 1990)
<code>\citep[see][chap.~2]{jon90}</code>	⇒ (see Jones et al., 1990, chap. 2)
<code>\citet*{jon90}</code>	⇒ Jones, Baker, and Williams (1990)
<code>\citep*{jon90}</code>	⇒ (Jones, Baker, and Williams, 1990)