Optimality Theory
Linguistics 471

The last decade has seen new approaches to the basic research questions of generative grammar: What is universal and what can vary between languages? How can Universal Grammar both admit variation and limit its range precisely? How can the abstract patterns of grammar be learned from the concrete data of speech? What is the relationship between the mechanisms of phonology and those of syntax? In this course, we will explore Optimality Theory, which proposes answers to all these questions.

Prerequisites: Linguistics 201 (Introduction to Linguistic Theory), one of Linguistics 305, 315, 325 (Syntax, Phonology, Semantics), or permission of the instructor.

Requirements: Readings, homework, class presentations, mid-term, final.

Course Outline. The course falls into three major sections. In the first, we examine the fundamental issues addressed by the theory and lay out its formal foundations, working from universals of syllable structure and related phonology. The next section will be devoted to detailed study of other central phenomena in phonology and prosodic morphology; the goal is to identify the basic patterns, see how they emerge under Optimality Theory, and locate problems that are exposed but not resolved by the theory as currently understood. The third section will focus on syntax, showing how complex structural and word-order patterns are controlled by constraints that are formally quite similar to those discovered in phonology. We will also look at recent ideas about how syntactic structure influences phonological phrasing. We cap the discussion with a brief forward look at some new ideas extending the theory into problem areas, and conclude with a retrospective summary of the leading ideas and results examined in the course.

Introduction to OT. Weeks 1-3.
Week 2. Formal structure of the theory. Conflict, ranking, RCD, use of software to aid OT calculations.
Week 3. Learning and constraint ranking. The learning problem for grammars, RCD, BCD, role of markedness/faithfulness.

Phonology under OT. Weeks 4-8.

-Midterm Exam-
Syntax under OT. Weeks 9-12.

Headedness of phrases: do-support, verb-raising; alignment in clitic systems; grammatical hierarchies; matrix/subordinate differences. Syntax-phonology mapping; relations between constraint-types in syntax & in phonology.


Extensions of the core theory. Week 13. Topics chosen from among those related to: sympathy and opaque interactions; constraint conjunction; lexical phonology under OT.


Retrospective overview. Week 14.

-Final Exam-

Bibliography

Background


Basic OT Literature

Prince, Alan and Paul Smolensky. 1997. Optimality: From Neural Networks to Universal Grammar,
S CIENCE 275, 1604-1610.

Textbooks

Phonology


http://www.cog.jhu.edu/~burzio/papers/cycles.ps


Lombardi, L. 1996. Why Place and Voice are different. ROA-105.


Syntax


