

Class 18

Morphological change

11/19/19

- **Reading for this week: Campbell Ch. 10**
- PSet #2 has been posted; due on Tuesday 12/3
- Language change-related talk tomorrow (11/20) by Meredith Tamminga (Green 1-S-5, 4:30pm–6:00pm):

Philadelphia English has been undergoing multiple vowel changes throughout the twentieth century. Using data from the Philadelphia Neighborhood Corpus (PNC), Labov et al. (2013) demonstrate that some of these changes reversed direction mid-century while others continued in a single direction. In Tamminga (2019), I show that among today's young women, there is significant interspeaker covariation between reversing changes but not continuing ones. This talk extends this analysis to the full timespan of the PNC data for five vowels. I find that the correlations between the reversing changes are present in the community prior to the overall reversal peaks, suggesting that covariation may drive, rather than reflect, long-term change trajectories. I further discuss the place of the continuing changes in the covariation picture and broader theoretical implications.

Folk etymology out in the wild: France Is Bacon

- (1) A funny case of mis-analysis I saw on Facebook...

The image is a screenshot of a Facebook post. At the top, there is a profile picture of a cartoon pig and the text "url-coming-soon" and "laughcentre". The post is from a user named "Lard_Baron" with 3468 points, posted 2 months ago. The text of the post is as follows:

When I was young my father said to me:
 "Knowledge is Power....Francis Bacon"
 I understood it as "Knowledge is power, France is Bacon".
 For more than a decade I wondered over the meaning of the second part and what was the surreal linkage between the two? If I said the quote to someone, "Knowledge is power, France is Bacon" they nodded knowingly. Or someone might say, "Knowledge is power" and I'd finish the quote "France is Bacon" and they wouldn't look at me like I'd said something very odd but thoughtfully agree. I did ask a teacher what did "Knowledge is power, France is bacon" meant and got a full 10 minute explanation of the Knowledge is power bit but nothing on "France is bacon". When I prompted further explanation by saying "France is Bacon?" in a questioning tone I just got a "yes". at 12 I didn't have the confidence to press it further. I just accepted it as something I'd never understand.
 It wasn't until years later I saw it written down that the penny dropped.

At the bottom right of the screenshot, the word "Cha" is partially visible.

1 Morphological Change

- “Morphological change” is a cover term for any changes in the morphological system of a language over time. These include things like:
 - Changes in the (underlying or surface) phonological shape of morphemes
 - Changes in the phonological distribution of allomorphs
 - Changes in the distribution of allomorphs within a paradigm
 - Changes in the set of meanings that a morpheme can express (or that any morpheme can express in a language)
 - Changes in what a morpheme can attach to
 - Changes in the order that morphemes appear in
 - Changes in the grammatical properties of individual morphemes or classes of morphemes
- Many of the analogical changes we saw last week are instances of morphological changes (e.g. paradigm leveling).
- Many of the sound changes we’ve seen have resulted in morphological changes (e.g. OE umlaut introducing allomorphy, and subsequent vowel deletions obscuring the original phonological trigger).
- Today, we’ll start going through these and various other kinds of changes from the perspective of the morphology.

2 Morphological change driven by sound change

2.1 Change to the phonological form of affixes

- Consider alternations in Maori between the base forms of verbs and their passive forms. What’s going on?

(2) Maori passives

Base form	Passive	Gloss
awhi	awhitia	‘embrace’
hopu	hopukia	‘catch’
aru	arumia	‘carry’
tohu	tohujia	‘point out’
mau	mauria	‘carry’
fao	faofia	‘put in’
wero	werohia	‘stab’

- From the synchronic perspective, a first pass at the data would probably make you think that the base form is the *root*, and then there are a whole bunch of allomorphs of the passive with different initial consonants.

(3) Maori passives: (lexically-specified) allomorphy analysis

Root	Passive	Gloss
/awhi/	awhi-tia	‘embrace’
/hopu/	hopu-kia	‘catch’
/aru/	aru-mia	‘carry’
/tohu/	tohu-ŋia	‘point out’
/mau/	mau-ria	‘carry’
/fao/	fao-fia	‘put in’
/wero/	wero-hia	‘stab’

- Once you look more closely, you'll see that it's completely unpredictable which allomorph (i.e. which initial consonant) will appear with which root.
- This would lead an analyst to say that, actually, the consonant belongs to the root, and it's just deleted word-finally:

- (4) a. Roots underlyingly have final consonants
 b. The passive suffix is underlyingly /-ia/
 c. $C \rightarrow \emptyset / _ \#$

- (5) Maori passives: deletion analysis

Root	Passive	Gloss
/awhit/	awhit-ia	'embrace'
/hopuk/	hopuk-ia	'catch'
/arum/	arum-ia	'carry'
/tohuŋ/	tohuŋ-ia	'point out'
/maur/	maur-ia	'carry'
/faof/	faof-ia	'put in'
/weroh/	weroh-ia	'stab'

- It is unquestionably the case that the latter analysis is correct *historically*.
 - These roots originally had final consonants, the suffix was originally just *-ia*, and there was a sound change that deleted word-final consonants.
- Comparative evidence (and economy of reconstruction) all support this.

* But it's possible that contemporary speakers don't actually have exactly this analysis: productively generated passives always take the *-tia* suffix.

