Optimality Theory: The Next Generation

Phonology Seminar :: Winter 2012 :: Wendell Kimper

Syllabus

1 Description

In recent years, several spinoff versions of Optimality Theory have emerged — these theories maintain OT's core insight of optimization and constraint interaction, but revise some of the fundamental architecture of the theory. In this seminar, we'll be looking at two of these spinoff theories — Harmonic Serialism (HS) and Harmonic Grammar (HG) — and exploring the ways in which their predictions differ from those of Classic OT.

Many of these differences center around issues of locality of constraint interaction. In the case of HS, a monotonically harmonically improving serial derivation produces myopia — there is no 'lookahead', precluding the kind of structurally remote interactions that Classic OT freely produces. In the case of HG, the precondition for cumulative interactions ('gang effects') is an asymmetric tradeoff of violations — meaning that only constraints whose loci of violation overlap in the right way can interact cumulatively. We'll explore the extent to which these predictions are desirable.

2 Requirements

eCommons

There will be an eCommons site; that's where you'll find the papers to read, and how I'll be spamming you with course-related emails. If you're not officially registered but still want access to the site, let me know and we can make it happen.

Reading and Presentations

There will be a number of papers to read and discuss each week; you should read these thoroughly enough to contribute meaningfully to course discussions, and should come prepared with questions, comments, objections, et cetera.

Each class one of you will be responsible for presenting one of these papers, and leading its discussion. How many you'll have to do will depend on how many of you there are:

$$\text{required presentations} = \frac{\text{course meetings}}{\text{registered students}}$$

Various and Sundry Tasks

From time to time there will be various tasks to be done between classes — working through some puzzle or other that arises in the course of discussion, doing some modeling with relevant software, et cetera.

Final Paper

Topic scope should be such that the paper could, with subsequent further development, lead to a poster or conference talk. Use of OT-Help 2.0 (or other appropriate software tools) strongly encouraged. It's especially exciting if you find serious empirical challenges to the theories we discuss.

Elevensies

(Okay, not strictly required.) Let's take turns bringing some sort of tasty snack to share.

3 A Tentative Plan

Weeks 1-5: Harmonic Serialism

Introduction to HS

→ McCarthy (2010b): Studying Gen

Myopia and Sour Grapes

→ Wilson (2004): Analyzing unbounded spreading with constraints.

→ McCarthy (to appear): Autosegmental Spreading in Optimality Theory.

→ Walker (2010): Nonmyopic harmony and the nature of derivations.

→ Kimper (to appear): Harmony is Myopic.

Stress

→ Pruitt (2010): Serialism and locality in constraint-based metrical parsing.

→ Hyde (2009): Another look at Iterative Foot Optimization and the case against parallelism.

→ McCarthy et al. (to appearb): Cross-level interactions in Harmonic Serialism.

→ Staubs (to appear): Serial restrictions on feature/stress interactions.

→ Elfner (to appear): Stress-epenthesis interactions in Harmonic Serialism.

Deletion and Epenthesis

→ Moore-Cantwell (to appear): Contexts for Epenthesis in Harmonic Serialism.

→ McCarthy (2008): The gradual path to cluster simplification.

→ McCarthy (2010a): Perceptually grounded faithfulness in Harmonic Serialism.

Morphophonology

→ McCarthy et al. (to appeara): Reduplication in Harmonic Serialism.

→ Wolf (2008): Optimal Interleaving (excerpt).

Computing Typology with OT-Help 2.0

→ OT-Help 2.0 User Manual & supplemental materials

Weeks 6-9: Harmonic Grammar

Introduction

→ Pater (to appearb): Universal Grammar with Weighted Constraints.

Cumulativity

→ Jesney (to appear): Licensing in multiple contexts.

→ Farris-Trimble (2008): Cumulative faithfulness effects.

→ Smolensky (2006): Optimality in Phonology II.

→ Potts et al. (2010): Harmonic Grammar with linear programming.

Computing Typology with OT-Help 2.0

→ OT-Help 2.0 User Manual & supplemental materials

Serial Harmonic Grammar (SHG)

→ Bane and Riggle (to appear): The typological consequences of weighted constraints.

→ Pater (to appeara): Serial harmonic grammar and Berber syllabification.

→ Kimper (2011): Competing Triggers (excerpt).

Variation and probability

→ Guy (1997): OT and linguistic variation.

→ Coetzee and Pater (2008): The place of variation in phonological theory.

→ Goldwater and Johnson (2003): Learning OT rankings using a maximum entropy model.

→ Coetzee and Kawahara (to appear): Frequency biases in phonological variation.

→ Jäger and Rosenbach (2006): Maximum entropy models and stochastic Optimality Theory.

→ Hayes and Wilson (2008): A maximum entropy model of phonotactics and phonotactic learning.

