

A Prediction Theory of Motor Representation

Daniel Hsi-wen Liu

Providence University, Taichung, TAIWAN, R.O.C.

Abstract: The theme of motor representation was initiated by Merleau-Ponty (1962). Grush (2004) and Pezzulo (2008, 2011) attempt to explain it by highlighting the role of internal models in simulation of motor effectors. Simulation represents facts of external states without accurately directing the motor system to its goal-state. The present paper explains motor representation in an alternative way, specifically in terms of Clark's (2013) thesis of hierarchical predictive processing models: representation of cognition rests on the recurrent processing of error-correction, and motor representation is a particular case of it. This is an account of representation that is not based on a standing-for (or, referring-to) relation.