Quick definition of terms

Exceptionality: When a static generalization, or an alternation, applies to some words/morphemes in a language, but not to others (e.g. Cánada vs. banána; serenity vs. obesity)

Variation: When a single word/morpheme has more than one possible surface phonetic form in the same phonological environment (còndënsåtion vs. còndënsåtion)

Syllabus

The main question I would like to address in this course is how exceptionality and variation are best treated within Optimality Theory. To do so, we will consider competing proposals in the recent theoretical literature. I have laid out a plan for this in the partial syllabus on the next page.

From these core issues, there are various directions we can strike out in. I have placed some possible topics, and associated readings in the section immediately following the partial syllabus.

I would also welcome suggestions about other topics to investigate during this semester. These could fall within the domain of “exceptionality and variation”, but they don’t have to.

Requirements

Note: These hold of registered participants only. To get the most out of this course, auditors should aim to meet them as much as they can.

Readings: Everyone is expected to be able to participate in an in-depth discussion of the “core” readings in class. Discussion questions will be distributed a week in advance; these should stimulate in-depth reading.

Presentations: All registered students will make a “core” presentation, and a “peripheral” one. These can consist of presentations of readings, or presentations of ones’ own work. “Core” presentations should aim to take up about 1/2 the class time; “peripheral” ones about 1/4.

Writing: A week after each of your presentations, you should hand in a written summary of the presentation and interesting issues that came up in discussion. In addition, you should write up responses to any three of the discussion questions. You will also write a term paper, and present your results in the final class.
Partial Syllabus

| Exceptionality 1: Lexically specific constraints | C: Pater (2000)  
| Exceptionality 2: Lexical strata | C: Ito and Mester (1998)  
| Exceptionality 3: Prespecification | C: Inkelas, Orgun and Zoll (1997)  
| P: Drachman et al. (1997), Hargus and Tuttle (1997), Tranel (1996a, b) |
| Variation 2: Constraint weighting | C: Boersma and Hayes (2001)  
| Exceptionality and variation 1 | Antilla (2002) |
| Exceptionality and variation 2 | Zuraw (2000) |

Prospective additional topics:

Testing internalized knowledge

Regularity vs. lexical diffusion in sound change
Labov (1994a) and references therein

Rules vs. lexical knowledge

Lexical phonology and rule typology
Kenstowicz (1994: ch. 5) and references therein, Rubach (1984), Myers (1999)

Sociolinguistics and variation
Labov (1994b) and references therein

Probabilistic phonotactics
Frisch, Broe, and Pierrhumbert (1997), Frisch diss.

Loanword phonology
Google search on “loanword phonology” turns up a number of leads...

Computational modeling of learning of variation (and exceptions?)
See Bruce Hayes’ and Paul Boersma’s web pages:
http://www.humnet.ucla.edu/humnet/linguistics/people/hayes/
http://www.fon.hum.uva.nl/paul/
A brief history of exceptions and variation in generative phonology

- Variation and lexical exceptions made their first appearance in early debates between structuralists and generativists (see esp. Postal 1968, Anderson 1985)
- Structuralists posited an “autonomous phonemic” level that encoded only contrasts, not free variants; the generativists argued that this level was unnecessary
- Ferguson (1962) additionally argued autonomous phonemics predicted that sound change should be regular, as claimed by the neo-grammarians
- As Postal argued, there seem to be both across-the-board changes, and cases where morphology and the lexicon play a role (see also Labov 1994a)

- There seems to have very little development of an explicit theory of variation in generative phonology - Postal offers the following in a footnote (p. 14)

(1) ...the way in which free variation is to be described within an explicit system of phonological rules is by no means settled. This turns out to be a rather complicated formal problem, and it may be that rule optionality is only a first approximation.

- As far as I can tell, pre-OT generative phonology never progressed beyond this “first approximation” (e.g. variation does not appear in the subject listing of Kenstowicz 1994)
- The one place in which it makes an appearance is in Lexical Phonology, in which it is claimed that post-lexical rules are typically subject to variation; but no theory seems to have been advanced for why this should be so
- One might speculate that generative phonologists have tended to view variation as outside their domain, being instead a matter for phonetic or sociolinguistic inquiry
- One argument for a phonological treatment of variation is that it is conditioned by the same factors that play a role in categorical phonology

- Exceptions have appeared more often in the generative literature
- A diagnostic of “natural” rules, or Stampe’s processes, is supposed to be that they are exception free; rules with exceptions were outside the purview of such theories (see Anderson 1985 for a lucid summary of this debate)
- Bybee has continued to pursue analogical models of non-regular rules (some references to such proposals can be found in Pater 2000)
- A diagnostic of lexical rules in Lexical Phonology is that they are prone to exceptions and lexical conditioning

- There are two broad classes of treatments of exceptions in generative phonology: representational and grammatical
- A case in point - exceptional main stress in English nouns (Pater 1994):
(2)  a. Canada America cinema  
    b. Kanata abscissa antenna

- SPE treated words in (2b) as having underlying geminates (see also Burzio 1992, Hammond 1999) - a representational approach
- Halle and Vergnaud (1987) grant the words in (2b) an underlying grid mark
- Selkirk (1984): words in (2a) have underlying final syllable extrametricality

- Grammatical approaches are taken by Kager (1989) and Jensen (1993); words in (2b) are marked as exceptions to the rule of final syllable extrametricality

Discussion questions: How do these approaches differ? Are they notational variants? Or do they make different claims about the nature of English stress or about phonological theory in general? What approaches can you imagine within OT?

Discussion questions for Pater (2000):

1. Taking the data discussed in 2.1 and 2.4 into consideration, construct an account that has lexically specified structure and faithfulness constraints, but no lexically specific faithfulness constraints. How would this account differ from the one in the text? What other assumptions could you make that would allow you to account for the full range of data, without postulating lexically specific faithfulness? Be creative - you may want to question some of the implicit assumptions that are being made in the text account.

2. Using tableaux, flesh out the problem alluded to in footnote 5. Note that this problem is due to the gradient application of alignment. If you are familiar with McCarthy’s (2002) recent proposal to replace gradient alignment constraints, take a look at this problem from that perspective.

3. Gather native speaker judgements from two speakers on a small set of key examples (e.g. the data in (11), (22), (42) or (47)). You are free to adopt any methodology you choose, except for self-introspection. Note any methodological issues/challenges that arise.

References


Hammond, M. 1995. There is no lexicon! Ms, University of Arizona (Available from ROA)


