Neurocognitive signatures of translation directionality

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Abstract
In the last decades, numerous neuroscientific investigations have revealed various aspects of translation processes, including differences between forward translation (FT, from L1 into L2) and backward translation (BT, from L2 into L1). In this talk I will review some key findings on the topic, incorporating insights from neuropsychological, hemodynamic, and electrophysiological techniques. The evidence convergently demonstrates that FT is more cognitively demanding than BT, with diverse neurocognitive patterns pointing to the role of semantic and executive mechanisms in this asymmetry. Overall, these findings allow characterizing a distinct trait of bilingual semantic memory skills while bridging the gap between translation theory and cognitive neuroscience.