

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Interactive Representation in the Motor Control

Permalink

<https://escholarship.org/uc/item/3p65q531>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 32(32)

ISSN

1069-7977

Author

Liu, Daniel His-wen

Publication Date

2010

Peer reviewed

Interactive Representation in the Motor Control

Daniel Hsi-wen Liu

Providence University

Abstract: Within the approach to embodied representation, Bickhard's (1993, 2000) account of interactive representation, like Rosenberg & Anderson's (2004) guidance theory of representation, employs a notion of representation that is not grounded on the standing-in-for relation. However, Bickhard's accounts of interactive representation remains in need of explanation as to why the interactive representation is genuine representation. The present paper aims at this explanation, with the focus of anticipatory motor activities, by employing Merleau-Ponty's notion of 'motor intentionality' (Merleau-Ponty, 2006). For this, the present paper explains how the interactive representation relates to motor performance in its immediate environment, in other words, how the interactive representation gains its intentional content. In addition, the present paper argues that the interactive representation of motor activities provides the guidance of motor actions, and vice versa, hence Bickhard's notion of interactive representation and Rosenberg & Anderson's guidance theory of representation are two versions of the same theory.