

**Review: Part I.
Phonological Processes**

A. ASSIMILATION

The influence of one segment upon another so that the sounds become more alike or identical.

1. *Consonant assimilates vowel features*

Brazilian Portuguese:

dadu	<i>given</i>
madriɲa	<i>godmother</i>
modernu	<i>modern</i>
unidu	<i>united</i>
guarda	<i>guard</i>
dʒiɲeiru	<i>money</i>
odʒiu	<i>hatred</i>
verdʒi	<i>green</i>
verdadʒi	<i>truth</i>
grãdʒi	<i>big</i>

Russian:

stol	<i>table</i>	stolje	(Loc.Sg.)
vkus	<i>taste (N)</i>	vkusien	<i>tasty</i>
dar	<i>gift</i>	darit	<i>to give</i>
dom	<i>house</i>	domiisko	<i>cottage</i>
bomba	<i>bomb</i>	bombit	<i>to bomb</i>

Nupe (a West African language):

egi	<i>child</i>	eg ^w u	<i>mud</i>
egie	<i>beer</i>	eg ^w o	<i>grass</i>

2. *Vowel assimilates consonant features*

Russian:

ɛtat	<i>this (Masc.)</i>
ʃɛst	<i>pole</i>
ɛra	<i>era</i>
ʒɛst	<i>gesture</i>
jɛlʲ	<i>fir-tree</i>
jesʲtʲ	<i>there is</i>
dvɛrʲ	<i>door</i>
dʲɛnʲ	<i>day</i>

English:

see	[i]	seen	[ɪ]
cat	[æ]	can't	[æ̃]

Chatino (spoken in Mexico):

tijéʔ	<i>lime</i>	t̪íhí	<i>hard</i>
kinó	<i>sandal</i>	k̪sú	<i>avocado</i>
suwí	<i>clean</i>	s̪ʔwá	<i>you send</i>
laʔá	<i>side</i>	t̪ʔá	<i>fiesta</i>
ngutá	<i>seed</i>	k̪utá	<i>you will give</i>
kít	<i>fire</i>	k̪tá	<i>you will wait</i>

3. *Consonant assimilates consonant features*

English:

emphasis
invisible
independent
infant
input
imbalance
uncle
inconceivable

Yoruba:

ba	<i>hide</i>	mba	<i>is hiding</i>
fɔ	<i>break</i>	mfɔ	<i>is breaking</i>
tɛ	<i>spread</i>	ntɛ	<i>is spreading</i>
sun	<i>sleep</i>	nsun	<i>is sleeping</i>
kɔ	<i>write</i>	ɲkɔ	<i>is writing</i>
wa	<i>come</i>	ɲwa	<i>is coming</i>

English:

cups	[s]	cubs	[z]
raced	[t]	raised	[d]
back <u>s</u>	[s]	bag <u>s</u>	[z]
back <u>e</u> d	[t]	bag <u>e</u> d	[d]

4. Vowel assimilates vowel features

Hungarian:

Dat.

kert	<i>garden</i>	kertnek
fal	<i>wall</i>	falnak
ember	<i>man</i>	embernek
vi:z	<i>water</i>	vi:znek
køɲv	<i>book</i>	køɲvnek
astal	<i>table</i>	astalnak

Turkish:

dif	<i>tooth</i>	difim	<i>my tooth</i>
ev	<i>house</i>	evim	<i>my house</i>
gönül	<i>heart</i>	gönülüm	<i>my heart</i>
göz	<i>eye</i>	gözüm	<i>my eye</i>
baf	<i>head</i>	bafım	<i>my head</i>
kol	<i>arm</i>	kolum	<i>my arm</i>

Icelandic:

Infinitive	Past Part.	
taka	tekin	<i>take</i>
draga	dregin	<i>drag</i>
vaksa	veksin	<i>grow</i>
aka	ekin	<i>drive</i>
vaða	veðin	<i>wade</i>
gefa	gefin	<i>give</i>
vega	vegin	<i>lift</i>

German:

Gast	<i>guest</i>	Gäste	<i>guests</i>
Rat	<i>advice</i>	Räte	<i>advice</i>
Jahr	<i>year</i>	jährlich	<i>annual</i>
gut	<i>good</i>	gütig	<i>kind</i>
Not	<i>need</i>	nötig	<i>necessary</i>

Old English:

foot/feet
goose/geese
mouse/mice

Assimilation may be:

- (i) progressive (left-to-right)

e.g., plot [l̥] cry [ɹ̥]

- (ii) regressive (right-to-left)

e.g., bean [i̥]

Vowel Harmony: A type of progressive assimilation, in which the first vowel in a sequence constitutes the conditioning factor for subsequent vowels.

