Class 9: Optimality Theory, part II, miscellaneous practice

Overview: Last time we talked in detail about how the theory works. This time and next, the focus will be on practicing using it.

1. Warm-ups

? Which candidate wins? Add in the shading and exclamation marks too

	CONSTR1	CONSTR2	CONSTR3	CONSTR4
a	*	*		
b	*		*	
c	*			*

	CONSTR1	CONSTR2	CONSTR3
a	*	**	
b		**	
c		***	

	CONSTR1	CONSTR2	CONSTR3	CONSTR4
a	*	*	*	*

	CONSTR1	CONSTR2	CONSTR3
a			**
b			**
c			*

2. How do I know which candidates and constraints to include in my tableaux?

This procedure works reasonably well:

- Start with the winning candidate and the fully faithful candidate.
- If the winning candidate ≠ the fully faithful candidate…
  - Add the markedness constraint(s) that rule out the fully faithful candidate.
  - Add the faithfulness constraints that the winning candidate violates.
  - Think of other ways to satisfy the markedness constraints that rule out the fully faithful candidate. Add those candidates, and the faithfulness and markedness constraints that rule them out. How far to take this step is a matter of judgment .

? Let's try it together for /atka/ → [at↔ka]

/ atka /	

? Now you do it for /bid/ → [bit]

/bid/	

3. Unnecessary candidates

? One of the candidates below is unnecessary in arguing for the constraint ranking. Which one? (And why?)

	/at+ka/	*CC	DEP-V
☞ *a*	[atəka]		*
b	[atka]	*!	
c	[atəkəa]		**!

- A candidate is **harmonically bounded** if it could not win under any constraint ranking.
- It's not necessarily wrong to include a harmonically bounded candidate in a tableau!
  - But it won't tell you anything about the ranking
  - Ask yourself why you're including it

? Here's a subtler case of harmonic bounding—explain:

	/at+kap+so/	*CC	DEP-V
a	atkapso	*!*	
b	atkapəso	*!	*
☞*c*	atəkapəso		**

4. How do I know which candidates and constraints to include, part II

- If the winning candidate = the fully faithful candidate, then you are probably including this example only to show how faithfulness prevents satisfaction of a markedness constraint.
  - Add that markedness constraint.
  - Add one or more candidates that satisfy that markedness constraint.
  - Add the faithfulness constraints that rule out those candidates.

? Let's try it for /atka/ → [atka]

/ atka /	

5. Question that came up on Perusall:

- Shibatani had an example of three ways to express the same constraint. Let's try translating this into OT:

(11) a. IF: [−sonorant] [−sonorant] ##
THEN: [α voiced] [α voiced]

(18) a. IF: [−sonorant, αvoiced] [−sonorant] ##
THEN: [αvoiced]

b. IF: [−sonorant] [−sonorant, αvoiced] ##
THEN: [αvoiced]

- First, the intuition: two obstruents in a row at the end of a word have to agree in voicing.
- Second, let's make sure we understand why those are the same
- Third, let's do a tableau
  - Here's a case where instead of following the recipe, I just used the four logical possibilities as candidates
  - Depending on what point we're trying to make, we might add more candidates

/ kæt+z /	
kæts	
kætz	
kæds	
klædz	

6. Exercise: Metaphony (just the two easier cases—we might do harder ones later)

- Northern Pugliese/Foggiano
  - Romance variety spoken in town of Foggia, in Puglia, Italy
  - Either closely related to Italian or a variety of Italian
  - However, the data below are pretty different from what I see in, e.g., ildialettodifoggia.altervista.org/dizionario-fonetico.html, or the number of vowels the image below suggests exist, so I'm not sure exactly what variety this is…

[1]

  - Data are originally from Valente 1975 if you want to track this back to source

- Veneto, as spoken in Vincenza, Padova, Rodigo (all near-ish to Venice)
  - Romance language from Italy
  - Also related to Italian but more distantly
  - Data originally from Renzi & Salvi 1985; Rohlfs 1966

[2]

[1] www.statoquotidiano.it/16/05/2013/anna-marino-romano-donne-e-idee-che-costruiscono-foggia/141054/
[2] commons.wikimedia.org/wiki/File:Targa_dialetto_veneto.JPG

- Walker (2005) discusses cases in which suffix vowels spread their [+high] feature to the stem's stressed vowel.

? Develop OT accounts of these two "metaphony" systems (they can have different rankings, since they're different languages). Assume each example is representative of the vowel it illustrates.

