

# Bibliographies and LaTeX

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November 18, 2016

# Overview

# Dealing with Bibliographies in $\text{\LaTeX}$

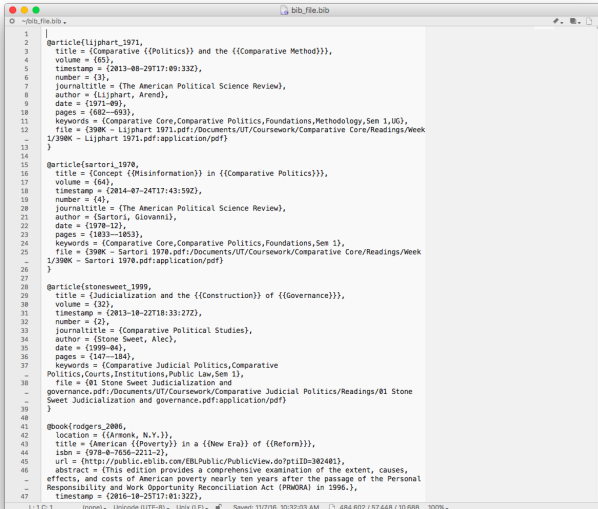
- ▶ There are three general concerns
  - ▶ Generating (and maintaining) a “Bib” file
  - ▶ Entering citations into your document
  - ▶ Getting  $\text{\LaTeX}$  to turn the first two items into something usable
- ▶ Other tweaks
  - ▶ Specific formatting requirements

# The Bib File

# What is a “Bib” File?

- ▶ A bib file, noted with a .bib extension, is a plain text file that contains a list of your citations
  - ▶ These entries include
    - ▶ Author
    - ▶ Title
    - ▶ Etc.
    - ▶ Citekey

# Example Bib File



```
1 |
2 @article{lijphart_1971,
3   title = {{Comparative {{Politics}} and the {{Comparative Method}}},
4   volume = {65},
5   timestamp = {2013-08-29T17:09:33Z},
6   number = {3},
7   journaltitle = {The American Political Science Review},
8   author = {Lijphart, Arend},
9   date = {1971-09},
10  pages = {682-693},
11  keywords = {Comparative Core,Comparative Politics,Foundations,Methodology,Sen 1,UG},
12  file = {390K - Lijphart 1971.pdf:/Documents/UT/Coursework/Comparative Core/Readings/Week
13  1/390K - Lijphart 1971.pdf:application/pdf}
14 }
15
16 @article{sartori_1970,
17   title = {{Concept {{Misinformation}} in {{Comparative Politics}}},
18   volume = {64},
19   timestamp = {2014-07-24T17:43:59Z},
20   number = {4},
21   journaltitle = {The American Political Science Review},
22   author = {Sartori, Giovanni},
23   date = {1970-12},
24   pages = {1033-1053},
25   keywords = {Comparative Core,Comparative Politics,Foundations,Sen 1},
26   file = {390K - Sartori 1970.pdf:/Documents/UT/Coursework/Comparative Core/Readings/Week
27   1/390K - Sartori 1970.pdf:application/pdf}
28 }
29
30 @article{stonesweet_1999,
31   title = {{Judicialization and the {{Construction}} of {{Governance}}},
32   volume = {32},
33   timestamp = {2013-10-22T18:33:27Z},
34   number = {2},
35   journaltitle = {Comparative Political Studies},
36   author = {Stone Sweet, Alec},
37   date = {1999-04},
38   pages = {147-184},
39   keywords = {Comparative Judicial Politics,Comparative
40   Politics,Courts,Institutions,Public Law,Sen 1},
41   file = {01 Stone Sweet Judicialization and
42   governance.pdf:/Documents/UT/Coursework/Comparative Judicial Politics/Readings/01 Stone
43   Sweet Judicialization and governance.pdf:application/pdf}
44 }
45
46 @book{rogers_2006,
47   location = {{Armonk, N.Y.}},
48   title = {{American {{Poverty}} in a {{New Era}} of {{Reform}}},
49   isbn = {978-0-7656-2211-2},
50   url = {http://public.eblib.com/EBLPublic/PublicView.do?ptID=302481},
51   abstract = {This edition provides a comprehensive examination of the extent, causes,
52   effects, and costs of American poverty nearly ten years after the passage of the Personal
53   Responsibility and Work Opportunity Reconciliation Act (PRMORA) in 1996.},
54   timestamp = {2016-10-25T17:01:32Z},
55 }
```

Ln 1 Col 1 (none) Unicode (UTF-8) Unix (LF) Saved: 11/7/16, 10:32:03 AM 484,602 / 57,448 / 10,688 100%

