April 21, 2003

### Class 6: Hayesian Anticorrespondence

#### To do for next time

- Finish antifaithfulness/anticorrespondence assignment
- Finish reading Alderete, Hayes

## Background: Yidin<sup>y</sup>

### 1. Penultimate lengthening in odd-syllabled words

Proto-Yidin<sup>y</sup>

absolutive purposive dative

mud<sup>j</sup>am mud<sup>j</sup>am+gu 'mother' gudaga gudaga+gu 'dog'

nunangara nunangara+ndanda

Modern Yidin<sup>y</sup>

absolutive purposive dative

mud<sup>1</sup>am mud<sup>1</sup>a:m+gu 'mother' guda:ga gudaga+gu 'dog'

nunangara nunangara+nda:nda

## 2. Final (C)V deletion (if the result has an even number of syllables and ends in a legal C)

Proto-Yidin<sup>y</sup>

absolutive ergative

buna buna+ngu 'woman' nunangara nunangara+ngu 'whale'

mulari mulari+ngu 'initiated man'

gindanu+ngu 'moon'

*Modern Yidin* $^{y}$  (<u>underlining</u> = exception)

absolutive ergative

buna buna:ŋ 'woman' nunangara:ŋ 'whale'

mula:ri mularingu 'initiated man'

gindam gindanungu 'moon'

o Which rule comes first (at least historically)?

### 3. Invariant lengthenings—origins unknown

absolutive dative durgu: durgu:nda 'mopoke owl'

Hayes points out a RoB problem: invariant long vowels never occur in odd syllables, closed syllables (though this is allowed on the surface), or <u>trisyllabic stems</u>:

	absolutive	ergative	locative of genitive	
*	nula:ri	nula:ri+ŋgu	nula:ri+ŋgu	'bnick'
cf.	mula:ri			'initiated man'
cf.			durgu:+nu+la	'mopoke owl'

• Why is this a ROB problem? Why doesn't a standard OT grammar rule out the paradigm we want to rule out?

#### 4. Vowel "restorations"

The historically deleted vowel shows up in suffixed forms. But,

- its quality is largely predictable
- its quality often deviates from the historical quality to follow the predictable pattern

Predicting the vowel quality

- [u] if preceded by nasal
- else copy of preceding V
- or sometimes [a]
- or sometimes, when preceding V is [a], [i].

An analysis needs to account for these strong tendencies but allow for the exceptions and for the fact that many final vowels idiosyncratically fail to alternate with Ø. And the vowels that don't alternate with Ø don't tend as strongly to follow the generalizations about the last 2 vowels (or obey slightly different ones).

Hayes concludes that what we have is not generalizations about underlying forms, and certainly not generalizations about surface forms, but rather generalizations about the *relationships* between unsuffixed and suffixed surface forms.

# 5. Hayes's anticorrespondence constraints

$$V\text{:}\ /\ \_\_\_\ \sigma\ ]\ /\!/\ \_\_\_]_{Absolutive}\!\to\!V\ /\!/\ \_\_\_\ \sigma$$

- = the long vowel in a V:\(\sigma\) configuration in the absolutive corresponds to a short vowel when that whole configuration is followed by another syllable.
- o Can you formulate anticorrespondence constraints for the vowel restoration generalization?

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• What are the differences in typological predictions between Hayesian anticorrespondence and Alderetian antifaithfulness?

#### 6. Another case: Polish

(greatly simplified from discussion in Kaye & Nykiel 1979)

V~Ø analysis of Gussman (1978): V is underlying (deletes unless followed by another alternating vowel, as in -ek, -ka, -ko, -ny, and certain zero affixes)

(a)			
form-a	'form'	forem-ny	ʻadj.'
tàsm-a	'ribbon'	tasiem-ka	'dim.'
wysp-a	'island'	wysep-ka	'dim.'
służb-a	'service'	służeb-ny	ʻadj.'

<sup>&#</sup>x27;form' is a loan—means this must be pretty productive.

(b) Some more loans that alternate the same way:

				source
pert-a	'pearl'	pereł	'gen. pl.'	Lat. per(u)la
mebl-e	'nom. pl.'	mebel	'furniture'	Fr meuble
trefl	'club'	trefel-ek	'dim.'	Fr trèfle
tawern-a	'tavern'	taweren-ka	'dim.'	Ital taverna
turm-a	'jail tour'	turem-ka	'dim.'	Germ Thurm
filtr	'filter'	filter-ek	'dim.'	Fr filtre
palm-a	ʻpalm'	palem-ka	'dim.'	Fr palme

(c) Some loans that don't alternate:

park	'park'	parcz-ek	'dim.'
plansz-a	'board'	plansz-ka	'dim.'
farb-a	'colour'	farb-ka	'dim.'
ryksz-a	'rickshaw'	ryksz	'gen. pl.'
reszt-a	'remainder'	reszt-ka	'dim.'
langust-a	'lobster'	langust-ka	'dim.'

The loans in (c) are supposed to have an underlying final cluster (no underlying V). The epenthetic vowel comes in if the second member is an obstruent. C-liquid clusters, on the other hand, almost always alternate, as in (b).

But, the constraint is sensitive to gender, so we can't appeal to purely surface phonotactic constraints.

For masc. Ns, a non-nasal sonorant can't be the second member of a final (underlying) cluster, but a nasal sonorant can. For other Ns, no sonorant at all can be the second member of a final cluster:

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pokarm 'food' (masc.) pokarm-ny 'adj.' /pokarm/
vs.
form-a 'form' (fem.) forem-ny 'adj.' /forem/
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Kaye & Nykiel argue from this for constraints on underlying forms that can be sensitive to things like gender.

