A Review of a Final Thesis

submitted to the Department of English and ELT Methodology,
Faculty of Arts, Charles University

Name and titles of the reviewer: Mgr. Kateřina Vašků, PhD
Reviewed as: ☐ a supervisor   ☒ an opponent

Author of the thesis: Bc. Tomáš Savčenko
Title of the thesis: *Effects of Semantic Network Structure of English on Word Processing*
Year of submission: 2024
Submitted as: ☐ a bachelor's thesis   ☒ a master's thesis

Level of expertise:
☐ excellent ☒ very good ☐ average ☐ below average ☐ inadequate

Factual errors:
☒ almost none   ☐ appropriate to the scope of the thesis   ☐ frequent less serious   ☐ serious

Chosen methodology:
☒ original and appropriate   ☐ appropriate   ☐ barely adequate   ☐ inadequate

Results:
☒ original   ☐ original and derivative   ☐ non-trivial compilation   ☐ cited from sources   ☐ copied

Scope of the thesis:
☐ too large   ☒ appropriate to the topic   ☐ adequate   ☐ inadequate

Bibliography (number and selection of titles):
☒ above average (scope or rigor) ☐ average   ☐ below average   ☐ inadequate

Typographical and formal level:
☒ excellent   ☐ very good   ☐ average   ☐ below average   ☐ inadequate

Language:
☐ excellent   ☒ very good   ☐ average   ☐ below average   ☐ inadequate

Typos:
☐ almost none   ☒ appropriate to the scope of the thesis   ☐ numerous

Brief description of the thesis (by the supervisor, ca. 100-200 words):

Review, comments and notes (ca. 100-200 words)
Strong points of the thesis:
The extensive theoretical chapter effectively presents the topic of semantic networks, covering all concepts essential for understanding the empirical section.
The methodology is clearly described and is reproducible.
The empirical section includes a visualization of the modelled network, and the final conclusions acknowledge the limitations of the thesis results.

Weak points of the thesis:
What I consider the weak point of the thesis is the extremely short Chapter 4 which only briefly reports descriptive statistics of the semantic network and describes the summary of the regression model with no further discussion. The empirical part has less then 2 pages of text when figures and visualizations are not counted. I think the study lacks a discussion section that would duly assess the results obtained. As a non-expert on semantic networks, I would, for example, appreciate a more extensive discussion in the first step of the conclusion that "[v]isual inspection of the semantic network reveals small-world characteristics with clusters of high-degree hub nodes and more scarcely connected low-degree nodes" (p. 36). The regression model presented in the second step suggests marginal significance for one variable, but is generally very weak (multiple R-Squared of 0.01156 and Adjusted R-Squared of 0.006803) and the thesis would benefit from further commentary on other possible explanatory variables not included and on the nature of the data (corpus).

Questions to answer during the Defence and suggested points of discussion:
A corpus linguist might expect a correlation between some of the measures discussed and general word frequency. Has any research been conducted on this correlation? Do you think frequency is a relevant factor to consider in your research?
The study suggests, as one of its conclusions, that the vector network model shows similarities to semantic networks because of the small-world characteristics. Is it possible to support this with data in addition to visual inspection?
All four variables studied are aggregated measures that simplify the comparison, but on the other hand lack detail about actual closeness of individual pairs of words. Do you think this has an impact on the results and conclusions to be made?

Proposed grade:
☒ excellent   ☒ very good   ☐ good   ☐ fail

Place, date and signature of the reviewer:
Prague, 2. 9. 2024