For a thesis, I would like to propose a critical and operational engagement with the TEX typesetting engine.

Critical Component

TEX has existed as a typesetting engine for a little over three decades. As an ecosystem, TEX is defined by its self-documentation. The source itself is open, but beyond that the source of individual documents are frequently provided. This allows a culture of technique diffusion and could qualify as a virtuous process as per Benkler. It also means the TEX project could be considered a self-documenting electronic typesetting assemblage, which to my mind provides a unique opportunity for investigating the materiality of electronic type. Whereas an experienced typographer can determine the processes (or at least parameters) used to create output on a page, this capacity requires years of training. On the other hand, after mastering TEX to a certain degree, it is possible to look at source documents and learn the exact parameters utilized to generate various outputs.
TEX documents exist in multiple stages of materiality:

- As a source document of marked up text.
- As intermediately processed files that are generated during document compilation.
- As a processed output file (DVI, PS, PDF)
- As ink on a printed page.
- As pixels on a screen.

(The operational engagement will incorporate an additional materiality: as a pre-TEX source format, most likely reStructuredText. This functionality is provided by a translation layer, most likely pandoc, adding another degree of intrigue to TEX's materiality. Many other formats besides TEX can be output through pandoc, giving a degree of format parity rarely held by TEX documents.)
Though TEX is powerful, it has also continued to evolve. Through macro packages such as LATEX and ConTEXt, TEX has become considerably easier to use. Furthermore, developments such as XeTeX and LuaTeX are pushing the envelope in terms of international support (Unicode, non-Western text formatting, etc). As ConTEXt will be utilized in the operational component of the project, combined with the fact that it is under the most heavy and promising development at the moment, I expect that ConTEXt and LuaTeX will be central to the critical engagement (perhaps even to the extent that it becomes a software study of ConTEXt more than TEX.

The capacity of ConTEXt to generate electronic documents, for instance, makes for another layer materiality: `hypertext.'

Preliminary Reference List

- Chun, Wendy Hui Kyong. (2008) *Control & Freedom*. () Materialist framework for investigating the `light' of electronic typesetting.

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