

Multilingualism and Cognition: Unraveling the Interplay Between Language Experience, Memory, and Executive Function



Lecture

Prof. Dr. Narly Golestani

University of Vienna
University of Geneva

Thursday, 14 November 2024, 17:15 - 18:45

Institut de plurilinguisme
Université de Fribourg | HEP|PH FR
Rue de Morat 24, 1700 Fribourg

📍 room K0.02

Abstract

Language is hierarchically structured, requiring the integration of phonetic, semantic, syntactic, and prosodic information with domain-general cognitive skills such as memory and executive control. In this talk, I will explore how bilingualism and multilingualism influence these interactions, drawing on recent findings from behavioural and neuroimaging studies. Work by our group and from others suggest that multilingual experience shows complex, likely bilateral relationships with broader cognitive skills, particularly on memory and executive control, and on the neural underpinnings of these.

I will present results of our recent and ongoing work on brain regions involved in memory and in executive control in multilinguals, highlighting how individual differences in multilingual language experience can shed light on these complex interactions. I will also talk about relationships between language skill and multilingual language experience. This research area has implications for understanding both typical and disordered language processing, at different points in development, and it underscores the complex interaction of nature and nurture

in shaping the neurocognitive mechanisms underlying language learning and use.

Bionote

Narly Golestani is Associate Professor and head of the Brain and Language Lab (www.brainandlanguage.org) at the Cognitive Science Hub of the University of Vienna, Austria, and at the Faculty of Psychology and Educational Sciences at the University of Geneva, Switzerland. She obtained her PhD in Clinical Psychology from the University of McGill in Montreal, Canada, and then did post-docs at the INSERM Unit 562 in Orsay, France, and at the Institute for Cognitive Neuroscience at University College London, in London, UK. Her research makes use of wide range of behavioural and brain imaging methods and analyses to advance our understanding of the brain and language processing at low (i.e. auditory, phonetic) to high (e.g. multilingualism, language control) levels of processing, in the context of healthy individual differences, language and auditory expertise (phoneticians, language interpreters, professional musicians and hyperpolyglots), and language disorder (e.g. dyslexia, aphasia).

