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Talk Title:

Motor contagions in human actions

Abstract:

Human actions are affected by "motor contagions"; implicit effects on an observer's actions caused by viewing other people's actions. Though these contagions are ubiquitous, affecting speech, gestures, everyday movements and sports, the mechanisms underlying them are still not fully understood. In this talk, I will show that they can be characterized into two types. First, action-imitative contagions, which include most previous contagion reports, are manifested as similarities between specific features (like the kinematics, outcome or goal) of an individual's action and an action they observe. Second, prediction-error induced contagions, which we have recently found, are driven by differences between predictions of how another will act and observations of how they actually do act. These lead to implicit modifications of the motor representations in an individual but may not manifest as similarities between action features. Finally, I will propose the conceptual mechanisms that can explain the entire motor contagion spectrum.