

In consultation with my advisors, the key feedback from examiners has been identified. The requests for changes have been addressed, and will be discussed below. The discussion of revisions below also includes the enhancements to the publications included in the thesis that were made as part of the review process for the papers under review for journal publications.

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Incorporated revised work on color, chapter 5.
Based on feedback from journal reviewers. It is now under second round of reviews.
This includes additional experiments with LSTMs, and additional discussion of training, and fitting.

Appendix B, C, D, JOSS papers replaced with accepted versions. The changes to these are primarily minor copy-copy-editing, but do also include some additional references and comparisons to related projects for the DataDepsGenerators.jl paper.

Re: Stenthorp page 1: 2.1. 2 sentences have been added to abstract to explain word embeddings
Re: Powers page 8-9: Corrected MSF to MFS

Re: Powers page 2: and page 3
List of abbreviations has been added to the start.
Extended background with citation to original works added to introduction.

Re: Powers page 4.
The part of Chapter 2 on the neural probabilistic language model were revised inline with the recommendations.

Re: Powers page 5,
References to the excluded chapters of “Neural Representations of Natural Language”, Appearing in Chapters 2 and 4 have been adjusted (no such reference occur in Chapter 3). The references have variously been: replaced with citation to primary source, or had the information moved into the included chapter and removed as redundant, or cited as an external source for more information.

Re: Powers page 5: Spelling corrections to chapter 3 have been made.

Re: Powers page 6,
Corrections and clarifications as per the errata have been made.
The mangled references have been fixed, and were as suggested the results of switching bibtex styles between the original paper and the copy in the thesis.

Re: Zhang page 2
Diagram added to conclusion, and two short paragraphs of additional explanation of future work and why a shared representation would be expected to help. With some additional reference. (I could add some more about Transformer models, and attention, which to an extent works on the same principle.)

Also re: Zhang page 2, and Powers page 8 and 9.
A additional section has been added to the conclusion titled final words, to bring all the conclusions together and highlight take aways for future research.