

# Embodied cognition and the Orwell's problem in cognitive science

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**Abstract** Embodied approach to cognition has taken roots in cognitive studies with developments in diverse fields such as robotics, artificial life and cognitive linguistics. Taking cue from the metaphor of a Watt governor, this approach stresses on the coupling between the organism and the environment and the continuous nature of the cognitive processes. This results in questioning the viability of computational–representational understanding of mind as a comprehensive theory of cognition. The paper, after giving an overview of embodied approach based on some examples from conceptual metaphor theory, looks into a special case of Orwell's problem in cognitive science. The problem is that there is so much evidence for embodiment to be true, yet there is little understanding of the same. I shall try to solve this problem by pointing out that it is our inveterate habits of perceiving ourselves that makes the embodied approach appear implausible. Studies on free will as well as the importance of the unconscious in overall cognitive processing raise challenging questions on our self-conception. A revision in the self-conception in the light of these findings will pave the way for a better appreciation of the embodied approach to cognition.

**Keywords** Embodied cognition · Orwell's problem · Conceptual metaphor theory · Self-conception

## 1 Introduction

Gone are the days when cognition was taken to be thoroughly a case of crunching of numbers and symbols. The

complacency of traditional cognitivism has vanished and fertile tools to explain cognitive processes appear in many directions. Embodied approach flourishes in the overall context of understanding mental phenomena in continuity with the rest of natural processes including that of non-neural bodily parts.

The thesis of embodiment in the context of cognitive science is not to be understood as the simple view that there is no mind without the body. It amounts to the stronger claim that the whole of conceptual repertoire and the cognitive operations on them are based on the bodily experience that each organism undergoes. That is to say, mental phenomena must be treated as continuous with the rest of the bodily experiences. The moorings of the embodiment thesis can be traced back to the works of the existentialist thinkers, like Heidegger and Merleau Ponty, as well as to the Rylean analysis of mental states in terms of dispositions. Heidegger's thesis of "being in the world" (Dasein) has questioned the status of the perceiving subject or agent as discontinuous with the rest of the world (Heidegger 1962). This is because the very nature of the agent is to be in the world, and therefore, abstracting out of the environment would not do justice to its real nature. Merleau Ponty makes clear the inextricable linkage of the agent and the world in the following passage:

When my hand follows each efforts of a struggling animal while holding an instrument for capturing it, it is clear that each of my movements responds to an external stimulation; but it is also clear that these stimulations could not be received without the movements by which I expose my receptors to their influence...the properties of the object and the intentions of the subject are not only intermingled; they also constitute a new whole. (Merleau Ponty 1963)

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