Modelling gradient variability in grammar

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Workshop description

Constraint-based approaches to language, such as Harmonic Grammar, Optimality Theory, and Gradient Symbolic Computation (Smolensky & Goldrick 2014) represent an alternative to traditional models of grammar to account for variability and gradience within the use and knowledge of language. Recently, these approaches have started to focus on how graded representations model linguistic performance in different speaker groups (Goldrick, Putnam & Schwarz 2016).

In this workshop, we bring together different fields of linguistics to investigate grammatical variability from within the system (theoretical linguistics), between individual speakers (psycholinguistics), and try to model variability by means of (weighted) constraint-based approaches. By modelling the factors influencing variability, we aim to get a clearer picture of the underlying mental representations and processing architectures in the individual and of the grammatical options that are inherent in a linguistic system.

The phenomena of interest include (but are not restricted to) syntactic and morphological variation. Some of the questions we aim to address are:

- How much variability does the language system allow?
- How much variability do individual speakers or different speaker groups show?
- How can this variability be predicted by means of weighted constraints?

References: Goldrick, Matthew, Michael Putnam & Lara Schwarz (2016). Coactivation in bilingual grammars: A computational account of code mixing. Bilingualism: Language and Cognition 19, 857–876. Smolensky, Paul, Matthew Goldrick & Donald Mathis (2014). Optimization and quantization in gradient symbol systems: A framework for integrating the continuous and the discrete in cognition. Cognitive Science 38, 1102–1138.

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