Class 12: More issues in process application: multisite optionality

0. Business
- Want to talk about Pohnpeian? (Thanks for the larger fonts!)
- Feedback on feedback
- Kie: start recording

1. Warm-up: Correspondence quiz

<table>
<thead>
<tr>
<th></th>
<th>MAX-C</th>
<th>UNIFORMITY (DON'T FUSE)</th>
<th>MAX-V</th>
<th>ONSET</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>sa.if</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>sa.i</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>sef</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

❔ Which candidate violates MAX-C?
❔ Which candidate violates UNIFORMITY (DON'T FUSE)?
❔ Which candidate violates MAX-V?

❔ If we decided that any of the questions should be answered D, now fix the tableau so that there is enough information to answer.

Overview: What kinds of variation do we expect when there are multiple places/ways for an optional process to apply to a single form?


2. Warao: global optionality
- Language isolate of Venezuela, Guyana, and Suriname
- 28,000 speakers (Herrman 2002).
- 2015 movie, *Dauna. Lo que lleva el rio* (*Gone with the River*), was in Spanish and Warao

• Data from Osborn 1966.

• Little raw data, but Osborn is very definite about the generalization:
  “/p/ has allophones [p b]. The voiced allophone [b] is heard more frequently than the voiceless [p] in most words. In every word, except for a few words noted below, alternation between [b] and [p] is presumably possible, since many alternations of this order have been heard. Thus in /paro+parera/ weak, both the initial and medial phoneme /p/ is heard as [b] generally, and as [p] infrequently. In words like the one cited, with two or more occurrences of /p/, the allophones are consistently [b] or [p] for each utterance of the word. If the first occurrence of /p/ in the word is [b], the following occurrence(s) will be [b]. If the first occurrence is [p], the following occurrence(s) will be [p]. The following are examples of words with two occurrences of /p/: potо+poto soft, apaupute he will put them, kapа+kapa kind of banana.” (p. 109)

• I.e., [paro-parera] ~ [baro-barera], but not *[paro-barera] or *[baro-parera].

• Also, for a non-reduplicative case, [hapisapa] ~ [habisaba] ‘other side’

❔ How might we try to capture this variation in OT? SPE?

/hapisapa/

\[ p \rightarrow b \]

<table>
<thead>
<tr>
<th></th>
<th>hapisapa</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>hapisapa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>hapisaba</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>habisapa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>habisaba</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Another global case, from Kaplan 2012

- Eastern Andalusian metaphony (vowel harmony).
  - Variety of Spanish spoken in Southern Spain
- Word-final /s/ laxifies preceding V, then usually deletes

(on the face of it, that looks like counterbleeding, but Kaplan cites Jiménez & Lloret’s analysis as reassociation of [spread glottis] from /s/ to V.)

<table>
<thead>
<tr>
<th>spelling</th>
<th>pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>mes</td>
<td>mé ‘month’</td>
</tr>
<tr>
<td>tos</td>
<td>tó ‘cough’</td>
</tr>
<tr>
<td>mis</td>
<td>mí ‘my (pl.)’</td>
</tr>
<tr>
<td>tus</td>
<td>tó ‘your (pl.)’</td>
</tr>
</tbody>
</table>

- Laxness spreads to preceding stressed V, if non-high:
  - lejos léhö ‘far’
  - tesis téśi ‘thesis’

- If other Vs intervene, they participate too, all-or-none:
  - treboles tréβole ~ tréβale ‘clovers’
  - cómetelos kómētelɔ ~ kómētelɔ ‘eat them (for you)’

- Similarly, non-high Vs before the stress can laxify, all-or-none:
  - cotillones kotizɔnɛ ~ kotizɔnɛ ‘cotillions’
  - monederos moneðɛɾɔ ~ moneðɛɾɔ ‘purses’

- Finally, the pretonic Vs lax only if the post-tonic ones do:
  - recógelos rekòhɛlɔ ~ rekòhɛlɔ ~ rekòhɛlɔ ‘pick them’
4. **Local optionality**—also hard to find good cases (besides French; see below)

- Vaux reports, for English *marketability*: (but see Derrick & Gick 2014: if you look at the phonetics, there’s a lot more to this):
  
  \[
  [\text{mərkətʰə'bilətʰi}] \sim [\text{mərkəɾə'biləri}] \sim [\text{mərkətʰə'biləri}] \sim [\text{mərkəɾə'bilətʰi}]
  \]

  - Can any of our ideas for SPE+variation get this? OT+variation ideas?

  \[
  /\text{mərkəɾə'bilətʰi} /
  \]

  \[
  t \rightarrow r / V (a) [\text{~stress}]
  \]

<table>
<thead>
<tr>
<th>\text{mərkətʰə'bilətʰi}</th>
<th>]</th>
<th>]</th>
<th>]</th>
</tr>
</thead>
<tbody>
<tr>
<td>\text{a} \text{mərkətʰə'bilətʰi}</td>
<td>]</td>
<td>]</td>
<td>]</td>
</tr>
<tr>
<td>\text{b} \text{mərkəɾə'biləri}</td>
<td>]</td>
<td>]</td>
<td>]</td>
</tr>
<tr>
<td>\text{c} \text{mərkətʰə'biləri}</td>
<td>]</td>
<td>]</td>
<td>]</td>
</tr>
<tr>
<td>\text{d} \text{mərkəɾə'bilətʰi}</td>
<td>]</td>
<td>]</td>
<td>]</td>
</tr>
</tbody>
</table>

5. **Vata: iterative optionality**

- *Ethnologue* classifies as variety of Lakota Dida
- Kru (and therefore Niger-Congo) language of southern Côte d’Ivoire with 98,8000 speakers.
- Sorry, no good pictures ☹
- Data taken from Kaplan 2009; originally from Kaye 1982.
The language has ATR harmony: [+ATR]: [i,u,e,o,ʌ]  [-ATR]: [ɪ, ɑ, ɛ, ɔ, a]

[+ATR] optionally spreads to the final syllable of a preceding word:

/ɔ̍ nɩ sa̍ ká pì/ → ɔ̍ nɩ sa̍ ká pì → ɔ̍ nɩ sa̍ ká pì ‘he didn’t cook rice’

If all the words are monosyllabic, this is potentially self-feeding. There are various options, all possible...

