

LING 303

Phonology I



Tongue Body

- [dorsal],
- [\pm high],
- [\pm low], and
- [\pm back].

Today...

- Tongue Body
 - [dorsal]

[dorsal]

- The feature [dorsal] characterizes segments that are produced primarily with the Tongue Dorsum.
- It is perhaps the most important articulator feature. (The other articulator features discussed so far are [labial] and [coronal].)

[–consonantal]

Vowels, e.g., i, ĩ, ĩ̇, ĩ̈, y, ÿ, ẏ, ÿ, i, ĩ, ĩ̇, ĩ̈, u, ũ, u̇, ü, ɪ, ĩ̇, ĩ̈, ʏ, Ț, Ț̇, Ț̈, ʊ, ũ̇, ũ̈, ɨ, ĩ̇, ĩ̈, ʎ, Ț̇, Ț̈, ʉ, ẽ, ẽ̇, ẽ̈, ø, ø̇, ø̈, ø̉, ɘ, ẽ̇, ẽ̈, ɚ, ɤ, ɤ̇, ɤ̈, œ, œ̇, œ̈, ɜ, ẽ̇, ẽ̈, ɞ, ẽ̇, ẽ̈, ɺ, ɻ, ɻ̇, ɻ̈, ɔ, õ, õ̇, ṏ, ə, ɛ, ẽ̇, ẽ̈, ɛ̇, ɛ̈, œ, œ̇, œ̈, ɜ, ẽ̇, ẽ̈, ɞ, ẽ̇, ẽ̈, ɺ, ɻ, ɻ̇, ɻ̈, ɔ, õ, õ̇, ṏ, æ, æ̇, æ̈, æ̉, ɸ, ɸ̇, ɸ̈, ɸ̉, a, ã, ă, ą, œ, œ̇, œ̈, œ̉, ɑ, ă̇, ă̈, ą̇, ą̈, ɒ, ɔ̇, ɔ̈, ɔ̉, ɔ̊, ɔ̋, etc.

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- That vowels involve a primary “dorsal articulation” has been recognised since Sievers (1901)

[+consonantal]

Velars, e.g., k, ŋk, g, ŋg, kh, k', gh, g, ɟ, ʔ, kx, gɣ, kxh, kx', k_̥, ŋk_̥, g_̥, ŋg_̥, k_̥h, k_̥', g_̥h, g_̥, kw, ŋkw, gw, ŋgw, kwh, kw', gw_̥h, gw, ɟw, ʔw, kwɪ, ŋkwɪ, gwɪ, ŋgwɪ, kwɪ', gwɪ, ɟwɪ, ʔwɪ, k_̥w, ŋk_̥w, g_̥w, ŋg_̥w, k_̥wh, k_̥w', g_̥wh, g_̥w, kj, ŋkj, gj, ŋgj, kjh, kj', gjh, gj, ɟj, ʔj, ʔj, kɪ, ŋkɪ, gɪ, ŋgɪ, kɪ', gɪh, gɪ, ɟɪ, ʔɪ, ʔɪ, ɪ, x, ɣ, ɣ̃, xh, x', xw, ɣw, ɣ̃w, xwh, xw', xj, ɣj, ɣ̃j, xjh, xj', ŋ, ŋ̃, ŋ̄, ŋw, ŋ̃w, ŋ̄w, ŋj, ŋɪ, ɫ, ɫ̃, ɫ̄, ɫw, ɫ̃w, ɫ̄w, etc.

Uvulars, e.g., q, Nq, G, NG, qh, q', Gh, G, ɣ, ɣ̃, ɣ̄, ɣh, ɣ', ɣw, ɣ̃w, ɣ̄w, ɣwh, ɣw', N, Ñ, N̄, NW, ÑW, N̄W, R, RW, ʁ, ʁw, etc.

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- [dorsal] also characterizes clicks and many complex segments, that is, segments specified not only [dorsal] but also [labial] or [coronal].
 - Clicks are velaric ingressive sounds, in which the [dorsal] closure is released to form an ingressive sound with the other closure, i.e. [coronal] or [labial].
 - For instance, the click /k[⊖]/ is both [dorsal] and [labial] (like the complex segment /k[̂]p/).

Clicks, e.g., k[◊], g[◊], k[◊]h, k[◊]' , k[◊]? , k[◊]x, k|, g|, k|h, k|' ,
k|? , k|x, k! , g! , k!h, k!' , k!? , k!x, k||, g||, k||h, k||' , k||? , k||x,
k≠, g≠, k≠h, k≠' , k≠? , k≠x, q[◊], ɠ[◊], q[◊]h, q[◊]' , q[◊]? , q|,
ɠ|, q|h, q|' , q|? , q! , ɠ! , q!h, q!' , q!? , q||, ɠ||, q||h, q||' , q||? ,
q≠, ɠ≠, q≠h, q≠' , q≠? , ŋ[◊], ŋ[◊], ?ŋ[◊], ŋ[◊]h, ŋ|, ŋ|, ?ŋ|, ŋ|h,
ŋ! , ŋ! , ?ŋ! , ŋ!h, ŋ||, ŋ||, ?ŋ||, ŋ||h, ŋ≠, ŋ≠, ?ŋ≠, ŋ≠h, etc.

Complex segments, e.g., t[̂]k, d[̂]g, t[̂]kw, d[̂]gw, k[̂]p, ŋ[̂]mk[̂]p,
ŋ[̂]k[̂]p, ɠ[̂]b, ŋ[̂]mɠ[̂]b, ŋ[̂]ɠ[̂]b, k[̂]ph, k[̂]p' , ɠ[̂]bh, ɠ[̂]b, k[̂]ɓ, k[̂]p^w, ɠ[̂]b^w,
ŋ[̂]m, ŋ[̂]m^w, q[̂]p, q[̂]b, etc.

