

(1) Two kinds of conditionals: supposition and support

Suppositional conditionals are evaluated by supposing that the antecedent A is true and then checking whether the consequent is true or accepted, too. They allow the antecedent to be irrelevant to the consequent if the consequent is true or accepted anyway. Support conditionals are stronger than suppositional conditionals in that they require that the antecedent in addition supports the consequent (is relevant to the latter, is evidence to it or makes a difference to it). We look at the semantics and logic of suppositional conditionals and discuss what kind of logic we may expect for support conditionals.

(2) Difference-making conditionals and connexivity

A difference-making conditional is evaluated by adding to the evaluation clause of the suppositional conditional another clause to the effect that the consequent is not true/accepted on the assumption that the antecedent is false. This is a very intuitive form of encoding the idea of support. We look at the semantics and the (rather unorthodox) logic of difference-making conditionals and discuss their intuitive adequacy. In particular, we address the question to which extent difference-making conditionals obey the principles of 'connexive logic'.

(3) Evidential conditionals and dependence conditionals

In this part of the course, we discuss two alternative ways of understanding support conditionals. First, we have a look at the 'evidential conditionals' of V. Crupi and A. Iacona. Second, we look at 'dependence conditionals' which are inspired by D. Lewis's idea of counterfactual dependence. A characteristic of the former is that they satisfy contraposition, a characteristic of the latter is that they satisfy what has been called 'conditional perfection'. We discuss the intuitive adequacy of both alternatives and their connexive properties.

(4) Towards a logic for 'because'

The meaning of the natural language connective 'because' appears to be close to the meaning of conditionals as used in natural language. We introduce the idea that 'C because A' is true/accepted just in case the corresponding difference-making conditional 'If A then C' is true/accepted and both A and C are true/accepted as well. A minimal logic for 'because' sentences is presented, and it is shown how it can be extended in ways that parallel extensions of the logic of suppositional conditionals. The adequacy of this idea is discussed for various problem cases known from the literature on causation. (This is joint work with E. Raidl.)

(5) Conditionals and probabilistic evidential support

While so far all proposals have been couched in a qualitative-modal framework, in the last part of the course we discuss a number of related ideas formulated in a quantitative-probabilistic framework. The semantics used here is based on well-known measures of evidential support which are intended to express to what extent the antecedent of a conditional supports its consequent. Two of these measures turn out to be suitable for approximating (but not entirely capturing) the logics of qualitative difference-making and evidential conditionals, respectively.