Thesis Chapter List

1. Introduction

   - Re-mediation: the drive towards "greater authenticity and immediacy of presentation" (Bolter 2001: 70)

   - Historical developments of the various formats (Typewriter -> Word, SGML -> HTML, Typesetting math -> TeX)

   - Contrast the approaches: WYSIWYG, semantic markup, formal markup

   - the relationship between computers and language (Cramer 2001)

     - computers run on alphabets; "Literature is therefore a privileged symbolic form in digital information systems." (Cramer 2001: 2)

     - the rule of searching for a specific text phrase is complicated by formats: intermediate layers are required for text searching when ODT/PDF are involved

   - the re-remediation of Project Gutenberg: the availability of ASCII (itself a remdiation) allows for translation across interfaces; the appearance of the tablets/e-readers as interfaces to the ASCII re-mediates them back into a book

2. A history of cross-media publishing and generative design

   - Simondon's *transduction*: "By transduction we mean an operation—physical, biological, mental, social—by which an activity propagates itself from one element to the next, within a given domain, and founds this propagation on a structuration of the domain that is realized from place to place: each area of the constituted structures serves as the principle and the model of the next area, as a primer for its constitution, to the extent that the modification expands progressibely at the same time as the structuring operation" (Simondon 2009: 11).

     - the "pre-format" as preindividual (but still individual); ontologies on top of ontologies

   - History of the term 'media,' it's origins in advertising as they developed a language to discuss 'mediating' messages, that is, tailoring the message to suit a particular 'medium'

- Advantages and disadvantages of generative design.
  - ⋆ Issues of scale can considerably affect the suitability of a generative workflow over a traditional one.
- The Holy Grail: “one system that serves as the universal document source”
  - ⋆ Resembles other holy grails, “artificial intelligence” and “real-time collaborative editing of the same document”
- Wrappers: software for remediating formats
  - ⋆ the ultimate intersection point
- Showstoppers: errors and/or limitations in functionality that force abandoning one approach for another
  - ⋆ limitations of bibliographic intersections
- The role of FLOSS in generative design
- bootstrapping - Engelbart’s idea of using computer tools to make better computer tools

3. Approaches to digital typesetting
   - Print is Static, Code is Process: the physics of text
     - ⋆ Hayles requests taking into account physical specificity; the last chapter will include memory heap visualizations in order to interrogate the utility of such an approach
       - ▷ what about the physicality of the writer in crafting the text? this leads directly into questions of workflow
   - WYSIWYG: the computer as a typewriter
     - ⋆ Concrete poetry and “free form typography” as unique to this approach.
     - ⋆ “A typewriter (or a computer-drive printer of the same quality) that justifies its lines in imitation of typesetting is a presumptious, uneducated machine, mimicking the outward form instead of the inner truth of typography.” (Bringhurst 2008: 28)

- Semantic markup: interpreted plaintext (top-down)
  - ⋆ Tuned for remediation, strict separation of display from content.
- Formal markup: the document typesets itself (bottom-up)
  - ⋆ The long and varied history of TeX.
  - ⋆ Why ConTeXt?

4. A Generative Methodology
   - Is this process useful? Does such a practical approach have anything to offer theory? And does theory offer anything useful for the practice?
   - Visualizations: memory heap analysis (again, is it useful? does it map a ‘materiality’?)
     - ⋆ also, version control visualizations of the git repository that hosts the thesis files
   - Case studies
     - ⋆ HTML
     - ⋆ OpenOffice.org
     - ⋆ ConTeXt
5. Conclusion