

# Fuzzy Logic and Theories of Vagueness

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## Abstract

Fuzzy Logic has been successfully applied to all kinds of scenarios, where degrees of membership and truth can be systematically discerned. However it is highly contentious whether this fact renders Fuzzy Logic an ideal tool for modelling reasoning with vague concepts and propositions. There is a lively and prolific debate in analytic philosophy about so-called theories of vagueness. Interestingly, degree based approaches don't fare well among most contemporary philosophers. In this talk we will survey this discourse on vagueness from a logician's perspective and try to explain why various alternatives to many valued logics are deemed necessary to model human reasoning under vagueness. We maintain that deductive Fuzzy Logic in itself is hardly a full-blown theory of vagueness, but may play an important role in formalizing and quantifying different aspects of handling logically complex vague information.