- Causative passives always use *-tia*

- | | |
|--|--|
| (6) <i>faka-maaori-tia</i>
CAUS-Maori-PASS
'translated into Maori' | (8) <i>faka-koopeke-tia</i>
CAUS-cold-PASS
'Made cold' |
| (7) <i>faka-atamira-tia</i>
CAUS-stage-PASS
'laid out on stage' | (9) <i>faka-maroke-tia</i>
CAUS-dry-PASS
'Made dry' |

- And new borrowings always take *-tia*

- (10) *puruma-tia*
sweep-PASS
'to sweep'

- I believe that the language generally vowels hiatus, so this can't be a purely phonological thing (i.e. inserting a *t* between the root-final vowel and the suffix-initial vowel).

→ The [t] has to be part of the productive suffix.

- If you want to maintain the synchronic *root-final-C* analysis, you could view this as a case of "**phonologically-conditioned (suppletive) allomorphy**" (PC(S)A).
 - PC(S)A: The distribution of allomorphs is determined by phonological properties, but not governed purely by phonological rules.

- (11) PC(S)A analysis:
- Consonant-final roots/stems take the vowel-initial allomorph /-ia/ [PASS ⇔ /-ia/ / C_]
 - Vowel-final roots/stem take the consonant-initial allomorph /-tia/ [PASS ⇔ /-tia/ / V_]

- Somewhat less elegant analysis — though a potentially more realistic one in terms of what’s in the minds of individual speakers — is one based on *lexical listing*.

- (12) Lexical listing analysis:
- PASS ⇔ /-kia/ in the context of CATCH,...
 - PASS ⇔ /-mia/ in the context of CARRY,...
 - PASS ⇔ /-ŋia/ in the context of POINT OUT,...
 - ...
 - PASS ⇔ /-tia/ elsewhere

2.2 Loss of morphological compositionality through sound change

- Frequently, words which were originally morphologically complex and had a transparently compositional meaning lose their morphological complexity through sound change.

- (13) a. Eng *lord* [lɔɹd] < OE *hlāf-weard* ‘bread warden’ [OE *hlāf* > Eng *loaf*]
 b. Eng *lady* [leɹi] < OE *hlāf-dige* ‘bread kneader’

- These were originally transparent compounds. But sound change obscured the separate parts, and the compounds as a whole semantically drifted away from their original individual parts.
- Hence, *lord* and *lady* have simply become their own roots in modern English (though their semantic connection is still loosely maintained)

3 Syncretism

3.1 Loss of category distinctions through sound change

- Frequently, a sound change (or set of sound changes) will destroy a previously significant morphological distinction.
 → This can either result in a loss of the distinction entirely, or a remodeling of the system to make sense of the new evidence.

- Consider the development of the Latin case system into the Romance languages.

(14) Development of case in Ibero-Romance in the paradigm of ‘bread’

	Latin	>	Ibero-Romance	>	Spanish
SG NOM	<i>pan-is</i>	[is > es]	<i>pan-es</i>	<i>-es</i> ⇒ <i>-ε</i> [ε > Ø]	<i>pan-Ø</i>
ACC	<i>pan-em</i>	[em > ε]	<i>pan-ε</i>	↑ [ε > Ø]	<i>pan-Ø</i>
PL NOM	<i>pan-e:s</i>	[e:s > es]	<i>pan-es</i>		<i>pan-es</i>
ACC	<i>pan-e:s</i>	[e:s > es]	<i>pan-es</i>		<i>pan-es</i>

- In some Latin noun paradigms, there was originally no NOM/ACC distinction in the plural, but there was a distinction between those cases in the singular, and between the singular and the plural.
- Various regular sound changes occurred that ended up merging the NOM.SG with the NOM/ACC.PL, while keeping the ACC.SG distinct.

- Speakers decided that it was important to maintain a singular/plural distinction, rather than a NOM/ACC distinction (which had always been more marginal because of the plural), so they *analogically leveled* the ACC.SG allomorph (now /-ε/) into the NOM.SG category.
- This had the effect of completely neutralizing the case distinction, in order to maintain the number distinction.
 - As a result, Spanish lost its case system entirely, but still does have a singular/plural distinction for nouns.
- ⇒ This is a type of “**syncretism**”, where previously distinct morphological categories (here, case forms) are no longer distinct.

3.2 Morphologically-driven syncretism

- Syncretism can happen for its own sake, not driven by phonological factors.

- (15) Development of the Indo-European case system into Modern Greek

I. PROTO-INDO-EUROPEAN	II. ANCIENT GREEK	III. MODERN GREEK
1. Nominative	1. Nominative	1. Nominative
2. Accusative	2. Accusative	2. Accusative
3. Genitive	3. Genitive	3. <i>Genitive</i>
4. Dative	4. <i>Dative</i>	
5. Ablative		
6. Instrumental		
7. Locative		
8. Vocative	5. Vocative	4. Vocative

- Indo-European originally had 8 distinct nominal cases.
 - We can reconstruct this on the basis of comparative evidence (Sanskrit still has all of them).
 - In particular nominal paradigms, some particular pairs of forms might have the same “**morphological exponent**” (the same phonological form of the affix), but all of the cases were distinct — in both the singular and the plural — in at least some paradigms.
- By the time of Ancient Greek, most of the “oblique cases” (i.e. cases other than the nominative and accusative) had merged into the **DATIVE**.
 - By this we mean that, in every single paradigm of the language, the *uses* formally expressed through addition of various different case suffixes (i.e. dative, ablative, instrumental, and locative) are all now expressed through a single form (which gets called the *dative*).
 - Different paradigms have reflexes of different case forms sitting in the category that’s called “dative” (i.e., the dative forms in Ancient Greek are not just old datives, but rather include some old locatives and some old instrumentals).
- By the time of Modern Greek, a further syncretism has happened, merging datives and genitives, in the same way that Ancient Greek had merged various other oblique cases.