FACULTY OF ARTS
Charles University

Department of English and ELT Methodology

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:
Reviewed as: ☐ a supervisor ☒ an opponent

Author of the thesis: Kateřina Kynčlová
Title of the thesis: Perception of Silent Speech in L1 Users of Sign and Spoken Languages

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

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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:

This thesis presents a study on how neural oscillations adjust to visual speech, using EEG to explore the brain's response to videos of people silently uttering syllables, which could be in random or structured order. The research is particularly commendable given its complexity, especially for an MA student. The experimental design was well-conceived and expertly implemented. The results, showing that the brain distinguishes between these conditions in hearing individuals, offer valuable insights on statistical learning skills in the absence of sound. Importantly, the result was obtained with Czech participants, but it was not obtained in Czech deaf participants and in English participants (more about this later).
The thesis is not only well-written but also meticulously organized and very polished from the graphical point of view, reflecting a high level of academic rigor. The data analysis, which is both sophisticated and thorough, demonstrates the student's strong grasp of EEG techniques and neural data interpretation. Overall, this thesis is an outstanding piece of work, showcasing the student's ability to handle complex research questions with precision and clarity. It represents a significant achievement and contributes meaningfully to our understanding of neural processing in visual speech perception. I am highly impressed with the quality and depth of this research.

Weak points of the thesis:

While the thesis is impressive, two issues need further clarification:
First, the rationale for including a group of English native speakers is not clear to me. It is not entirely evident why this specific group was chosen or how their inclusion aligns with the study's objectives. I assume this somehow relates to the stimuli used. The description of the stimuli does not rely on IPA, but we read that the person recording was a Czech speaker with a high proficiency in English, and that they were instructed to read with a "natural articulation". Did the final product include Czech phonemes that are not present in English? Does this matter?
A second weakness of the thesis lies in the sample sizes of groups 2 and 3. Both groups are rather small, so a lack of a condition effect in these groups shall not be considered conclusive (as the student already notices).

Questions to answer during the Defence and suggested points of discussion:

Can you please expand on the reasons why it is relevant to compare Czech native speakers performing this task to English native speakers performing the same task?
It is interesting to notice that deaf learners did not show a condition effect, suggesting that they did not grasp the difference between the random vs structured sequences. While you discuss this finding in the thesis, I would appreciate if you discussed it further during defence, as it is something rather counter-intuitive (one would expect deaf learners to be particularly skilled in a "visual speech" task).

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Other comments:

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

Place, date and signature of the reviewer:
Prague, September 2nd 2024

Doc. Luca Cilibrasi