Class 12: Markedness and allomorph choice

To do for next time

• Start revised Catalan assignment

1. Phonologically based allomorph selection

French again—alternative view

(based on discussion in Joan Mascaró (1996) External allomorphy and contractions in Romance, *Probus* 8, 181-205)

'friend'	'husband'	
[bɛl] ami	[bo] mari	pretty, nice
[nuvɛl] ami	[nuvo] mari	new
[vjɛj] ami	[vjø]mari	old
[sɛt] ami	[sø] mari	stupid
[kɛl] ami	[kɛl] mari	what
[ʒɔli] ami	[30li] mari	pretty

Despite the regularities in the correspondences between the two allomorphs, we wouldn't want to try to derive them both from a single UR. Rather, both could be listed, with the choice depending on phonological factors (whether the following word begins with a consonant or a vowel).

• What do you think about the hybrid cases of French? Compatible with allomorph-listing?

Korean

	'baby'	'water'
subject	ko.giga	mu.R-i
object	ko.girıl	mu.R-1l
topic	ko.ginin	mu.R-in
ʻit's'	ko.gije.jo	mu.R-i.e.jo

Other examples

- English *a/an*, [ðʌ]/[ði]
- Italian *il/l* '
- English *more X/Xer*
- English deverbal-noun –*al/-ment*

2. Allomorph selection as TETU

The key proposal of OT is that there can be output-oriented constraints that are violable, but nonetheless active.

Given a theory (or at least a partial inventory) of markedness conditions, we expect them to pop up here and there, even in languages that seem to violate them rather freely. Reduplicative TETU: CORR-IO >> PHONO >> CORR-BR

Allomorphic TETU: CORR-IO >> PHONO, but the lexicon sometimes supplies an allomorph that satisfies PHONO:

(again, from Mascaró)

{/bɛl/, /bo/} ami	MAX-C	Dep-C	NoCoda	Onset
→ bɛl ami				
bo ami				*!

/ʒəli/ ami	MAX-C	Dep-C	NoCoda	Onset
30lit ami		*!		
→ ʒɔli ami				*

{/bɛl/, /bo/} maʁi	MAX-C	Dep-C	NoCoda	Onset
pel mari			*!	
→ po mari				

/kɛl/ maʁi	MAX-C	Dep-C	NoCoda	Onset
→ kɛl maʁi			*	
ko mari	*!			

<u>Moral</u>: even though French has no repair mechanism for hiatus or codas, it nevertheless avoids them when it can do so at no cost to faithfulness.

3. Case study: Tagalog nasal substitution for the millionth time

Nasal substitution

a.	h	hukbó	'army'	paŋ-hukbó	'military'
	т	marká	'mark'	paŋ-marká	'marker'
	(nc	examples of <i>n</i>)		
	ŋ	ŋálit	'grinding of teeth'	paŋ-ŋa-ŋálit	'grinding of teeth'
	W	mag-wisik	'to sprinkle'	paŋ-wisîk	'sprinkler'
	j	jamót	'annoyance'	maŋ-jamót	'to annoy'
b.	l	lágom	'assimilation'	ma-pan-lágom	'monopolistic'
c.	ſ	rasjón	'ration'	paŋ-rasjón, pan-	-rasjón 'for rationing'
d.	р	pighati?	'grief'	pa-mi-mighati?	'being in grief'
		po?ók	'district'	pam-po?ók	'local'
	t	pag <u>-</u> tú:loj	'staying as guest'	ka:-pa-nulú:j-an	'fellow lodger'
		tabój	'driving forward'	pan-tabój	'to goad'
	S	sú:lat	'writing'	ma:-nu-nulát	'writer'
		sú:lat	'writing'	pan-sú:lat	'writing instrument'
	k	kamkám	'usurpation'	ma-pa-ŋamkám	'rapacious'

	kaliskís	'scales'	paŋ-kaliskîs	'tool for removg scales'
2	?isda?	'fish'	ma:-ŋi-ŋisdá?	'fisher'
	?ulól	'silly'	maŋ-?ulól	'to fool someone'
b	mag-bigáj	'to give'	ma-migáj	'to distribute'
	bigkás	'pronouncing'	mam-bi-bigkás	'reciter'
d	dalá:ŋin	'prayer'	?i-pa-naláŋ-in	'to pray'
	dinîg	'audible'	pan-dinîg	'sense of hearing'
g	gindáj	'unsteadiness on feet'	pa-ŋi-ŋindáj	'unsteadiness on feet'
	gá:waj	'witchcraft'	man-ga-gáwaj	'witch'

4. PHONOS

Tagalog freely tolerates *mp*, *nt*, *ns*, *ŋk* *NÇ >> {IDENT-IO[VOICE], MAX-C, DEP-V, UNIFORMITY, IDENT-IO[NASAL], etc.}

Tagalog also tolerates onset *y* (cf. Japanese, English). *[*y* >> {IDENT-IO[PLACE], MAX-C, IDENT-IO[NASAL], etc.}