Figure 1:

# How to Make a bib file

- ▶ Do it by hand
  - ▶ Google Scholar makes getting the citation easy
  - ▶ But it means that all you end up with is this goofy file
- ▶ Use a .bib file app manager like BibDesk
  - ▶ Relatively easy to use
  - ▶ Adds tools like keywords and groups

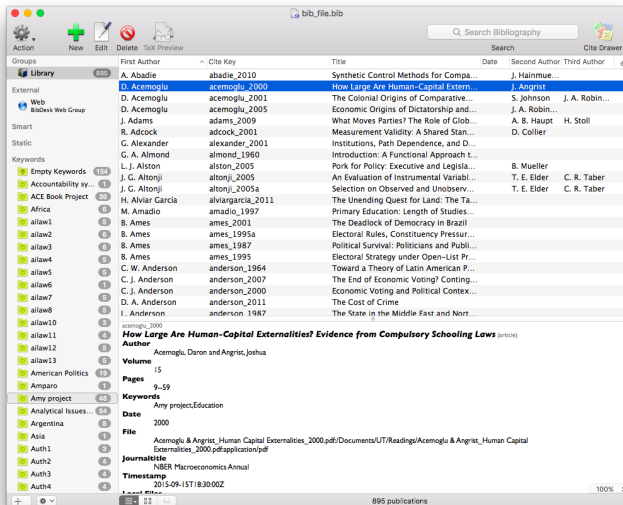


Figure 2:



# How to Make a bib file

- ▶ Use a full “point-and-click” manager like Zotero or Mendeley

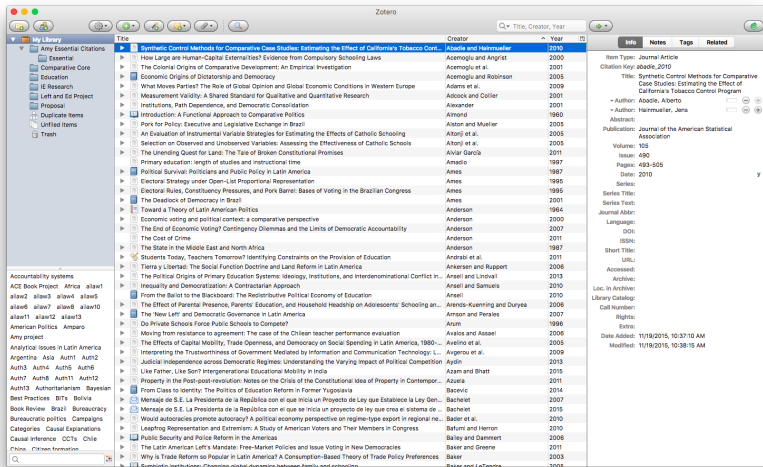


Figure 3:

# Zotero (or similar)

- ▶ Advantages
  - ▶ Easy to use
  - ▶ Complex groups/collections/tags
  - ▶ Notes
  - ▶ Attach files and index them for search
  - ▶ Has options for Word, if you ever need to go that route
- ▶ Disadvantages
  - ▶ Can slow down with larger bibliographies
  - ▶ “Point-and-click” convenience is ultimately slower
  - ▶ Possibly not future-proof

# My Zotero Use

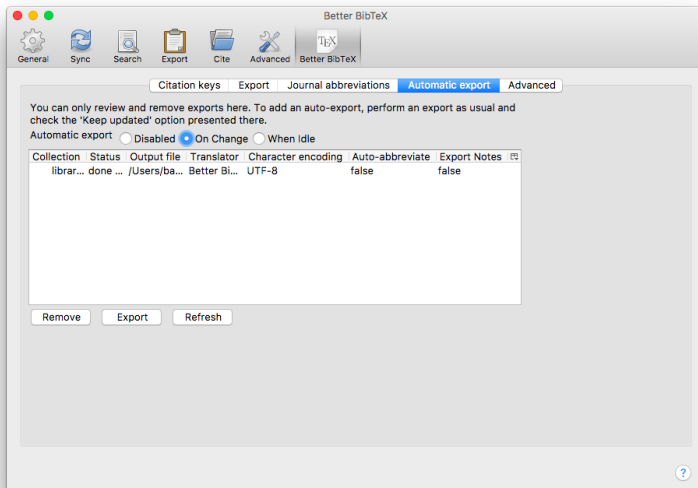


Figure 4:

# My Zotero Use

- ▶ Adjust my citation key default
- ▶ Automatic export to bib file

## Citations - Overview

# Natbib vs BibLaTeX

- ▶ There are two citation packages options: “natbib” and “biblatex”
  - ▶ They use different backend programs to process the citations (bibtex and biber, respectively)
  - ▶ The differences are pretty small between the two, but there are some incompatibilities
- ▶ You have to make a choice up front when generating your bib file
  - ▶ The choice will affect what you put into your  $\text{\LaTeX}$  file, but other than that it shouldn't matter very much

## Citations Using natbib



# The Preamble

- ▶ `\usepackage{natbib}`
- ▶ Well that's easy!

