From Sensorimotor Data to Concepts: The Role of Symmetry

Thomas C. Henderson and Anshul Joshi
University of Utah
Edward Grant
North Carolina State University

Abstract

We have proposed the use of symmetry theories as the basis for the interpretation of sensorimotor data and the creation of more abstract representations. Here we outline a cognitive architecture to implement such an approach and provide a set of specific mechanisms for 1-D and 2-D sensorimotor processing. The overall goal is to integrate low-level sensorimotor data analysis and behavior with more abstract affordance representations.