/ɔ̍ ká zā pì/ → ɔ̍ ká zā pì → ɔ̍ ká zā pì → ɔ̍ ká zā pì ‘he will cook food’

Can we get this one?

/- - - + /

[-ATR] → [+ATR] / __ # [+ATR]
6. Hypercorrection in Dominican Spanish: unique-target optionality

- Data from Bradley 2006. See also Núñez-Cedeño 1994, Bullock & Toribio 2010.

- /s/ typically absent in a syllable coda:

<table>
<thead>
<tr>
<th>Popular Dominican Spanish</th>
<th>Conservative Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>se.co</td>
<td>se.co</td>
</tr>
<tr>
<td>ca.so</td>
<td>ca.so</td>
</tr>
<tr>
<td>e.tú.pi.do</td>
<td>es.tú.pi.do</td>
</tr>
<tr>
<td>do</td>
<td>dos</td>
</tr>
</tbody>
</table>

- Hypercorrection can insert a coda [s]:

<table>
<thead>
<tr>
<th>Hypercorrected</th>
<th>Conservative</th>
</tr>
</thead>
<tbody>
<tr>
<td>in.vis.tado</td>
<td>in.vi.ta.do</td>
</tr>
<tr>
<td>co.mos</td>
<td>co.mo</td>
</tr>
<tr>
<td>e.tús.pi.do</td>
<td>es.tú.pi.do</td>
</tr>
<tr>
<td>de.des</td>
<td>des.de</td>
</tr>
</tbody>
</table>

- And there can be variation of where the [s] is inserted:

<table>
<thead>
<tr>
<th>Hypercorrected</th>
<th>Conservative</th>
</tr>
</thead>
<tbody>
<tr>
<td>as.bo.ga.do a.bo.gas.do a.bo.ga.dos</td>
<td>a.bo.ga.do</td>
</tr>
</tbody>
</table>

- But, apparently there can only be one inserted s: *as.bo.ga.dos, etc.

- This claim is not really documented or discussed in the literature. Bradley cites personal communication with Núñez-Cedeño, the main describer of the phenomenon.

❓ Any ideas, for each theory?

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2 though not before an otherwise intervocalic tap or trill, which would be phonotactically illegal, and not if it would create a closed penult in a word with antepenultimate stress.
3 See p. 24 for discussion of an apparent counterexample given by Harris.
7. **Optionality and self-bleeding: French schwa-deletion**

Indo-European language from France and surroundings with 67.8 million speakers worldwide.

- There’s a big literature on this; Dell 1970 is a good place to start, and next I’d recommend Kaplan 2016 and Bayles, Kaplan & Kaplan 2016.

- /ə/ optionally deletes, except when it would create a bad consonant cluster.

```
/suvənir/ → [suvən] ~ [suvn]  ‘to remember’
/pasəra/ → [pasə] ~ [pasa]  ‘will pass’
/sufəra/ → [sufə] *[sufla] ‘will blow’ ([VflV] unsyllabifiable)
/âri dəve partir/ → [âri dəve part] ~ [âri dve partir]  ‘Henri had to go’
/ʒak dəve partir/ → [ʒak dəve part] *[ʒak dve partir]  ‘Jacques had to go’ (*[kdv])
```

❔ What does basic SPE predict for this form (pretend the rule is obligatory): /ty davəne/ ‘you were becoming’

❔ Actual result is (supposedly) [ty davə] ~ [ty dvə]₄ ~ [ty dəvne], but *[ty dvne]—discuss.

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8. **If time—Anderson 1974’s solution**

- Find all segments eligible for the rule and circle them.
- For each circled segment, underline the smallest environment that lets the segment meet the rule’s structural description.
- If the rule is optional, you may uncircle some of the eligible segments and de-underline their environments.
- If any circled segment is contained in some other circled segment’s underlined environment, uncircle (and de-underline the environments of) as few segments as possible to get rid of these overlaps.
- Now apply the rule simultaneously to the remaining circled segments.

(Of course, circling and underlining themselves have no theoretical status—this is just a convenient way to say “identify targets and environments”)
What does Anderson’s proposal predict for French /ty vudre kə sə kə lə bədo/5 ‘you would like that what the beadle…’?

/ty vudre kə sə kə lə bədo/

Does Anderson’s proposal help with the non-optional cases we saw Klamath? Kikuyu?

- Recall Klamath: In /…q̉l̉q…/, deglottalization self-bleeds: […q̉lq …]
- Recall Southern Kikuyu: In nekakaakeroma/, spirantization of /k/ when next consonant is a voiceless stop self-counterbleeds: [neyaakeroma]

**Next time:** Process interaction—beyond (counter){f,bl}eeding

**References**


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5 I got this from an online appendix to David Odden’s *Introducing Phonology* (2005: Cambridge UP): www.ling.ohio-state.edu/~odden/IntroducingPhonology/Theory%20Discussion.html