Umlaut: Change in the quality of a vowel due to the anticipated influence of a subsequent vowel.

B. DISSIMILATION

Dissimilation is a phonological process in which two segments become less similar to each other.

Slovak:

Masc.	Fem.	Neuter	
kruti:	kruta:	krute:	<i>cruel</i>
slovenski:	slovenska:	slovenske:	<i>Slovak</i>
ľu:ti	ľu:ta	ľu:te	<i>merciless</i>
zat'ati:	zat'ata:	zat'ate:	<i>stubborn</i>
druhi:	druha:	druhe:	<i>other</i>
tata:rski	tata:rska	tata:rske	<i>Tartar</i>
ri:ʒi	ri:ʒa	ri:ʒe	<i>genuine</i>

Latin	→	English
peregrinus		pilgrim
purpur		purple

English:

fifth [fθs] → [fts]

C. DELETIONS AND INSERTIONS: Syllable Structure Processes



They result in a simpler syllable or,
the preferred syllable structure: CV

1. Deletions

Tibetan:

d̥zu	<i>ten</i>
d̥zig	<i>one</i>
d̥zugd̥zig	<i>eleven</i>
ʃi	<i>four</i>
d̥zubʃi	<i>fourteen</i>
ʃibd̥zu	<i>forty</i>
gu	<i>nine</i>
d̥zurgu	<i>nineteen</i>
gubd̥zu	<i>ninety</i>
ŋa	<i>five</i>
d̥zuŋa	<i>fifteen</i>
ŋabd̥zu	<i>fifty</i>

French:

petit ami [pətit ami] petit tabloux [pəti tablo]
nos amis [noz ami] nos tableaux [no tablo]

le garçon [lə garsɔ̃] l'ami [lami]
la fille [la fij] l'arbre [larbr]

2. Insertions (=epenthesis)

Hypothetical language:

Gen.Sg.

dubok	dubokut	<i>glass</i>
sanut	sanutut	<i>boy</i>
depe	depet	<i>flower</i>
soldi	soldit	<i>place</i>
kopis	kopisut	<i>hat</i>
siru	sirut	<i>toy</i>
wokub	wokubut	<i>sun</i>

Hanunoo (spoken in the Philippines):

ʔupat	<i>four</i>	ʔupati	<i>make it four</i>
ʔunum	<i>six</i>	ʔunumi	<i>make it six</i>
ʔusa	<i>one</i>	ʔusahi	<i>make it one</i>
tulu	<i>three</i>	tuluhi	<i>make it three</i>

Latin:

patris	<i>father</i> (Gen.)	pater	(Nom.)
agri	<i>field</i> (Gen.)	ager	(Nom.)
libri	<i>book</i> (Gen.)	liber	(Nom.)

English:

central, centre
cyclic, cycle

D. LENITIONS (=weakening) and FORTITIONS (=strengthening)

1. Lenitions

Southeast Ambrym (a Malayo-Polynesian language):

Poss.Sg.3.

hil	hilin	<i>hair</i>
vaŋ	vaŋen	<i>belly</i>
luh	luhon	<i>tooth</i>
asou	asoun	<i>wife</i>
he	hen	<i>land</i>

Saami (a Finno-Ugric language):

Loc. /-st/

miäccest	miäcc	<i>forest</i>
koaðest	koað	<i>tent</i>

Hypothetical language:

Plural

serati	sertimt	<i>wall</i>
varude	vardemt	<i>cloth</i>
filatu	filtumt	<i>key</i>
gete	getemt	<i>cherry</i>
fuka	fukamt	<i>name</i>
sipeto	siptomt	<i>knee</i>

Latin → French

populus	peuple	<i>people</i>
tabula	table	<i>table</i>

English:

chocolate, nursery, etc.

