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TOWARDS A COGNITIVE SEMANTICS FOR INDEXICAL LANGUAGES

Abstract

With the *Logic of Demonstratives* (LD), David Kaplan defines a new formal approach for indexical languages (languages containing expressions as ‘I’, ‘here’, ‘now’), introducing a double indexing into the definition of satisfiability and distinguishing the *content* and the *character* of an expression. In particular, the meaning of an indexical is provided by an *ad hoc* index which depends on the (objective) context of utterance. In this work, we face the problem of indexicals from a cognitive point of view, where we can distinguish between the *metaphysical* content (“what is said”) – Kaplan’s approach – and the *cognitive* content (“what is meant”) of indexical expressions. In particular, the meaning of an indexical expression is determined through an index which depends on the cognitive context (the mental representation of the agent) and not on the context of utterance (the objective context). In fact, the content of an expression of the kind ‘I am here now’ depends on the cognitive representation of the world state of the agent rather than on the world state itself. We propose a new logic, called LMS_i (Local Models Semantics for Indexicals) which: (i) allows us to distinguish between metaphysical and cognitive content; (ii) allows agents to communicate when knowledge provided by the context of utterance is not available; (iii) under suitable restrictions, can embed LD as a special case.