Common Sense Reasoning: What logic does this follow?

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Abstract

Understanding the nature of Common Sense Reasoning (CSR) has been one of the central problems of Artificial Intelligence since its very inception. There are now strong reasons to believe that classical logic is not adequate to model this type of reasoning. In this talk we will examine a prototypical example of CSR, namely that of (temporal) Reasoning about Actions and Change addressing in particular the issue of developing a formalisation that can lead to a viable computational method for this kind of reasoning. We will see how argumentation can help to provide a such a computational formalisation and study its limitations. Drawing from this experience we will at the end of the talk attempt to speculate on some of the foundamental problems that need to be addressed in order to understand in a contructive and computational way CSR and other related phenomena of intelligence.