Michael De

Abstract

The motivation behind relevance logic is that an inference is valid just in case (i) it necessarily preserves truth, and (ii) the premises and conclusion are relevantly related. Thus, there are two ways in which an inference can go wrong, i.e. by committing a fallacy of relevance or by failing to preserve truth. This idea is made clear in Belnap and Anderson 1975 and reflected in the original deductive systems for relevance logic, where necessary truth preservation and relevance are kept neatly separate.

However, this neat separation has been lost with the advent of relational semantics for relevance logic, according to which an inference is good simpliciter just in case it necessarily preserves truth. This has led to various related objections to relevance logic on the grounds that "the radical case for relevance should be dismissed just because the hypothesis it requires us to entertain is inconsistent" (Lewis 1982). In this talk I argue that proof-theoretic treatments of relevance are preferable to semantic ones, but suggest a way of semantically treating relevance that keeps it separate from truth preservation.