Exploring the Neurocognitive Correlates: Bilingual Profiles and Cognitive Processing in Oral Interpretation through fMRI

Li Defeng, Huang Ruey-song, Victoria L C LEI, Wendy Leung
Language and Cognition Lab, University of Macau

Abstract

This lecture aims to investigate the impact of bilingual profiles on interpreters' cognitive processing and their performance in oral interpreting, with a specific focus on the evidence gathered from a functional magnetic resonance imaging (fMRI) study carried out at University of Macau. It will explore the correlation between interpreters' bilingual profiles, activation of language-specific regions and executive functions regions, and their overall interpreting performance.

Bilingual profiles play a crucial role in the interpretation process, as they encompass the linguistic skills and cognitive abilities that enable interpreters to bridge the gap between languages. By analyzing the fMRI data, we can gain valuable insights into the neural mechanisms underlying interpreters' performance and understand how their bilingual profiles influence these processes. The discussions will specifically delve into the activation of executive functions, including planning, attention shifting, working memory, and inhibitory control, during the interpretation process.