Apocope:	The loss of a final unstressed vowel -- weak position!
Syncope:	A vowel is deleted word-internally when it occupies a weak position (=unstressed).

Maltese:

Sg.3.	Pl.3.	
kien	kienu	<i>was</i>
sa:m	sa:mu	<i>fasted</i>
die?	die?u	<i>tasted</i>
za:r	za:ru	<i>visited</i>
bies	biesu	<i>kissed</i>
mes	messu	<i>touched</i>
ḍar	ḍarru	<i>carry</i>
sen	sennu	<i>sharpen</i>
hak	hakku	<i>scratch</i>
fa?	fa??u	<i>crack</i>

2. Fortitions

Hypothetical language:

Acc.

e ^l mani	'eimanid	<i>man</i>
'eilata	e ^l latad	<i>tree</i>
e ^l ruhi	'eiruhid	<i>bread</i>
'ougitu	o ^l gitud	<i>foot</i>
o ^l dali	'oudalid	<i>chair</i>
o ^l buta	'oubutad	<i>bug</i>

Latin → Italian

bona buona *good* (Fem.)

nova nuova *new* (Fem.)

E. COALESCENCE

Two adjacent segments are replaced by a single one which shares features of the two original ones.

1. Consonant coalescence

Korean:

nak	<i>fall</i>	hwa	<i>flower</i>	nak ^h wa	
					<i>fallen flower</i>
kup	<i>bend</i>	hita	(Caus.)	kup ^h ita	
					<i>to bend</i>
noh	<i>to lay</i>	ta	(verb ending)	not ^h a	
					<i>to lay eggs</i>

2. Vowel coalesce

Latin → Spanish

aidificium → edificio *building*

causa → cosa *thing*

paupere → pobre *poor*

3. *Coalescence of vowel and consonant*

French:

[plənə]	<i>full</i> (Fem.)	[plɛ̃] (Masc.)
[tɔ̃nalitɛ]	<i>tonality</i>	[tɔ̃] tone

F. METATHESIS

Two segments may interchange.

Hebrew:

kabel <i>to accept</i>	lehit-kabel	<i>to be accepted</i>
pater <i>to fire</i>	lehit-pater	<i>to resign</i>
sames <i>to use for</i>	lehis-tames	<i>to use</i>
sader <i>to arrange</i>	lehis-tader	<i>to arrange oneself</i>

Hypothetical language:

	Loc.
semre <i>hut</i>	sermes
difni <i>bed</i>	dinfis
kabru <i>cup</i>	karbus
vepto <i>box</i>	vetpos

.....

NEUTRALIZATION

Phonological distinctions are reduced in a particular environment. Segments that contrast in one environment, have the same representation in the environment of neutralization.

English:

bet	betting [ɹ]
bed	bedding [ɹ]

Russian:

górat	town	garada	(Plural)
glás	eye	glazá	(Plural)
óstraf	island	astrava	(Plural)

English:

able	ability	[ə]
super	superior	[ə]
photograph	photography	[ə]

German:

Rat [t]	<i>advice</i>	Räte [t]	(Plural)
Rad [t]	<i>wheel</i>	Räder [d]	(Plural)
bunt [t]	<i>colourful</i>	Bunte [t]	(Plural)
Bund [t]	<i>bundle</i>	Bunde [d]	(Plural)

Korean:

Study the *Stop nasalization in Korean*: pp. 128-130.

Dynamic vs. Static Neutralization

Book: pp. 134-135.

English:

Voicing Assimilation

Study the examples and the rule on p. 134.

This phonological process is an example of *Dynamic Neutralization*.

Explain!

English:

Alveolar Place Enforcement

Study the examples and the rule on p. 135.

This phonological process is an example of *Static Neutralization*.

Explain!

Voicing Assimilation: *Dynamic neutralization* -- it *alters* the form of morphemes.
Alveolar Place Reinforcement: *Static neutralization* – it imposes *no* changes.

