

Constitutional logic

A non-revisionary approach to hyperintensionality and relevance

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In this talk I present a novel framework to define hyperintensional notions, relativized to any existing truth-functional logics. We formalize the meaning of connectives and formulas of a given language by means of a set of bilateral grounding statements, the *constitution* of the (deterministic or non-deterministic) truth-functional logic. The members of a constitution, *constitutive sequents*, are a special kind of sequents that express how the meaning of semantically complex sentences is based on the meaning of less complex formulas. We define a set of basic, structural rules: *Identity*, *Mixed Cut* and *Weakening*. If constitutions are closed under all three of them, one obtains the existing Tarski logic. However, when the Weakening rule is dropped, one naturally obtains a consequence relation that is *relevant*, in the sense that only those sequents are deducible that do not contain premises or conclusions that have no impact on the validity of the sequent. All the other sequents are deducible. When also Identity is dropped, one obtains a theory of bilateral logical grounding. I will also present a simple generic Truthmaker Semantics for constitutional logics. This way one obtains an exact semantics (in Kit Fine's sense of the word) for every logic that can be characterized as a constitutional logic. This can then be used to define well-known hyperintensional notions such as *exact consequence*, *analytic implication*, *hyperintensional propositions*, and *partial truth*, relativized to a logic.

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Zoom Meeting:

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