Picard & Nicol (1982), who favor constraints on surface forms, argue that cases like this should be reanalyzed in terms of required relationships between surface forms (although they don't propose a formalism), which can be sensitive to things like gender.

o Can you formulate Hayesian anticorrespondence constraints for Polish?

# 7. Another case: Basque loans from Spanish

Hualde (1993, 1999). Basque loans from Spanish offer speakers strong opportunities to infer cross-language anticorrespondence constraints: there is a large body of loans and nearly all Basque speakers are fluent in Spanish.

Moreover, borrowing has been going on for hundreds of years, so historical developments have resulted in some interesting patterns.

Spanish	Basque	
camión	kamioi	'truck'
macarrón	makarroi	'macaroni'
avión	abioi	'airplane'
melón	meloi	'melon'
patrón	patroi	'patron, boss'
marrón	marroi	'brown'

Does Basque forbid final *ón*? No: native *gizon* 'man', and...

Spanish	Basque	
afán	afan	'zeal'
atún	atun	'tuna'
delfin	delfin	'dolphin'

#### 8. Historical explanation

• *oi* is phonetically [oj], but underlyingly /oe/ (mid and high vowels, when subject to gliding, merge)

How to tell the difference between /oe/ and /oi/ in Getxo dialect:

uninflected	absolutive sg.	
gastai	gastaya	'cheese'
kanpai	kanpaya	'bell'
oi	oya	'bed'
botoi (Sp. botón)	botoya	'button'
erratoi (Sp. ratón)	erratoya	'rat'
yai	yaye	'holiday'
gai	gaye	'call'
sei	seye	'six'
goi	goye	'top'
úrdai	úrdaye	'bacon'
gison	gisona	'man'
plater	platera	'plate'
lagun	lagune	'friend'

How to tell the difference between /oe/ and /oi/ in Ondarroa dialect:

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uninflected	absolutive sg.	
etxe	etxi	'house'
berde	berdi	'green'
ume	umi	'child'
bide	bidi	'path'
abade	abadi	'priest'
mendi	mendixe	'mountain'
saldi	saldixe	'horse'
barri	barrixe	'new'
gorri	gorrixe	'red'
arrazoi (Sp. razón)	arrazoi	'reason'
arratoi (Sp. ratón)	arratoi	'rat'
patroi (Sp. patrón)	patroi	'boss'
botoi (Sp. botón)	botoi	'button'
meloi (Sp. melón)	meloi	'melon'
melokotoi (Sp. melocotón)	melokotoi	'peach'
gastai	gastai	'cheese'
galbai	galbai	'sieve'
ibai	ibaixe	'river'
mai	maixe	'table'
odoi	odoixe	'cloud'
arpei	arpeixe	'face'

- Spanish ón was once one: botone, patrone, etc. In the 11<sup>th</sup> century, e after a coronal C was lost.
- Basque had a rule deleting *n* intervocalically, with nasalization of the preceding vowel. The rule was already established in the 11<sup>th</sup> century, and maybe earlier. Doesn't apply any more (and the nasalization is gone now).

vestiges in old borrowings:

Spanish	Basque	
anate	ahate	'duck'
honore	ohore	'honor'
corona	koroa	'crown'
arena	are(a)	'sande'
catena	kate(a)	'chain'
ballena	bale(a)	'whale'

vestiges in some alternations in native words:

free	suffixed	
ardo	ardan-	'wine'
gaztai	gaztan-	'cheese'
orga	organ-	'chariot'

# 9. Synchronic analysis

- Basque speakers extract and generalize a rule mapping Spanish –*ón* to Basque /oe/.
- o Can you formulate a Hayesian anticorrespondence constraint for this?

#### 10. More cases

French

- Hualde gives some Basque-Spanish cases involving o and u.
- Reed (1982): Romance o to English u (less systematic, since less bilingualism):

1	2.1811
doublon	doubloon (why not "doublone"?)
Italian	
ballone	balloon
Spanish	English
vaquero	
lazo	lassoo
salón (or Fr.)	saloon
vamos	vamoose

English

- Heath (1989): Classical Arabic to Moroccan Arabic
- Weinreich (1953): German [st] to Danish [sk]
- Haugen (1950): English [o-] to American Portuguese [al-]

also less productive, because they lack the long history of intense contact

(all are less productive than the Basque case, probably because the historical and sociolinguistic situation is different)

Hualde suggests that these 'correspondences' may be similar to those used when 'putting on' another dialect, understanding speakers of another dialect, or learning a word from a speaker of another dialect.

# 11. A surprising case (also from Hualde): Beasain Basque accent

no lexical accent →accent falls on second syllable (default			cent
'dog'		dénporea	'the time'
'with the dog'		líburue	'the book'
Beasain Basque			
marátoia	'marathon'		
pintálabiosa	'lipstick'		
albárikokea	'apricot'		
autómatikoa	'automatic'		
míkrofonoa	'microphone'		
and similarly for all Sp. sSss words			
	'dog' 'with the dog'  Beasain Basque marátoia pintálabiosa albárikokea autómatikoa  míkrofonoa	'dog' 'with the dog'  Beasain Basque marátoia 'marathon' pintálabiosa 'lipstick' albárikokea 'apricot' autómatikoa 'automatic'  míkrofonoa 'microphone'	'dog' 'with the dog'  Beasain Basque marátoia 'marathon' pintálabiosa 'lipstick' albárikokea 'apricot' autómatikoa 'automatic'  míkrofonoa 'microphone'

o Why is this surprising?

## Hualde's explanation

- Most proparoxytones (words with antepenultimate stress) borrowed from Spanish were trisyllabic, and thus got default initial accent.
- A correspondence was extracted from this giving initial accent to any Spanish proparoxytone.

Studying this kind of case may give us some insights into what kinds of correspondences people are capable of extracting from data...