Linguistics Association Lecture 2016

Non-discrete structures in grammar

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A number of long-standing debates in linguistics arise from the insufficiency of any single categorical structural analysis for explaining the full range of empirical facts characterizing a particular phenomenon. In this talk, I argue that for some such phenomena the best analysis involves non-discrete or gradient representations. In such representations an individual structural position is occupied by a blend of multiple symbols active to continuously varying degrees. Such representations can alternatively be viewed as built of symbols each of which occupies a gradient blend of multiple structural positions. This type of representation arises naturally within a grammar formalism deploying Gradient Symbolic Computation, a general cognitive architecture which leverages principles of computation in the brain to make progress on fundamental issues in linguistic theory.