

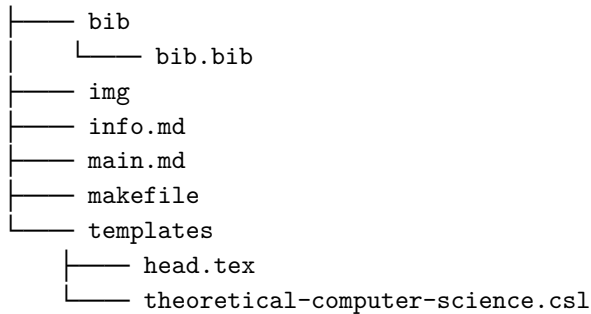
Exercises - 0

Setting up a Typesetting system

The current workflow uses:

- Pandoc (<https://pandoc.org/installing.html>, v. 3.1.11.1),
- L^AT_EX(or, actually, xelatex) (<https://www.latex-project.org/get/>),
- makefiles (that are native to Unix systems, but can be ported in windows using Cygwin)

The typical file hierarchy is:



Where

- `bib.bib` is a file containing references, using the `bibtex` formatting, often used with L^AT_EX.
- `img/` contains potential images loaded in the main document,
- `info.md` contains some meta-data and instructions for the formatting (they could be in `main.md` as well, it is just to keep that later file as small as possible, and to be able to re-use this templating easily),
- `makefile` gives instructions on how to generate `.tex` and `.pdf` files from `main.md`, using commands such as

```
pandoc --pdf-engine=xelatex --metadata-file=info.md \
  --citeproc -M date="+%B %e, %Y" -" \
  --include-in-header templates/head.tex $< -o $@
```

that means:

- Tell pandoc to process `main.md` (the `$<` parameter, which denotes in makefile the source we need to construct what we are constructing),
 - using XeLaTeX as the pdf engine,
 - using `info.md` for the metadatas,
 - using `citeproc` (which is a filter that process the bibliographical references),
 - setting the date to be the value returned by the command `date "+%B %e, %Y"` (so, the current date, formatted nicely),
 - including in the header the file `templates/head.tex`
 - and outputting into a file called `main.pdf` (the `$@` parameter, which denotes in makefile what we are constructing).
- `templates/head.tex` contains some L^AT_EXtweaking (primarily about the sections, some unicode characters and the appareance of the links),

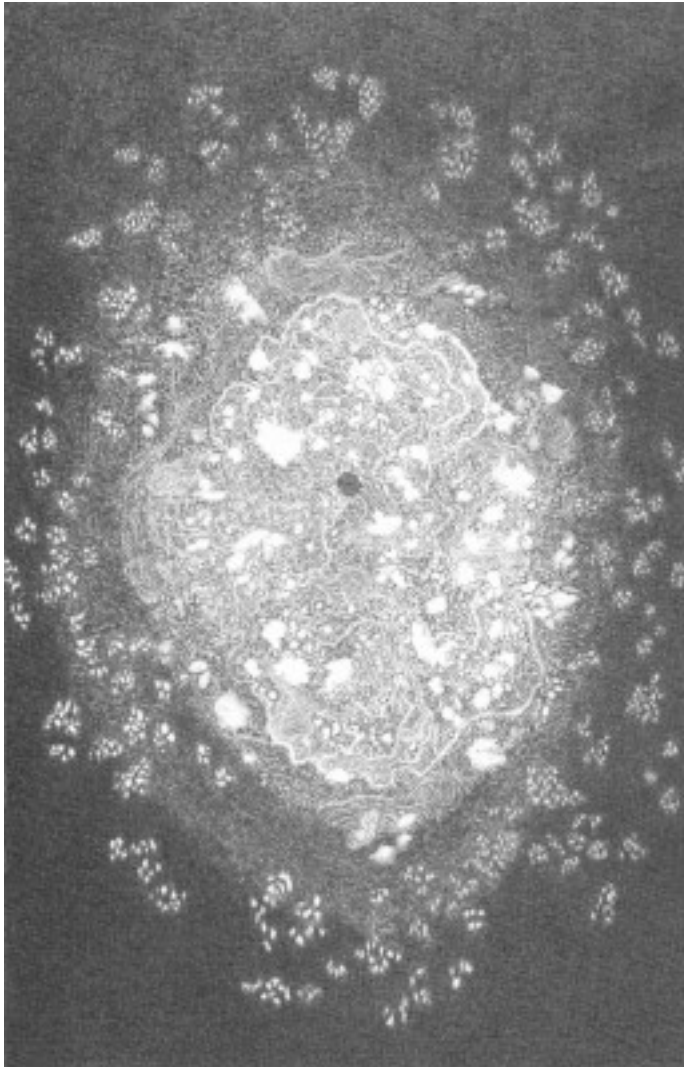
- `templates/theoretical-computer-science.csl` is the [Citation Style Language](#) file, that explains how references should be displayed. Since this is very field-sensitive, many different formatting exist, and we pick the one for theoretical computer science.

If you install `entr`, you can also use `make watch` that will automatically re-compile `main.md` into `main.pdf` whenever `main.md` is modified (that is, edited and saved).

Important: Note that this details the organization of *the current folder* (`exercises_0`) but that the overall repository is organized a bit differently, to avoid duplicating the bib and template files.

Examples

Here is a reference [1], and here is an image, courtesy of Jérôme Minard:



References

- [1] C. Aubert, Categories for Me, and You?, Augusta University, 2019. <https://hal.science/hal-02308858>.