

Spoken-word recognition is the process happening since the first milliseconds of hearing a word until the word has been selected by our mind as fitting the utterance context and until it has been selected as target. It is a very complex process, in which human mind concurrently processes great amounts of information and deals with unwanted similar competing words which also fight to be selected. Recognising spoken words in our native tongue is easy and automatic. However, listening to speech of a second language is a much more difficult task, sometimes it is almost impossible. Research shows that the phonetic training may be a good method of improving listening to the sounds of a second language. Such a training leads to better capabilities of learners to differentiate between sounds. The aim of my project is to establish whether the training of English pronunciation has an influence (apart from sound differentiation skills) also on the spoken-word recognition skills and if it facilitates this process, making it more similar to the recognition of words in the first language.

To investigate this research question, several psycholinguistic tasks including measuring reaction times and accuracy rates to linguistic stimuli and eye-tracking experiments will be conducted. Measuring reaction times and the abilities of accepting target and rejecting non-target competing words and eye-tracking experiments will allow to record the ability of bilingual speakers to deal with unwanted competition. Eye movement data will show the amount of cognitive effort accompanying tasks. All studies will be conducted both before and after the phonetic training offered to participants in the experimental group. It will enable comparisons of spoken-word recognition at different stages of the phonetic development. Also, a group of native speakers of English will be tested and they will constitute a comparison group to the learners of English, recipients of the phonetic training.

Researching this topic is very interesting for several reasons. First, the project will expand the knowledge and the degree of understanding about spoken-word recognition of people who know more than one language. It will allow to establish whether the explicit training of the pronunciation of the second language improves learners' abilities of recognising spoken language. Finally, it will allow the identification of the mental mechanisms exhibited by learners who attain high second language understanding abilities. The research project will be the first systematic longitudinal study into the influence of phonetic training on the nature of mental spoken language processing.