# Citations in the Document

- ▶ `\citep{<citekey>}` for an parenthetical citation
- ▶ `\citep[<pages>]{<citekey>}` for parenthetical with a page citation
- ▶ `\citet{<citekey>}` for a text citation
- ▶ `\citeyear{<citekey>}` for just the year citation
- ▶ There are some other options, but these are the most common

# References Page

`\clearpage` % to add a page break

`\bibliographystyle{apsr}` % assuming you have apsr.bst s

`\bibliography{<your_bib_file>}`

# Compiling into a pdf

- ▶ To compile within TeXworks (or similar):
  - ▶ Compile once as pdfLaTeX
  - ▶ Compile a second time as BibTeX
  - ▶ Compile a third time as pdfLaTeX
  - ▶ Compile a fourth time as pdfLaTeX

# Some Notes on natbib

- ▶ There are lots of style files out there
  - ▶ You can save it in the working directory for your document or `~/Library/texmf/bibtex/bst` for global access (on Mac, not sure about Windows)
- ▶ The bib file should also be placed in the working directory for your document
  - ▶ If it's not, you can use an absolute path to direct  $\text{\LaTeX}$  to it
- ▶ But it struggles with foreign characters

## Citations Using biblatex

# The Preamble

```
\usepackage[style=authoryear, url=false, doi=false]{bib  
\addbibresource{<your_bib_file>}
```

- ▶ Also pretty easy!
- ▶ Note the second line implies you could use multiple bib files

# Citations in the Document

- ▶ `\autocite{<citekey>}` for almost everything
- ▶ `\textcite{<citekey>}` for a text citation
- ▶ `\autocite[<page_no>]{<citekey>}` also works for page numbers
- ▶ You can also use things like `\citeyear{}` if you need



# References Page

```
\clearpage % to add a page break  
\printbibliography
```

# Compiling into a pdf

- ▶ To compile within TeXworks (or similar):
  - ▶ Compile once as pdfLaTeX
  - ▶ Compile a second time with biber (may require extra setup)
  - ▶ Compile a third time as pdfLaTeX
  - ▶ Compile a fourth time as pdfLaTeX

# Some Notes on biblatex (ht: JAB)

- ▶ Biblatex solves problems with foreign/unicode characters
- ▶ But there are limitations:
  - ▶ No deep library of citation style files (but, honestly, who cares?)
  - ▶ Default is to put “In:” before the journal name; solve with (one line)

```
\renewbibmacro{in:}{\ifentrytype{article}{}  
{\printtext{\bibstring{in}\intitlepunct}}}
```

## Also this:

- ▶ Inconsistent period placement with quotation marks; solve with:
  - ▶ `\usepackage[american]{babel}`
  - ▶ And to avoid a warning, also add `\usepackage{csquotes}`

## Other Considerations

# Isn't there an easier way to compile!?

- ▶ If you happen to be using a .Rnw file in RStudio, then when you “knit” that, it will do all four steps for you in one fell swoop
- ▶ If you compile from the command line, you can run `latexmk <yourfile.tex>`
  - ▶ This allows you to set extra flags like `-xelatex` or `-c`

# Some cool tricks (ht: JAB)

- ▶ Load the hyperref package at the very end of your preamble to automatically link your text citations with your reference list
  - ▶ `\usepackage{hyperref}`
  - ▶ Fix its ugly box default and make links colored words instead by adding this immediately after:
    - ▶ `\hypersetup{colorlinks=true}`

## One more trick (thanks again Alex)

- ▶ If you keep a DOI in your bib file for your entries, you can link the title of each entry to the DOI

```
\newbibmacro{string+doi}[1]{%  
  \iffieldundef{doi}{#1}{\href{http://dx.doi.org/\thefield{doi}}{#1}}  
\DeclareFieldFormat{title}{\usebibmacro{string+doi}{\mktitle{#1}}}  
\DeclareFieldFormat{article}{title} % should be one line  
\usebibmacro{string+doi}{\mkbibquote{#1}}}
```



There are lots of options for everything

- ▶ JFGI