5. Distribution of nasal substitution



- Nasal substitution is frequent when it eliminates a violation of *NC
- Nasal substitution is infrequent when it creates a violation of *[y

(actually, I propose a scale *[y >> *[n >> *[m]; the phonetic property that presumably makes [ŋ] a bad onset is that the oral "side tube" is very short, so there are no low-enough antiformants to interfere with the vowel-like-ness of the sound; [n] has a slightly longer oral tube, but the lowest antiformant is still higher than [m]'s)

6. Loans from Spanish

This distribution is fairly productive—if you can say that of a distribution:



7. Cross-linguistic facts

(adapted from Newman 1984, p. 10)

	sul	substituted?				ranking
	р	t,s	k	b	d	g
Toba Batak type	+	\sim	-	\sim	-	- *[ŋ >> *NC >> {MORPHUNI, *[n, *[m} >> NASSUB
Malay type	+	+	+	-	-	- *NC >> {MORPHUNI,*[ŋ, *[n, *[m} >> NASSUB
Sama Badjao type	+	+	+	+	-	- *NC >> {*[n,*[n] >> NASSUB >> {*[m, MORPHUNI}
Cebuano type	+	+	+	+	+	- *NC >> *[ŋ >> NASSUB >> {*[n, *[m, MORPHUNI}
Kalinga type	+	+	+	+	+	+ NASSUB>> {*[n, *[n, *[m, MORPHUNI}

(Caution: Tagalog is often described as being a Sama-Badjao- or Cebuano-type language, though the facts are more complicated; the same may be true for some other languages. You will see another interesting pattern in Timugon Murut in a future problem set.)

8. Case study: Finnish genitives

Anttila, Arto. 1997. Deriving variation from grammar. In Frans Hinskens, Roeland van Hout, and Leo Wetzels (eds.), Variation, Change and Phonological Theory, 35-68. Amsterdam/Philadelphia, John Benjamins Publishing Company.

9. Distribution of Finnish genitives

Some stems always take the 'strong' genitive *-iden*, some always take the 'weak' genitive *-en/-jen*, and some vary, but often with a preference one way or the other.

 Monosyllables always take the strong variant (INITIALSTRESS, *STRESSEDLIGHT) /maa/ má-i.den *má.-jen

- Disyllabic stems ending in a light syllable always take the weak variant (INITIALSTRESS, *STRESSCLASH, *UNSTRESSEDHEAVY)
 - /kala/ *ká.lo-i.den, *ká.lò-i.den ká.lo.-jen
- Disyllabic and longer stems ending in a heavy syllable always take the strong variant (IDENTWEIGHT?? These cases aren't really discussed.) /palttoo/ pált.to-i.den *pált.to.-jen
- Trisyllabic and longer stems ending in a light syllable vary.
 Those ending in a high vowel prefer the weak variant

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/lemmikki/ ~lém.mik.kè-i.den lém.mik.ki.-en
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    Those ending in a low vowel prefer the strong variant
/sairaala/ sái.raa.lò-i.den ~sái.raa.lo.-jen
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Those ending in a mid vowel vary more freely (secondary stress is optional: *LAPSE must be freely ranked w.r.t. some anti-stress constraint)
 /fyysikko/ fýy.si.kò-i.den fýy.sik.ko.-jen

Weird quirk: these generalizations refer to underlying vowel height

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*HEAVYHIGH >> *HEAVYMID >> *HEAVYLOW
*LIGHTLOW >> *LIGHTMID >> *LIGHTHIGH
*STRESSEDHIGH >> *STRESSEDMID >> *STRESSEDYLOW
*UNSTRESSEDLOW >> *UNSTRESSEDMID >> *UNSTRESSEDHIGH
(do we really need all four scales?)
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• In trisyllabic and longer stems, there's also a tendency for a heavy antepenult to take the weak genitive and for a light antepenult to take the strong genitive. ("weight-clash/lapse" constraints: *H.H, *L.L)

Weight-clash considerations conflict with vowel-height considerations (corpus data reported by Anttila, for 3-, 4- and 5-syllable words combined):



Some categorical gaps in longer words:

/ministeri/	mí.nis.te.rè-i.den	mí.nis.te.rien			
/margariini/	*már.ga.rìi.ne-i.den *már.ga.rii.nè-i.den *már.ga.rìi.nè-i.den	már.ga.rìi.nien			
/aleksanteri/	á.lek.sàn.te.rè-i.den	á.lek.sàn.te.rien			
/koordinaatisto/	kóor.di.nàa.tis.tò-i.den	kòor.di.nàa.tis.tojen			
/italiaano/	*í.ta.li.àa.no-i.den *í.ta.li.aa.nò-i.den *í.ta.li.àa.nò-i.den	í.ta.li.àa.nojen			

10. Proposed grammar

Nearly stratal, but not quite



(plus transitivity)

There is variation in ranking within each row, and among all the constraints of the last three rows, except that *LIGHTO>>*LIGHTI and *UNSTRESSEDA>>*UNSTRESSEDO>>*UNSTRESSEDI.

• How can this work in terms of statistics?