The objectivity of action-oriented representation

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Clark (1997ab, 1999, 2001) couches the notion of *action-oriented representation*, and Symons (2001) supports it. As that notion contends, the primary role of perceptual representations (especially those relating to visually-guided activities) is to support actions; by contrast, describing the world is of secondary importance. This notion stems from the stance of embodied and situated (i.e. environmentally embedded) cognition (Haugeland (1998) terms it as embodied and embedded cognition), which sees cognition as inextricably bound to action. A problem arises that the perceptual representation so construed might risk losing not only its autonomy but also its objectivity, because the world would then be represented selectively (in support of prompt actions) and consequently partially. Some aspects of the environment are completely unattended from the outset, and certain world features are gathered while not recovered in full. The process of perception is usually subject to real-time constraints; as a consequence, perceptual recognition of the external conditions ends up with the best 'guess' (of them). An additional problem of lacking objectivity arises in Symons (2001), where explaining representation in terms of organism-environment interplay is basically an interpretationist account. While a compromise between autonomy and adaptive success is generally understandable (especially in evolutionary context), perceptual objectivity must be strictly explained. The present project aims to explain this objectivity, with the limited scope of visually-guided activities (in order to maintain a sharp focus).

Haugeland (1996) discusses the objectivity of perception, suggesting that one of its important aspects rests on the *constitutive standards* of an object being perceived: such as the physical laws and/or the norms of the object's actions, to which the object strictly subsumes. Haugeland's (1996) discussion resorts to chess and the rationality of empirical science, but has not referred to visually-guided activities. However, the role of action in the objectivity of perception has been highlighted. Thus, the present project can be seen as a connection between Haugeland (1996), on the one hand, and Clark (1997, 1999, 2001) and Symons (2001), on the other.

This project will argue that action-oriented representation is objective grounded on a novel sense of constitutive standard—the recurrent linkage between the available perceptual heuristics and the agent's actions leading to adaptive success. The linkage is dynamical because it is gradually constructed in the light of increasing that agent's optimality of adaptive success. Analogous to physical laws, the heuristics in support of adaptive success guide agents' optimality of survival, and consequently must be strictly followed. So understood, the objectivity of visually-guided activities is to be dynamically established.

Keywords: objectivity, action-oriented representation, embodied and situated cognition, perception.

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