

Announcements

Homework 2 will be handed out today. It is due next Tuesday 9/16/03. Try to have a look at it before Thursday so you can ask me questions in class or in office hours.

Reading for this week is Spencer Ch.2 pp45-62 and W&J Ch.6 pp88-93.

If there are no objections from other students, I will allow you to analyze for you paper the same language you worked in your phonetics course. That said, you should still plan on collecting more data.

Assimilation

Assimilation is a phonological process where a phone becomes similar to a nearby phone. This is probably the most common phonological process in all languages – you will see it over and over as you analyze different languages. *Let's take a look at the English prefix in-*

[m]	[n]	[ŋ]
i[m]potent	i[n]direct	i[ŋ]conclusive
i[m]partial	i[n]dependent	i[ŋ]considerate
i[m]possible	i[n]tolerance	i[ŋ]correct
i[m]practical	i[n]sufferable	i[ŋ]complete
i[m]mature	i[n]sufficient	i[ŋ]convenient
i[m]balance		i[ŋ]gratitude

The nasal in the prefix *in-* has the same place of articulation as the following consonant:

[m] before [p, b, m]

[n] before [t, d, s]

[ŋ] before [k, g]

We say: the nasal *assimilates* in place of articulation to the following consonant.

Consider the following data:

i[n]advisable

i[n]animate

i[n]ordinate

i[n]eligible

Based on these data, [m] occurs in the most environments: before vowels, t, d, s.

Therefore, we want to say that the underlying form of the prefix is /m/.

/m/ → [m] / ___ bilabial consonants

→ [ŋ] / ___ velar consonants

→ [m] elsewhere

Assimilation comes in two types:

(1) Complete (total) assimilation: one phone becomes identical to another phone.

Complete assimilation of nasals in Biblical Hebrew

<i>perfect verb</i>	<i>imperfect verb</i>	
$C_1V:C_2VC_3$	$yiC_1C_2VC_3$	
ka:tab	yiktab	<i>write</i>
na:pal	yippol	<i>fall</i>
na:tan	yitten	<i>give</i>
na:gaʃ	yiggaf	<i>approach</i>

(2) Partial assimilation: one phone acquires the same feature as another phone (place, manner, voicing, height, backness, rounding, etc.)

(a) Place assimilation of nasals in Yoruba:

<i>stem</i>	<i>progressive</i>	
ba	mba	<i>hide</i>
badʒɛ	mbadʒɛ	<i>spoil</i>
fɔ	mfɔ	<i>break</i>
fibanudʒɛ	mfibanudʒɛ	<i>be sad</i>
te	nte	<i>spread</i>
teyɔnrin	nteɔnrin	<i>press sand</i>
sun	nsun	<i>sleep</i>
lɔ	nlɔ	<i>go</i>
raʃɔ	nraʃɔ	<i>buy a dress</i>
kɔ	ŋkɔ	<i>write</i>
gun	ŋgun	<i>climb</i>
wa	ŋwa	<i>come</i>
kuro	ŋkuro	<i>stop</i>
wi	ŋwi	<i>say</i>

The progressive prefix in Yoruba assimilates in place of articulation to the following consonant.

(b) Voicing assimilation in English in third person singular and plural endings –s

cup	cup[s]	cub	cub[z]	come	come[z]	cull	cull[z]
rip	rip[s]	rib	rib[z]	rim	rim[z]	thrill	thrill[z]
kit	kit[s]	kid	kid[z]	can	can[z]	kill	kill[z]
pat	pat[s]	pad	pad[z]	pan	pan[z]	pal	pal[z]
hack	hack[s]	hag	hag[z]	hang	hang[z]	hill	hill[z]
back	back[s]	bag	bag[z]	bang	bang[z]	ball	ball[z]

The suffix –s in English assimilates in voicing to the preceding consonant.

Direction of assimilation:

Regressive assimilation: this is leftward assimilation; the phone assimilates to a preceding phone. (English *in-*, Biblical Hebrew, Yoruba progressive prefix)

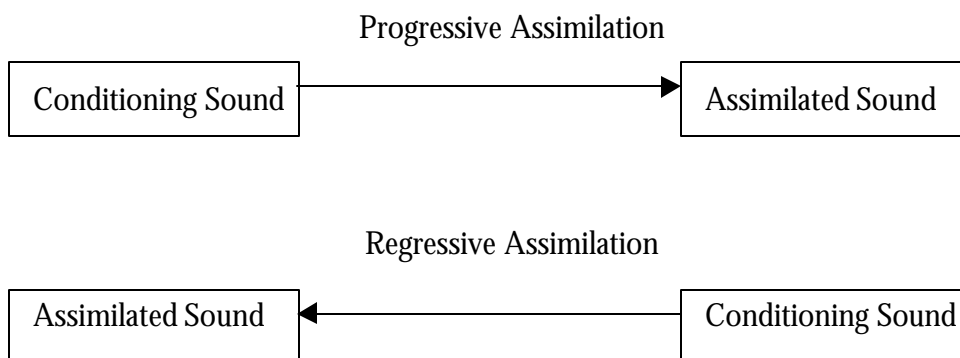
Progressive assimilation: this is rightward assimilation; the phone assimilates to a following phone. (English –s)

More terminology...

The sound that changes is called the **assimilated sound** or the **target**

The sound that causes the change is called the **conditioning sound** or **trigger**.

Two sounds that have the same place of articulation are called **homorganic**.



Practice

(1) Alveolar and dental nasals in English

know [nɒʊ]	tenth [tɛŋθ]
annoy [ənɔɪ]	month [mʌŋθ]
onion [ʌŋjən]	panther [p ^h æŋθə]

(2) Nasals in Hindi

a:kɑr	<i>shape</i>	sɑ:mɑ:kɑr	<i>homophonous</i>
ki:ʈɑn	<i>devotional singing</i>	sɑ:ŋki:ʈɑn	<i>collective devotional singing</i>
ʈo:l	<i>measure</i>	sɑ:ŋʈo:l	<i>equilibrium</i>
calɑn	<i>conduct</i>	sɑ:ŋcalɑn	<i>movement</i>
nɑ:d̪	<i>sound</i>	sɑ:nɑ:d̪	<i>consonance</i>

(3) -ed suffix in English

rip	ripp[t]	rob	robb[d]	ram	ram[d]
back	back[t]	bag	bagg[d]	bang	bang[d]
race	race[t]	raise	raise[d]	ban	bann[d]

Put here:

Italian p.51, Zoque p.79 (p.25)

Spanish p.19

Russian prepositions

s annəj	<i>with Anna</i>	z babuʃkəj	<i>with grandma</i>	ʃ ʃubəj	<i>with a fur coat</i>
s papəj	<i>with dad</i>	z dʲædʲɪ	<i>with uncle</i>	ʒ ʒinəj	<i>with (my) wife</i>
s tʲətʲɪj	<i>with aunt</i>	z ɡɔrʲə	<i>from grief</i>		
s kətəm	<i>with the cat</i>	z zontikom	<i>with an umbrella</i>		
s fətəɡrafʲijej	<i>with a photo</i>				
s sʲɪstrəj	<i>with sister</i>				
s xrʲenəm	<i>with horseradish</i>				

German -en
p.115