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SOME REPRESENTATION STRUCTURES FOR COMPUTATIONAL LINGUISTICS

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Abstract

In this talk, I will present useful tools for producing semantic representations derived by an analysis of a sentence, and I will suggest how to take the discourse context in consideration for this goal. All these tools are taken from recent developments in logics, mainly in Resource Sensitive Logics (particularly Linear Logic). After viewing classical tools like the lambda calculus and its use in a Montagovian perspective, we will recall some aspects of the now well known "Curry-Howard" isomorphism. These classical views are now surpassed by new structures: proof-nets, which replace lambda terms and whose main advantages reside in their geometrical properties, and continuations, which make it possible to take contexts as arguments. I will particularly develop the point on the calculus of continuations (and its lambda-mu calculus version) with regards to the question of interpretation in context (anaphors, deictics, ...).

Biography

Prof. Alain Lecomte is presently professor of Theoretical Linguistics at the University Paris 8 (France), and member of the Laboratory of "Formal Structures of Language" (UMR 7023, CNRS). He was previously professor of logics and epistemology at the University Grenoble 2 and member of the Institute of Applied Mathematics of Grenoble. He is also an associate member of the team "SIGNES", an INRIA project in Bordeaux. He obtained his doctorate of Applied Mathematics from the University of Grenoble, and his habilitation in Computational Linguistics from the University of Clermont-Ferrand. His research projects are in the areas of Theoretical Linguistics, Computational Linguistics and Logics. He is presently coordinating a national project on "Ludics and Formal Pragmatics".

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