Solving the Symbol Grounding Problem: a Critical Review of Fifteen Years of Research

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Abstract

This article reviews eight proposed strategies for solving the Symbol Grounding Problem (SGP), which was given its classic formulation in Harnad (1990). After a concise introduction, we provide an analysis of the requirement that must be satisfied by any hypothesis seeking to solve the SGP, the zero semantical commitment condition. We then use it to assess the eight strategies, which are organised into three main approaches: representationalism, semi-representationalism and non-representationalism. The conclusion is that all the strategies are semantically committed and hence that none of them provides a valid solution to the SGP, which remains an open problem.

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