



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:** Kateřina Chládková, MA. PhD

**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:** 2023/2024

**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):

Kateřina Kynčlová's master's thesis reports on an EEG experiment that investigated the neural tracking of statistical regularities in silent speech in three groups of adults with different language backgrounds. The research question regarding neural tracking in silent speech is novel in the field of neurolinguistics. As can be seen in the theoretical part, Kateřina conducted an impressive literature review, discussing studies on neural speech processing as well as studies on silent speech. She demonstrated excellent familiarity with the state-of-the-art literature and the ability to identify gaps in knowledge and formulate interesting, yet testable, research questions.

To address her research question, Kateřina designed an EEG experiment using silent speech stimuli—strings of syllables. She worked independently to set up her experiment, starting from stimulus creation and recording to the very laborious task of implementing the video presentation and accurately sending triggers into the EEG acquisition program. I commend her creativity in developing a Czech version of the lip-reading task she administered at the end of the EEG sessions. Kateřina recruited and tested all the participants and managed to obtain at least a minimal sample of the deaf/hard-of-hearing group, which was not an easy task.

Through designing and administering her experiment, as well as analyzing the data, Kateřina has gained extensive experience in the field of neurolinguistic research. In her thesis, she demonstrated that she is an excellent young researcher who can critically review existing literature, formulate and test hypotheses, implement experiments, record and analyze EEG data, and, importantly, interpret her results in light of the original hypotheses while relating the findings to prior studies. It was a great pleasure to supervise her work on this thesis and to read the final written product.

**Review, comments and notes** (ca. 100-200 words)

**Strong points of the thesis:**

Many of the strong points are mentioned above in my summary of the thesis. I would particularly like to highlight the thorough literature review, the demonstrated critical thinking about prior research as well as Kateřina's own experiment. The experiment's precise and thoughtful implementation, the well-thought-out stimulus design, and the impeccably carried out neurophysiological measurements—despite this being the student's first hands-on encounter with the EEG technique—are commendable.

**Weak points of the thesis:**

A potential criticism could be the low number of participants in the deaf/hard-of-hearing group and the L1 English group. While this would be a relevant concern for a scientific research article, it is less critical for a master's thesis. I recommend recruiting and testing a larger sample in each group ( $n = 12-16$ , comparable to the L1 Czech hearing group) before transforming the thesis into a journal paper.

**Proposed grade:**

excellent    very good    good    fail

Place, date and signature of the reviewer:

Prague, September 4, 2024