A Semiotic Turn in Cognitive Science?

Classical cognitivist accounts of thinking claim that internal symbol manipulation and computation are necessary (if not sufficient) conditions for cognitive behavior. Thus, according to these theories, a good explanation of human cognition can be provided if and only if a primary epistemic role is given to mental representations, which play the role of mediators between sensations (inputs from the world) and actions (outputs directed towards the world), both considered as non-cognitive events. Therefore, if what can be called “mind” is identified with thinking, and in general with cognitive processes, and if these ones are supposed to be internal (i.e. they ought to be located in our heads), the mind can be defined as the whole of internal representational processes which mirror the external world by means of the unconscious use of symbols.

Reacting to this internalist and “intellectualistic” picture of cognition and mind, second generation cognitive scientists try to provide alternative explanations, which, to some extent, could be defined as anti-intellectualist and externalist, inasmuch as they claim that “externalities” (i.e. artifacts, actions, bodily movements, etc.) are enabling conditions to produce cognition. Nevertheless, if on the one hand new paradigms which fall under the label “4 E cognition” seem to propose a unitary reaction to the cognitivists’ internalist faith -giving birth to a sort of “pragmatic turn” in cognitive science- on the other hand scholars who support Extended, Enactive, Embodied, Embedded and Distributed theories of cognition do not seem to reach an agreement on the issue of representation. Moreover, it seems to me that the problem of representation within the theoretical frame of the “New Science of Mind” does not concern only a superficial disagreement on its epistemic necessity or epistemic power, but it seems to have deeper roots. As a matter of fact, the notion of representation all these theories deal with still seems to fit the narrow description which first generation cognitivists give of it. 

Thus, the aim of this talk is to speculate on another and broader way to think of representation, conceiving it in semiotic terms, namely as an element of a formal triadic relation which can actively produce cognitions, and whose embodiment is not a priori determined. The discussion will be lead by the analysis and the reinterpretation of some pivotal notions of Peircean semiotics, such as those of interpretant and semiosis, in order to produce an integration among the cognitive theories examined.

PEIRCE, C. S. (1967), Charles Sanders Peirce’s manuscripts; ROBIN Richard, Annotated catalogue of Charles Sanders Peirce, Amherst, University of Massachussetts Press.