We saw a bunch of parallels between speech errors and OCP/consonant harmony

1.1 Similarity

• In speech errors, already-similar segments tend to interact
  ▪ *subjects show* → *shsubjects show*: already are both voiceless coronal fricatives
  ▪ explanation: /s/ sends activation down to features/gestures like tongue-tip critical constriction, which sends activation back up /ʃ/
    ▪ if your model includes feedback, there’s always the danger of activating sounds that are similar to the one you wanted

• In consonant harmony, already-similar segments tend to become identical
  ▪ /kun+Il+a/ → *[kunina]*: already are both coronal sonorants

• In OCP, nearby, highly similar segments are forbidden
  ▪ Arabic /ktb/ ‘write’ is a good verb root; /stb/ would be kind of bad; /dtb/ would be really bad

1.2 OCP sometimes has an exemption for identical sounds

• MacEachern 1999: laryngeal co-occurrence restrictions
  ▪ Peruvian Aymara can only have one ejective per morpheme: *[t’ank’a]*
  ▪ unless they’re identical: *[k’ink’u]* ‘clay’

• Consistent with above idea that what’s difficult about similar sounds ([t’] and [k’]) is preventing them from becoming identical
  ▪ So if they’re already identical, there’s no problem

1.3 Anticipation vs. perseveration

*shsubjects show* vs. *subjects sow*

more common in English, German, Dutch, preplanned Japanese

more common in Chinese, Korean

not much difference in casual Japanese, Hindi, Spanish

• Consonant harmony tends to be anticipatory (spread right-to-left)
1.4 Prosodic position

- In speech errors, target and source phoneme tend to be in same syllable position
- Some consonant harmony systems also require same syllable position

1.5 Not all features are equal

- In speech errors, consonants get swapped more frequently than vowels (e.g., MacKay 1970)
  - Is long-distance consonant harmony more common than long-distance vowel harmony?
  - Does OCP affect consonants more than vowels?

- In Stemberger’s speech error corpus…
  - labials prefer to interact with other labials
  - velars prefer to interact with other velars
  - alveolars are just as happy to interact with labials and velars
    - there is some effect of shared alveolarness, but it’s weak/fragile

- In Frisch, Pierrehumbert & Broe 2004’s study of OCP in Arabic verb roots…
  - Two adjacent labials never happens: */bmk/
  - Two adjacent velars/uvulars is very rare: */kgb/, */kʁb/
  - Two adjacent “gutturals” is very rare: */hhb/
  - Two adjacent coronals is underrepresented but not by as much: */tdb/

2 What does it all mean? How does the causality work here? (emphasis added)

- Hansson 2001: “In a sense, CH [consonant harmony] can be viewed as ‘phonologized speech errors’ (though this phrase should not be taken too literally). The wide-ranging parallels that hold between slips of the tongue and phonological CH processes provide strong support for the hypothesis that the latter have their roots (diachronic and/or synchronic) in the domain of speech planning and phonological encoding.”
• Rose & Walker 2004: “we suggest that LDCA [long-distance consonant agreement] may arise through production-based pressures in diachronic change but may also operate as an active constraint in a synchronic grammar. We leave open the possibility that perception-based factors might also play a role. […] We interpret these production-based pressures as supplying the functional origins and motivation for the formal phonological constraints that drive LDCA. We assume a model of phonology that includes constraints informed by factors in the domains of psycholinguistics and phonetics but that nevertheless stands apart from these as an autonomous grammatical component.” (pp. 488-489)

• Walker, Hacopian & Taki 2002: “root morphemes containing combinations of consonants which are more prone to participate in a speech error, such as m-b or n-d, would be excluded from the lexicon; this could take place diachronically or in a synchronic grammar”

• Walker 2007: “the functional basis does not represent a conscious intention of the speaker but it exerts influence on language change and shapes certain synchronic phonological processes through constraints grounded in production” (p. 1104)

*Here’s something a bit different* (same Berg as in Berg & Abd-El-Jawad 1996)

Berg 1998:

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<table>
<thead>
<tr>
<th>functional pressures</th>
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<tbody>
<tr>
<td>less activation for the right pronunciation/more activation for the wrong one</td>
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</tbody>
</table>

| less activation for conservative option, more activation for innovative one |

<table>
<thead>
<tr>
<th>speech error</th>
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| grammar changes diachronically |

| “the likelihood of error increases with the number of processing biases. The function of these biases is best expressed by the designation ‘facilitator’. […] Each facilitator influences the activation levels to a certain degree. If a number of facilitators conspire, a non-intended unit may amass more activation than the intended one, and an error is outputted. […] linguistic change represents the replacement of one intention by another whereas slips of the tongue represent a violation of an intention. […] In both areas, the competitor has to accumulate more activation than the norm. The advantage that accrues to the innovative form [in language change] comes from a set of facilitators which may be of social, psychological, or any other origin in the case of language change.” (pp. 297-298) |
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References


