

## **Competitive explanations in semantics and pragmatics: A logic-based approach to problems in pragmatics**

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It is argued that the Gricean approach to the well-known clash of natural logical intuitions with standard modern logic fails to provide an adequate answer and that a fundamentally new approach is called for. This approach (based on Seuren 2009, 2010), calls on logic itself. It is argued that there is no reason why natural logical intuitions should conform to standard logic, because standard logic is based on mathematics while natural logical and ontological intuitions derive from a cognitive system in people's minds (supported by their brain structures). Since any logical system is fully defined by (a) its overarching notions and axioms regarding truth, (b) the meanings of its operators, and (c) its ontology and the ranges of its variables, logical systems can be devised that deviate from modern logic in any or all of the above respects, as long as they remain consistent and paradoxes are avoided. This allows one, as an empirical enterprise, to devise a natural predicate logic (based on a natural ontology and a natural set theory), which is as sound as standard logic but corresponds better with natural intuitions. It is hypothesised that at least two varieties of natural predicate logic must be assumed in order to account for natural logical intuitions, since culture and scholastic education have elevated modern societies to a higher level of functionality and refinement, which has also refined logical intuitions. These two systems correspond, with corrections and additions, to Hamilton's 19th-century logic and to the classic Square of Opposition, respectively. Finally, an evaluation is presented, comparing the empirical success of the systems envisaged.

### References:

Seuren, P.A.M. (2009). *Language in Cognition*. Oxford University Press, Oxford.

—— (2010). *The Logic of Language*. Oxford University Press, Oxford.

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