Foggiano/Pugliese. Vowel inventory: [i,e,ɛ,a,u,o,ɔ]

pɛ́t-e	'foot'	pít-i	'feet'
móʃʃ-a	'soft (fem.)'	múʃʃ-u	'soft (masc.)'
kjén-a	'full (fem.)'	kjín-u	'full (masc.)'
gróss-a	'big (fem.)'	grúss-u	'big (masc.)'
no data given for other vowels, but assume hypothetical…			
mís-e		mís-i	
mús-e		mús-i	
más-e		mas-i	

Veneto Same vowel inventory.

véd-o	'I see'	te víd-i	'you see'
kór-o	'I run'	te kúr-i	'you run'
tos-o	'boy'	tus-i	'boys'
prét-e	'priest'	prɛ́t-i	'priests'
bɛ́l-o	'beautiful (masc. sg.)'	bɛ́l-i	'beautiful (masc. pl.)'
mɔ́d-o	'way'	mɔ́d-i	'ways'
no data given for other vowels, but assume same as for Foggiano/Pugliese			

? When you're done, we'll talk about triggering and blocking.

Foggiano

/kjen+u/				
kjenu				
➔ kjinu				

/pɛt+i/				
pɛti				
➔ piti				
peti				
pɪti				

Veneto

/ved+i/				
vedi				
➔ vidi				

/prɛt+i/				
➔ prɛti				
priti				
preti				
prɪti				

7. Exercise: our bleeding example from English

⍰ Translate our previous rule analysis into OT—do one example of each allomorph (= 3 tableaux). Be sure to include the counterbleeding candidate (*[glæs-ɨs])

(reminder: /-z/, Ø → ɨ / [+strid]__[+strid], [–son] → [–voice] / [–voice] __)

pʰi-z	‘peas’	dɑg-z	‘dogs’	mɪt-s	‘mitts’	glæs-ɨz	‘glasses’
tʰoʊ-z	‘toes’	læb-z	‘labs’	bloʊk-s	‘blokes’	fɪz-ɨz	‘fizzes’
dɑl-z	‘dolls’	sɑlɪd-z	‘solids’	kʰɑf-s	‘coughs’	bɹæn͡tʃ-ɨz	‘branches’
pʰæn-z	‘pans’	weɪv-z	‘waves’			bæd͡ʒ-ɨz	‘badges’
		saɪð-z	‘scythes’			wɪʃ-ɨz	‘wishes’

8. Very short feeding example: Catalan

- Indo-European language from Spain, France, Andorra with 11.5 million speakers
- Some English words of Catalan origin: *paella*, maybe *apricot*

Antonio Gaudí, architect

Montserrat Caballé, opera singer

Susana Martínez Heredia, economist, Romani activist

From Mascaró (1976):

/son/ → [son]	'they are'	/bint/ → [bin][3]	'twenty'
/pok-s/	'few'	/pan-s/	'breads'
[som poks]	'they are few'	[bim pans]	'twenty breads'

- First, develop an analysis with rules.
- Give an OT analysis.
- Could the counterfeeding candidate *[bin pans] win under any ranking of these constraints?

[3] How do we know the underlying form has a final /t/? Because it shows up when it can be syllabified as an onset, as in /bint+i+un/ → bin.ti.u 'twenty-one'.

9. *If we have time:* counterfeeding that we <u>can</u> capture

Lena Asturian: another Romance metaphony case from (Walker 2005)

- Asturian is a Romance language from Spain, around 100,000 native speakers
  - Lena is a municipality in Asturias

Ramón Menéndez Pidal, philologist person most nominated for Nobel Prize

Santa Cristina de Lena church, Lena

  - Walker's data are from Hualde 1989, and they seem to be from Neira Martínez 1955

vowel inventory: {i, e, a, o, u}

fí-a	'daughter'	fí-u	'son'
nén-a	'child (fem.)'	nín-u	'child (masc.)'
kúb-os	'pails (masc. pl.)'	kub-u	'pail (masc.)'
tsób-a	'wolf (fem.)'	tsúb-u	'wolf (masc.)'
gát-a	'cat (fem.)'	gét-u	'cat (masc.)'

- ? Develop a rule account
- ? What's the problem with translating this into OT (hint: [gét-u] is the problematic word)?
- ? Any ideas for playing with our faithfulness constraints to get this?

10. Opacity [more on this in Week 7 or so!]

- We now have our first empirical difference between SPE and OT: SPE straightforwardly predicts counterfeeding and counterbleeding, and OT doesn't.
- In Week 8-9 we'll see a version of OT that does better with opacity (Kiparsky's Stratal OT).

11. Wrap-up

- Now you know OT!
- Next time we'll cover correspondence theory, and do more practice developing an analysis in OT

References

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