# Digital Tools for Humanities Research

## Citation and Source Material Management

* [Zotero](https://zotero.org) – Open-Source citation management software
  + Runs on Windows, MacOS, Linux
  + Can manage your PDFs as attachments (see below)
  + Has plugins and integrations for Microsoft Office and LibreOffice
  + Can import citation information automagically from ISBN or DOI
  + [Zotero @ FSU](https://guides.lib.fsu.edu/zotero)
* [Zotmoov](https://github.com/wileyyugioh/zotmoov)
  + Normally, Zotero will store your PDFs in a network of hidden folders and synchronize them to its own, paid cloud storage :(
  + Zotmoov is a Zotero plugin that allows you to choose a different folder on your computer, possibly one connected to OneDrive or Google Drive

## Notes

* [Obsidian](https://obsidian.md)
  + Runs on Windows, MacOS, Linux, and mobile
  + Notes formatted in Markdown (see below)
  + Not open source but freely available with many plugins
  + Allows note linking, 3D visualization, flow charts, sketch boards
  + Stores notes as a folder of text files. If you stop using Obsidian, you can still access them in any other text editor.
  + Wants to sell you its own, paid cloud storage :(

## Word Processors

* [Microsoft Word](https://www.microsoft.com/en-us/microsoft-365/word)
  + Free for University affiliates, subscriptions for everyone else
  + .docx file format is industry standard for journals and publishers
  + Not open source
  + Pushes cloud storage and now AI
* [LibreOffice](https://www.libreoffice.org/)
  + Open source, free for everyone
  + Uses .odt format by default but highly compatible with .docx
    - LibreOffice is better at rendering .docx files than Word is at .odt
  + Excellent .pdf export options
  + User interface feels like Word 2003 (a benefit to some…)
* [Scrivener](https://www.literatureandlatte.com/)
  + More like a combination of Obsidian and Word/LibreOffice
  + Allows you to write in snippets, rearrange them, and compile into .docx and other formats
  + Geared toward novel and book writers but can be used to organize research
  + Not open source
  + One-time fee, must buy versions for MacOS, Windows, and mobile separately
  + Academic discount

## Writing in Plain Text

The following tools are for a different way of working. They involve drafting in a text editor and then exporting to .docx, .pdf, .html. Originally developed by bloggers and digital-first authors but gaining traction among academics. Parallel to the [LaTex](https://www.latex-project.org/) and [Overleaf](https://www.overleaf.com/) workflow used in the sciences. [The Programming Historian](https://programminghistorian.org/en/lessons/sustainable-authorship-in-plain-text-using-pandoc-and-markdown) has an excellent article explaining the advantages and mechanics of this workflow.

### Markdown

* Markdown is a way of formatting plain text that allows for basic formatting, like **bold**, *italics*, headings, and footnotes.[[1]](#footnote-33)
* You use a plain text editor to write in Markdown. Then, you use a utility—either one built into the text editor itself or a separate program—to convert the markdown to an output format.

### Text Editors

* [Microsoft VSCode](https://code.visualstudio.com/) – Industry-leading text and code editor
  + Partly open source
  + Windows, MacOS, Linux
  + Tons of plugins and AI Copilot
  + Can customize the appearance for different “languages” (i.e., markdown)
* [Emacs](https://www.gnu.org/software/emacs/)
  + One of the original text editors from the 1980s
  + Fully open source
  + Windows, MacOS, Linux
  + Extremely customizable
    - Can save your settings as a [text file](/extras/.emacs) to transport them to other computers
  + Can be used as an outliner, planner, project manager, email client, etc. etc.
  + Steep learning curve, huge time suck

### Markdown Converter

* [Pandoc](https://pandoc.org/)
  + Open source
  + Command-line utility for converting between dozens of different file formats. Ex., markdown to [.docx](/samples/README.docx), [.odt](/samples/README.odt), [.rtf](/samples/README.rtf), [.html](/samples/README.html), [.pdf](/samples/README.pdf) (via LaTex).
    - pandoc sample.md -o sample.docx
  + Can use a [template](/extras/manuscript-template.docx) to standardize output formatting
    - pandoc sample.md -o sample.docx --reference-doc=manuscript-template.docx

### Considerations

#### Advantages

* Distraction-free writing
* Draft first, format later
* Markdown text files are small
* Citation management
  + You can curate your bibliography in a BibTex file, embed citation keys into your Markdown manuscript, and then compile the citations automatically as part of the export process
* Sync, version control, collaboration with git and [GitHub](https://github.com)
* Easy export to a variety of formats: .docx for publishers, .pdf for printing, .html for web
* Outputs accessible .docx files with Styles used correctly
* Markdown is spreading (Zotero, Obsidian, web developing)
* Learn digital humanities tools
* Open source tools are free to use and privacy-friendly

#### Disadvantages

* **Warning:** Learning curve (time suck)
* Customization (time suck)
* Need to convert to .docx for collaboration and feedback (time suck)

1. A sample footnote. [↑](#footnote-ref-33)