

Encoding Intonational Information in a Logical Grammar

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The discrepancy between syntactic structure and intonational structure is well known. This makes it particularly difficult to simultaneously examine the semantic contributions of both types of information and their interaction. Due to the flexible notion of constituency inherent to categorial grammars, they make ideal candidates for the encoding of both kinds of information. By treating the abstract syntactic structure (tectogrammar) and its concrete realization (phenogrammar) as separate, parallel components of a categorial grammar, we are able to construct grammars which make this distinction in a precise manner. Inspired in part by Polakow and Pfenning's Intuitionistic Non-Commutative Linear Logic and de Groote's Partially Commutative Linear Logic, the work presented here examines the structure of the logic necessary to construct the phenogrammatical and intonational component of this kind of grammar in a way that suggests a solution to the problem of how intonational meaning can be integrated into a semantic representation.