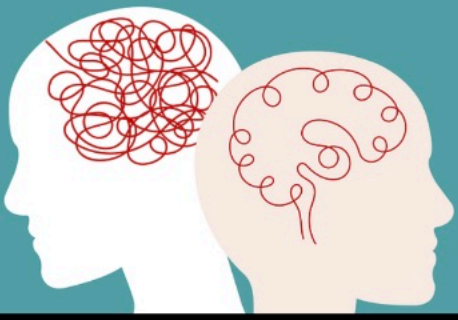
Special Lecture on Language and the Brain

TALK 1: Non-native speech sound representation in the brain and implicit phonetic learning

Perceiving the speech sounds of a foreign language can be difficult for an adult learner. In my lecture, I will first present the results of our research using behavioural and brain activity measurements to investigate foreign speech perception. We have compared Chinese-speaking and Finnish-speaking participants in the perception of native and non-native features (Chinese lexical tone and Finnish vowel duration). In addition, I will describe how (passive) language exposure, based on living in a foreign language environment or intensive exposure to foreign phonemes in a laboratory environment changes the speech perception.

TALK 1:
Wednesday,
11 December, 2024
3PM -4:10 PM
Venue: GSICS W302

TALK 2:
Friday,
20 December, 2024
3:30 PM -4:40PM
Venue: IDAC 3F seminar room



Dr. Piia Astikainen

Professor at University of Jyväskylä, Finland

Dr. Piia Astikainen is a professor at the Department of Psychology, University of Jyväskylä, Finland. Her research focuses on face and speech perception and foreign language learning, using electrophysiological and behavioral methods. She has conducted several large-scale projects funded by the Research Council of Finland related to these topics, and her latest project investigates social foreign language learning. For more details, see her research group's web site: https://www.jyu.fi/active-mind-lab

TALK 2: Social learning of foreign languages: electrophysiological studies

In this lecture, I will present preliminary results from our study investigating the social learning of foreign phonetic features in adult participants. Native Finnish speakers were taught detection and pronunciation of Mandarin tones for one hour per day on four consecutive days. Two groups of learners, learning the language alone or in pairs, were compared in terms of learning outcomes. Learning performance was tested using behavioural and brain activity (event-related potentials) measures. In addition, brain-to-brain synchrony between tutor and learner was measured during listen-and-repeat training of word pronunciation. I will also describe the research protocol of two ongoing studies. These will test social and interactive methods for teaching pronunciation and word meaning in a foreign language.

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