

Hannes Leitgeb: On Merely Expressive Devices

In this talk I will develop a semantics for merely expressive devices: linguistic expressions that help us to express propositions (thoughts) but which do not at the same time contribute to the truth conditions of the propositions thereby expressed. Logical operators constitute paradigm case examples of such merely expressive devices, but I will argue that there are many further merely expressive devices, including stipulatively defined terms and metaphysical modalities. Ultimately, the semantics will throw new light on various important philosophical debates, such as on the viability of analyticity and the metaphilosophical status of logic and metaphysics.

Peter Verdée: Relevance understood as connectedness: constitutional logics and their graph-theoretic representation

In this talk I will introduce the concept of *constitutional logic*. Constitutional logics are logics that are defined on the basis of their constitution: a set of bilateral logical grounding statements, i.e. metalinguistic statements that say how the truth/falsity of a complex statement can be inferred from the truth/falsity of simpler statements. Many logics can be characterized in this way, among which classical logic, Priest's logic of paradox, Belnap and Dunn's FDE, logics of formal inconsistency and in fact, in a less direct way, any logic defined by means of finite deterministic or indeterministic matrices. The advantage of defining logics by means of their constitution is that one can isolate the substructural rule called *weakening* from the logic. The most natural and simple consequence relation one obtains on the basis of constitutions is one without weakening. The full constitutional logic is obtained by mere closure of the weakening-free consequence relation under weakening. We argue that the weakening-free versions are fully relevantized versions of the full logic, without altering the traditional meaning of the connectives.

I will also present a method to represent constitutional logics visually. For this we use a translation of constitutional proofs to graph theory. The graphs have the pedagogical feature that they show, for valid sequents, how exactly their premises and conclusion are interconnected. Irrelevant premises or conclusions of a valid sequent can simply not be connected at all to the main structure, they remain isolated. This shows that how the pre-theoretic notion of relevance is here explicated as connectedness of arguments. Arguably, that is close to what relevant logicians were after before they came up with their famous collection of relevance logics.

Marianna Antonutti Marfori: The Implicit Commitment Thesis for Arithmetical Reflection Principles

The implicit commitment thesis for first-order arithmetical theories states that when we accept the axioms of a theory we are thereby also committed to accepting additional

statements (reflection principles) that formally express the soundness of the theory and which are expressible in the language of the theory in question, but are formally independent of its axioms. The addition of reflection principles has been justified in various ways on the basis of syntactic, semantic, or epistemic considerations. In this talk I will present a new way of justifying the addition of reflection principles on the basis of epistemic considerations. By employing certain uncontroversial properties of the notion of informal or absolute provability for arithmetic, I will show how the addition of a principle that expresses the recognition that Peano arithmetic correctly formalises informal arithmetical reasoning implies the local and uniform reflection schemes.