Literature studies without the existential dread: Taking notes

We all have to perform literature research, we scan the internet for papers, we store them in our trusty literature management tool and then what?

How we read the papers and take notes varies greatly between person to person. But I do think we all had that one point where we lost track of something and had to spent much effort into finding it back. This experience probably shaped how you conduct this specific step now.

So let us start with the question: How do *you* take notes? Most likely it will fall within one of the following categories:

- Pen and paper
- Your phone
- Tablet
- Computer

Within these steps there can be variations, one might like to print out every paper and highlight with a physical marker. Other people will read the PDF but take their notes in a aptly named notebook. Most likely, we have all started using pen and paper. In my case this was fine for my bachelor end project, however it became too troublesome for my graduation project.

I could not find my notes on papers/books that I had read 2 or 3 years ago. Let alone the pictures I took on my phone, sorry but my pet photos outnumber them 1000 to 1. Then there are the more modern takes on note taking, using either a tablet with specific apps to make either hand written or typed notes. A computer with word or similar software in and of itself is a good choice, but it is difficult to maintain a good overview of all your files and how they relate to each other. Overleaf can work directly with both Zotero and Mendeley, this would allow you to cross-reference your notes quite well, but the fact that one file for your notes will create a massive text-dump which will need to be loaded each time you change it. It seems a bit excessive.

It is not impossible to continue this, and by that I imply your, way, everybody has their personal preferred method. However in this day and age, we can optimize this process and use the power of software to out advantage.

We set out to look for an alternative solution, one that can combine all the pros and remove the cons from all methods into a single piece of software. And we found Obsidian. I will not yet go into details about why we chose this. But I will first dive into how it works.

What is Obsidian?

Obsidian is a free to use, but not open source software that is basically notepad on steroids. It is highly customizable and has a very active community around it.

Obsidian has a familiar interface to Onenote, something that I have personally used for note taking and planning for the past 5 to 6 years.

One has a so called vault, which is stored locally, then you can create a folder in which you have the specific notes. Note that unlike Onenote, one can create folders within folders. You can organize it however you like.

A unique but very welcome property of Obsidian is that it does more than just text, it works in what is called Markdown. And maybe you can recognize certain tricks as watsapp uses a similar technique for styling messages. Or, if you ever used Github, markdown might even sound familiar.

We can do:

Headers

italic, bold, underlined

Links to pages

- lists
- 1. enumeration
- checkboxes (with styles)

highlighting

String = "We can do code blocks!"

inline ET_EX but also

outline $L T_{F}X$

And the ability embed a large variety of material:

- To markdown pages inside the same vault (including preview if desired)
- Copy pasted screenshots
- Media inside the vault (think of pdf or figures)
- Youtube content
 And much much more with community plugins!

These community plugins are what makes this software the one tool I use for my PhD. If you want something, there is a high chance somebody already made it!

Some examples are:

Custom periodic notes to improve your planning and maintaining your schedule. You
can even create a custom template to customize the UI/file structure to your liking.

- A drawing tool, allowing for one to create hand-written notes on their (drawing)-tablet.
 And the best of all:
- The ability to work with your reference manager, and here is why Zotero is bundled with Obsidian. Both are highly customizable and because Zotero is open source, there are multiple good implementations of the reference manager inside Obsidian.
 Obsidian will keep track of which notes refer to each other, forwards and backwards!
 And allow you to create a quick overview of which paper was the most influential within your research.

Or even, there exists a plugin that will import the notes taken from within Zotero to Obsidian! But more information regarding plugins is given in the installation guide.