

Epistemic modals under disjunction

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Abstract

You can assert mixed disjunctions, where at least one disjunct is an epistemic modal sentence, even if you cannot assert at least one disjunct. For example, in wondering what number a fair die has landed on, I can assert “It’s at least four or it’s probably odd.” Similarly, in wondering which side a biased coin (of unknown bias) has landed on, I can assert “It’s likely heads or it’s likely tails.” However, where assertibility is plausibly understood in terms of acceptability by a belief state (modeled by a probability space), Yalcin (2007)’s domain semantics for expressivists incorrectly predicts that the assertibility of a mixed disjunction entails the assertibility of at least one disjunct.

I examine three refinements to consider for a domain semantics, in order to help it fare better in light of mixed disjunctions. The first, inspired by Rothschild (2012), is to model one’s belief state by a set of probability spaces. The second, inspired by Klinedinst and Rothschild (2012), is to posit a dynamic use of disjunction. However, I raise some worries about the first two refinements, and argue for a third: the refinement, inspired by Jeffrey (1965), Skyrms (1980), and Dorr and Hawthorne (2013), is to posit that epistemic modal operators are sensitive to a contextually-salient partition.

References

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