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ELECTRONIC NEWSLETTER ON
REASONING ABOUT ACTIONS AND CHANGE

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Today

Today, Peter Grünwald's answers to two questions in the previous Newsletter issue.

The latex/postscript version of the monthly News Journal has now been published officially for the months up to October. The draft version of the November issue is available on our "back issues" page, and will go to official publication in about a week. If you made debate contributions during November, please check so that they have been rendered correctly. December and January issues are forthcoming.

Discussions

Discussions about Articles at Commonsense workshop

(Ramifications and sufficient causes)

The difference is that it is not clear what exactly has to happen (in the real world) for a fluent p 'to be caused to have truth value v'.

For example, $Holds(Sw1(Up), s) \wedge Holds(Sw2(Up), s) \rightarrow Caused(Open, s)$

is how Lin formalizes the suitcase domain. This translates to 'if both switches of the famous suitcase are up, then it is caused to be open'

But is the suitcase caused to be open by the mere fact that the switches are up? Shouldn't it rather be: 'the suitcase is caused to be open only if the the switches are *put* in the up position? One may argue about this - as one may argue about the appropiateness of lots and lots of uses of the word 'caused' in everyday language: in different situations the word can stand for different things. Because of this ambiguity, I argue, theories of action in which 'caused' is used as an atomic concept, *intended to be used whenever we use the word 'caused' in everyday language*, will run into trouble at some point.

I think the concept of 'intervention' suffers no such ambiguity. Suppose I give you a description of the complete state of a reasoning domain at time t (or in a situation s, if you like). Then you will usually be able to say whether or not an intervention takes place at that point in time/ in that situation. It will not always be clear whether or not something is 'caused to have truth value v' at that point in time/ in that situation. In other words, to put it very bluntly, 'I know what I'm modelling' whereas Lin does not.

Yes, my 'causal implication' is monotonic. To handle examples like

$$Shoot \wedge \neg - loaded \rightarrow Do(Alive(1), False)$$

I would remodel my domain as follows:

$$Shoot \wedge -Abnormal_i \rightarrow Do(Alive(1), False)$$

All the nonmonotonicity is then put in the $Abnormal_i$ propositional variable. This is discussed, by the way, in the technical report INS-R9709 (basically a long version of my Common Sense paper) available at my web-page. For brevity, I excluded all talk of abnormalities from the Common Sense paper.

This newsletter is issued whenever there is new news, and is sent by automatic E-mail and without charge to a list of subscribers, in plaintext format. The present postscript issue is a bona fide rendering of the same information in alternative typography. Instruction for contributors and other additional information is found at the following URL:

`http://www.ida.liu.se/ext/etai/actions/njl/`