Week 10: Student Presentations

References

Bane, Max, and Jason Riggle. to appear. The typological consequences of weighted constraints. In *Proceedings of the 45th Meeting of the Chicago Linguistics Soceity*.

Coetzee, Andries, and Shigeto Kawahara. to appear. Frequency biases in phonological variation. *Natural Language and Linguistc Theory* .

Coetzee, Andries, and Joe Pater. 2008. The place of variation in phonological theory. ROA 946.

Elfner, Emily. to appear. Stress-epenthesis interactions in Harmonic Serialism. In *Harmonic serialism and harmonic grammar*. Equinox Press.

Farris-Trimble, Ashley. 2008. Cumulative faithfulness effects: Opaque or transparent? In *Iuwpl6: Phonological opacity effects in optimality theory*, ed. Ashley Farris-Trimble and Daniel Dinnsen, 119–145. IULC Publications.

Goldwater, Sharon, and Mark Johnson. 2003. Learning OT constraint rankings using a maximum entropy model. In *Proceedings of the Workshop on Variation within Optimality Theory*, ed. Jennifer Spenader, Anders Eriksson, and Östen Dahl, 111–120. Stockholm University.

Guy, Gregory. 1997. Violable is variable: Optimality Theory and linguistic variation. *Language Variation and Change* 9:333–347.

Hayes, Bruce, and Colin Wilson. 2008. A maximum entropy model of phonotactics and phonotactic learning. *Linguistic In* 39:379–440.

Hyde, Brett. 2009. Another look at Iterative Foot Optimization and the case against parallelism. Ms., Washington University.

Jäger, Gerhard, and Anette Rosenbach. 2006. Maximum entropy models and stochastic Optimality Theory. *Linguistics* 44:937–971.

Jesney, Karen. to appear. Licensing in multiple contexts: an argument for Harmonic Grammar. In *Proceedings of the 45th Meeting of the Chicago Linguistics Soceity*.

Kimper, Wendell. 2011. Competing triggers: Transparency and opacity in vowel harmony. Doctoral Dissertation, University of Massachusetts Amherst.

Kimper, Wendell. to appear. Harmony is myopic. *Linguistic Inquiry* .

McCarthy, John. 2008. The gradual path to cluster simplification. *Phonology* 25:271–319.

McCarthy, John. 2010a. Perceptually grounded faithfulness in Harmonic Serialism. Ms., University of Massachusetts Amherst.

McCarthy, John. 2010b. Studying Gen. *Journal of the Phonetic Society of Japan* .

McCarthy, John. to appear. Autosegmental spreading in Optimality Theory. In *Tones and features*, ed. John Goldsmith, Elizabeth Hume, and Leo Wetzels. Mouton de Gruyter.

McCarthy, John, Wendell Kimper, and Kevin Mullin. to appeara. Reduplication in Harmonic Serialism. *Morphology* .

McCarthy, John, Joe Pater, and Kathryn Pruitt. to appearb. Cross-level interactions in harmonic serialism. In *Harmonic serialism and harmonic grammar*. Equinox Press.

Moore-Cantwell, Claire. to appear. Contexts for epenthesis in harmonic serialism. In *Harmonic serialism and harmonic grammar*. Equinox Press.

Pater, Joe. to appeara. Serial harmonic grammar and berber syllabification. In *Prosody matters: Essays in honor of Elisabeth o. selkirk*, ed. Toni Borowsky, Shigeto Kawahara, Takahito Shinya, and Mariko Sugahara. London: Equinox Press.

Pater, Joe. to appearb. Universal grammar with weighted constraints. In *Harmonic grammar and harmonic serialism*. Equinox Press.

Potts, Christopher, Joe Pater, Karen Jesney, Rajesh Bhatt, and Michael Becker. 2010. Harmonic Grammar with linear programming: From linear systems to linguistic typology. *Phonology* 27:77–117.

Pruitt, Kathryn. 2010. Serialism and locality in constraint-based metrical parsing. *Phonology* 27:481–526.

Smolensky, Paul. 2006. *Optimality in phonology II: Harmonic completeness, local constraint conjunction, and feature domain markedness*, volume 2, chapter 14, 27–160. The MIT Press.

Staubs, Robert. to appear. Serial restrictions on feature/stress interactions. In *Harmonic serialism and harmonic grammar*. Equinox Press.

Walker, Rachel. 2010. Nonmyopic harmony and the nature of derivations. *Linguistic Inquiry* 41:169–179.

Wilson, Colin. 2004. Analyzing unbounded spreading with constraints: marks, targets, and derivations. UCLA.

Wolf, Matthew. 2008. Optimal interleaving: Serial phonology-morphology interaction in a constraint-based model. Doctoral Dissertation, University of Massachusetts, Amherst.