The Alternative Activation Theory: A Unified Account of the Processing of Focus and Implicature?

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The concept of alternatives has been evoked widely in attempts to explain both linguistic focus (Rooth, 1992, Krifka, 2008) and implicatures (see Sauerland, 2012 and Gotzner and Romoli, 2021 for an overview) at the formal level. As for the former phenomenon of focus, the past decade has brought a multitude of studies suggesting that alternatives should also figure in our explanation of how comprehenders process focused words in real time (Gotzner & Spalek, 2019). Likewise, the processing of implicatures has enjoyed significant attention from both experimentalists and formal theorists (Chemla & Singh, 2014). In the current talk, we aim at presenting a proposal for a unified theory of the processing of alternatives shared between focus comprehension and implicature computation – the Alternative Activation Theory. We provide a review of the recent findings in both domains, sketch our theory, and discuss several open questions and issues for further research.

In the Roothian (1992) framework, the semantic contribution of focus is the addition of a set of propositions constructed by replacing the focused element with its contextually relevant alternatives of the same semantic type. On the other hand, alternatives in implicatures have been thought of as tied to lexical scales (Horn, 1972). However, Fox and Katzir (2011) argue for a unified formal approach to both, since a fundamental issue arises in both focus and implicatures – the Symmetry Problem, i.e. how to systematically account for the exclusion of alternatives that if entertained in the computation would give rise to an incorrect interpretation.

In terms of the processing of alternatives, our account proposes that in cases of both focus comprehension and implicature computation, there is first an activation of semantic associations, followed by a selection mechanism that winnows out contextually irrelevant alternatives (Husband & Ferreira, 2016). These domain-general mechanisms are also supplanted with a process selecting the set of formal alternatives based on complexity in order to solve the Symmetry Problem (Gotzner, 2017).

We identify several gaps in our current knowledge of how this mechanism operates. Among these is the issue of broad focus, a context in which the Symmetry Problem arises (Fox & Katzir, 2011). While it is generally accepted that focus can have varying scope (Büring, 2007), there has been no published experimental work to date examining whether larger focused constituents also activate their alternatives. In a similar vein, little is known about how alternatives for implicatures are represented cognitively, at what level (i.e. at the level of entire utterance only or also locally where scalar elements are introduced), and what the nature of those representations is. We present some preliminary work on these issues as well as research proposals to tackle it.

References

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