Linguistics 599: Of Grammar and Graphs

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Th 2-4:20
GFS 330

Plan

This seminar will explore the use of dynamical coupling as the basis for combination operations in both phonology and syntax. Representations in these domains can be expressed as coupling graphs, in which nodes represent constituents and links represent coupling relations. Grammars can be conceived as rules that license particular graph (or sub-graph) topologies.

Required Work

- Reading
- Final paper

Notes, reading assignments are available here: http://sail.usc.edu/~lgoldste/Graphs/

Outline

I. Introduction
Week 1 (27 Aug): Introduction to Articulatory Phonology


Week 2 (3 Sept): Introduction to Dynamical Systems and Task Dynamics


Week 3 (10 Sept) No class

Week 4 (17 Sept) Coupling Dynamics


Week 5 (24 Sept) Planning models and speech errors


II. Syllable Structure and coupling graphs

Week 6 (1 Oct) : Coupled Oscillator Model of Gestural Timing and Syllable Structure


Week 7 (8 Oct): Complex Onsets


III. Prosody and Coupling Graphs

Week 8 (15 Oct): Hierarchical Coupling, Stress, Rhythm


IV. Coupling Grammars

Week 9 (22 Oct) : Phonology and Morphology

V. Syntax (reading to be specified later)

**Week 10 (29 Oct): General Aspects of Syntax**

Syntactic properties of expressions: division into small computational domains, transformations, multiplicity of interpretations associated with a given surface structure, the distinction between A-movement and A’-movement. The classical approach.

**Week 11 (5 Nov): Some difficulties with the classical approach**

Preserving the explanatory force. Moving away for Transformation-Markers to a more abstract transformational level, with Phrase-Markers being derived from that level.

**Week 12 (12 Nov): Illustrating the model with a case study: DP structure.**

**Week 13 (19 Nov): Abstract transformation grammar and coupling graphs**

The coupling of dynamical systems gives content to central features of the abstract grammatical model. Implications in areas such as extraction from islands, A-movement, and control will be pursued.

VI. Summing Up

**Week 14 (3 Dec)**