ELECTRONIC NEWSLETTER ON
REASONING ABOUT ACTIONS AND CHANGE

Issue 99008 Editor: Erik Sandewall 31.3.1999

Today

Pat Hayes today comments on John McCarthy's 'grumble' yesterday; the general issue is how we deal with the names of approaches within the field.

Debates

Publication practices

From: Pat Hayes

John McCarthy's 'grumble' in ENRAC 30.3 (99007) raises a general issue of nomenclature.

The following scenario is quite a common one. A formal term of art becomes generally used to refer to something in the literature which was invented or introduced by someone. After some time has elapsed, however, another author or group re-adopts or re-uses the term in a somewhat different sense, and this second sense is then widely used by a related community, or among a different generation of researchers. This has happened for example to the word "ontology", which is now widely used in the, er, ontology community to refer to what philosophical logicians (who originally had possession of the word) called "axiomatic theories". In our community it has happened to "situation", which is now widely taken to mean what Reiter (et. al.) defines it to be, ie a finite sequence of actions, and its cognates such as "situation calculus", which Reiter (et al) uses to refer to a particular formalization developed at Toronto in the last decade. Neither of these meanings are what these terms meant before Reiter changed the language.

The result of such alterations in meaning is pernicious only if people fail to realize that it has happened, or are unclear about which sense they intend when they use the term; but when this does happen, a great deal of confusion, not to mention emotional heat, can be generated. Once introduced into a community, terminology has a life of its own, and nobody can expect to exert a kind of eternal authority over it. But any useage of such a term should clarify which sense is meant; and any writing which purports to be a definitive *survey* of a topic must be especially careful about such ambiguities, and to make clear to a reader that the word has changed in meaning. Evidently what Reiter and his co-authors mean by "situation calculus" isn't what John McCarthy invented. Regardless of the relative merits of the calculi being referred to, a survey with that title should at least clarify and respect the way that the terminology was used for about a quarter of a century before Reiter re-defined it.

Pat Hayes

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