1 Nov. 2023

Class 8: 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

	П	
4		

	Constr1	Constr2	Constr3	Constr4
а	*	*		
b	*		*	
С	*			*

	Constr1	Constr2	Constr3	Constr4
а	*	*	*	*

	Constr1	Constr2	Constr3
а	*	**	
b		**	
С		***	

	Constr1	Constr2	Constr3
а			**
b			**
С			*

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 <u>faithfulness constraints</u> that the winning candidate violates.
 - Think of <u>other ways to satisfy the markedness constraints</u> 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/ \rightarrow [atəka]

/ atka /	

? Now you do it for /bid/ \rightarrow [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!
 - o But it won't tell you anything about the ranking
 - o Ask yourself why you're including it
 - ? Here's a subtler case of harmonic bounding—explain:

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



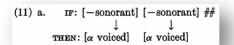
4. How do I know which candidates and constraints to include, part II

- 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/ \rightarrow [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:



(18) a.
$$_{\text{IF:}}\begin{bmatrix} -\text{sonorant} \\ \alpha \text{voiced} \end{bmatrix}\begin{bmatrix} -\text{sonorant} \end{bmatrix} \#$$
THEN: $[\alpha \text{voiced}]$

b.	IF:	[-sonorant]	$\lceil -\text{sonorant} \rceil$	##
			_ αvoiced _	
	THEN:	$[\alpha voiced]$		

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



- 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)
 - o Romance language from Italy
 - Also related to Italian but more distantly
 - Data originally from Renzi & Salvi 1985; Rohlfs 1966



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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.
- Pevelop 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] pέt-e 'foot' pít-i 'feet' mó∬-a 'soft (fem.)' mú∬-u 'soft (masc.)' kjén-a 'full (fem.)' kjín-u 'full (masc.)' 'big (fem.)' 'big (masc.)' grúss-u gróss-a 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.

venero Same	vower 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'	prét-i	'priests'
bél-o	'beautiful (masc. sg.)'	bél-i	'beautiful (masc. pl.)'
mód-o	'way'	mód-i	'ways'
no data giver	n for other vowels, but assum	ne same as for F	Toggiano/Pugliese

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

Foggiano

Г	roggiano				
	/kjen+u/				
	kjenu				
	→ kjinu				

/pɛt+i/			
		r	ſ
peti			
→ piti			
peti			
pıti			

Veneto

VEHELO		
/ved+i/		
vedi		
→ vidi		
/pret+i/		
→ preti		
priti		
preti		
prīti		

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-is])

(reminder: /-z/, $\emptyset \rightarrow i$ / [+strid]_[+strid], [-son] \rightarrow [-voice] / [-voice] __)

p^hi -z	'peas'	dag-z	'dogs'	mɪt-s	'mitts'	glæs-iz	'glasses'
thou-z	'toes'	læb-z	'labs'	bloʊk-s	'blokes'	fız-iz	'fizzes'
dal-z	'dolls'	salıd-z	'solids'	$k^h \alpha f$ -s	'coughs'	b.ænt͡ʃ-ɨz	'branches'
p ^h æn-z	'pans'	weiv-z	'waves'			bæd͡ʒ-ɨz	'badges'
		saıð-z	'scythes'			wıʃ-iz	'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







Montserrat Caballé, opera singer



Susana Martínez Heredia, economist, Romani activist

From Mascaró (1976):

 $/son/ \rightarrow [son]$ 'they are' $/bint/ \rightarrow [bin]^3$ 'twenty' /pok-s/ 'few' /pan-s/ 'breads' [bim pans] [som poks] 'they are few' '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?

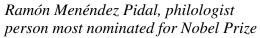
³ How do we know the underlying form has a final /t/? Because it shows up when it can be syllabified as an onset, as in /bint+i+un/ \rightarrow bin.ti.u 'twenty-one'.

9. If we have time: counterfeeding that we can capture

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

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







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.)'

- Property 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 week we'll cover correspondence theory, and do more practice developing an analysis in OT

References

Hualde, Jose Ignacio. 1989. Autosegmental and metrical spreading in the vowel-harmony systems of northwestern Spain. De Gruyter Mouton 27(5). 773–806. https://doi.org/10.1515/ling.1989.27.5.773.

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