FACULTY OF ARTS
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Supervisor's report on Mgr. Marie Hévrová's doctoral study and doctoral thesis

**"Phonetic attrition and cross-linguistic influence in L1 speech of late
Czech-French bilinguals"**

**submitted in 2021 at Institute of Phonetics, Faculty of Arts, Charles University
within international cotutelle: l'Université Toulouse 2 – Jean Jaurès**

Thesis supervisors: Barbara Köpke (France) and Tomáš Bořil (Czech Republic)

I.   PhD studies evaluation

I found Marie Hévrová to be a conscientious and talented student working full-time on her PhD topic on everyday basis and regularly coming up with original ideas. Considering the fact that she started her PhD studies with no previous background in phonetics, statistics, acoustics or programming, she made a significant progress over the past three years, culminating in the submitted thesis.

She mastered advanced concepts in phonetic attrition, phonetic acoustic measures, statistics (e.g., linear mixed-effects models), programming in R, using the ggplot2 library for creating advanced plots, and became fluent with the phonetic Praat software, including the creation of scripts and multiple-forced-choice perceptual experiments.

She actively participated in Doctoral seminars and Theoretical and Methodological Seminars during the past three years of her doctoral study. She successfully passed the following examinations:
- English Language
- First or Second Language Acquisition
- Speech acoustics and speech technology
- State PhD Examination

Marie Hévrová attended Internship abroad, at the Institut für phonetic und sprachverarbeitung in München, Germany, from 9/30 to 12/20/2020 under the leadership of Dr. Esther de Leeuw, a specialist on cross-linguistic influence and phonetic attrition. She was an active attendee of the postdoc seminars under the leadership of Prof. Dr. Jonathan Harrington.

She participated in several local conferences and workshops and published two peer-reviewed papers in international conferences:
- Hévrová M., Bořil T., Köpke B. (2020). Phonetic Attrition in Vowels' Quality in L1 Speech of Late Czech-French Bilinguals. In: Sojka P., Kopeček I., Pala K., Horák A. (eds) Text, Speech, and Dialogue. TSD 2020. Lecture Notes in Computer Science, vol 12284. Springer, Cham, pp 348-355, DOI 10.1007/978-3-030-58323-1_38.
- Hévrová M., Köpke B., Bořil T. (2021). Perception of L1 Speech of late Czech-French Bilinguals by Czech Monolinguals. In: Proceedings of VIII Congreso Internacional de Fonética Experimental.

She is a coauthor of a research paper that will be submitted to an impact journal Linguistica Pragensia later this year (autumn/winter 2021):
- Bořil T., Hévrová M., Skarnitzl R., Šturm P. What makes a French accent in Czech: Perceptual impression of melodic patterning. Linguistica Pragensia. (ISSN 0862-8432 (print), 1805-9635 (online))

This paper follows up on the findings made in her thesis and applies them in the context of artificially manipulated melodic contours of utterances which are being perceptually evaluated by Czech L1 monolinguals.

Marie Hévrová successfuly applied for a prestigious grant by the Grant agency of Charles University: "Translingvistický vliv v řeči česko-francouzských pozdně bilingvních mluvčích - Longitudinální studie fonetické derivace" (1/1/2020 – 12/31/2021).

II.   Submitted thesis evaluation

In the theoretical background section, Marie Hévrová conducted thorough research of L2 speech production and perception models, cross-linguistic influence and L1 attrition and compared Czech and French phonetic systems. Based on this state-of-the-art knowledge, she proposed major research questions and hypotheses about Czech-French bilinguals' speech.

In the experimental section of the thesis, she conducted three main studies – perceptual test, acoustic study and extralinguistic factors analysis.

During her stay in Toulouse, she recorded read and semi-spontaneous speech of 17 late Czech-French (CF) bilinguals in a professional sound-treated studio. Subsequently, she transcribed all the recording by means of precisely labelling phone-level time boundaries following well-defined phonetic segmentation rules. In her analyses and experiments, as a reference, she used a sound material capturing Czech (C) monolinguals, which was recorded in similar settings in a previous effort under a grant cooperation of Charles University and Czech Technical University in Prague.

At all levels of her analyses (acoustic and perceptual), she found statistically significant differences between CF's and C's Czech speech (L1), both in segmental and suprasegmental features.

The submitted thesis presents an intensive research work with a good logical structure, outstanding use of references, and application of effective methods accompanied by statistical evaluations and producing highly promising results.

III.   Summary and evaluation

In closing, I find that the document represents both a meaningful and substantial contribution to the field of L1 speech attrition and cross-linguistic influence. The author of the thesis proved to have the ability to perform original research and achieve novel scientific results. I conclude that Mgr. Marie Hévrová's submitted thesis meets the requirements of a doctoral thesis. I recommend accepting the submitted thesis for defence, and preliminary recommend classification: Passed (*Prospěla*).

Prague, 11th September, 2021   Ing. Tomáš Bořil, Ph.D.