Class 10 plural prefix in Zulu

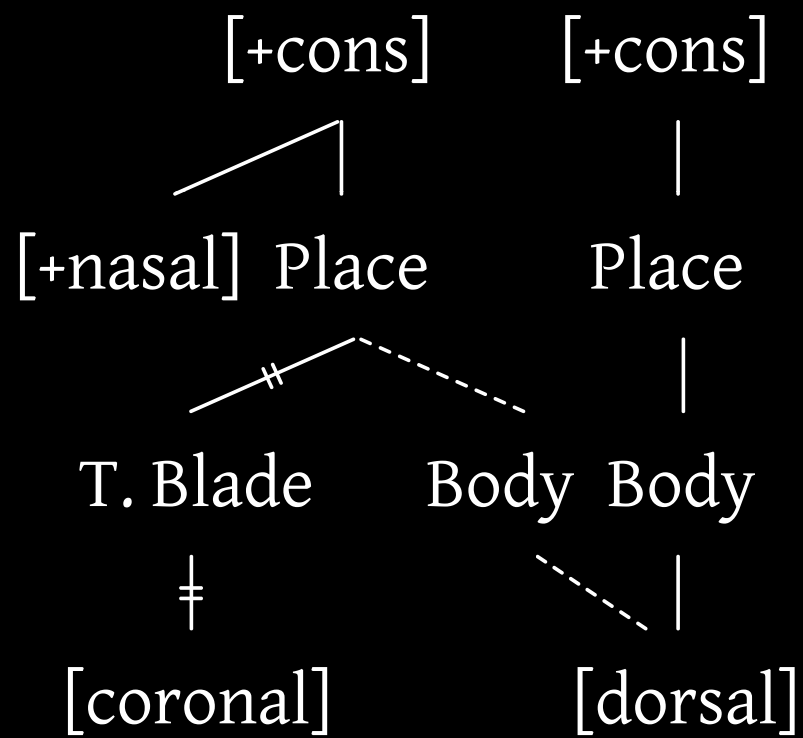
izin-ti
'sticks'

izin-lezu 'slices'

izin-kezo
'spoons'

izin-#un#ulu 'bird' (pl.)

izin-llanlla 'frogs'



Exercise

Middle
Chinese

Fuzhou
Chinese

śjəm

> ts^hiŋ

‘deep’

duân

> touŋ

‘break off’

dung

> tøiŋ

‘copper’

Middle
Chinese

Fuzhou
Chinese

diep

> t^hak

‘stack up’

ngjwət

> ŋuok

‘moon’

ńźjiuk

> nyk

‘meat’

<i>sock</i>	gɔk	<i>other</i>	ʌdə	<i>brush</i>	bʌt
<i>leg</i>	gɛk	<i>scream</i>	gi:m	<i>bath</i>	ba:t
<i>signing</i>	giŋiŋ	<i>apple</i>	ɛbu	<i>John</i>	dɔn
<i>chockie</i>	gɔgi:	<i>dark</i>	ga:k	<i>bump</i>	bʌp
<i>stop</i>	bɔp	<i>lock</i>	gɔk	<i>drink</i>	gik
<i>spoon</i>	bu:n	<i>table</i>	be:bu	<i>skin</i>	gin
<i>zoo</i>	du:	<i>bus</i>	bʌt	<i>stuck</i>	gʌk
<i>nipple</i>	mibu	<i>smith</i>	mit	<i>nipple</i>	mibu
<i>tent</i>	dɛt	<i>brush</i>	bʌt	<i>smith</i>	mit
<i>snake</i>	ŋe:k	<i>thank you</i>	gɛgu	<i>swing</i>	wiŋ
<i>knife</i>	majp	<i>tickle</i>	gigu	<i>crumb</i>	gʌm

S. (2;2)

Théo 2;05-4;00

Target

Child

dʋol

gʋol

‘funny’

dʋaɔɔ̃

kʋɔɔ̃

‘dragon’

tʋɛ̃

kʋɛ̃

‘train’

tʋo

kʋo

‘too much’

sitʋɯj

kʋœj

‘pumpkin’

tʋavaje

kʋavaje

‘to work’

Gullah English

- /wn/ regularly becomes [wŋ]:

down [dawn]

drown [dɹawn]

around [(ə)ɹawn]

sundown [sʌndawn]

But...

gown [gawn], *[gawn]

ground [gɹawn], *[gɹawn].

Canadian French

<i>Onset position</i>		<i>Word-finally</i>		<i>Preconsonantly</i>	
gaŋe	<i>won</i>	gaŋ	<i>win!</i>	gaŋpɛ̃	<i>job</i>
ãseŋe	<i>taught</i>	ãseŋ	<i>teach!</i>	ãseŋmã	<i>teaching</i>
peŋe	<i>combed</i>	peŋ	<i>comb!</i>	peŋwaR	<i>peignoir</i>
liŋe	<i>lined</i>	liŋ	<i>line</i>	ãliŋmã	<i>alignment</i>

Ligurian

Word-finally

Before labials

Before coronals

viŋ *wine*

puŋpa *pump*

tʃaŋta: *plant (v.)*

tʃaŋ *even*

riŋbursu *refund*

veŋde *sell*

noŋ *not*

ruŋfu *I snore*

fiŋze *pretend*

feŋ *fine*

kaŋpaŋŋa *bell*

iŋfa: *blow up*

Cuban Spanish

u[ŋ] señor	'a man'	cf. u[n]a señora	'a lady'
u[ŋ] domingo	'one Sunday'		
rede[ŋ]tor	'redeemer'	cf. redi[m]ir	'to redeem'
rede[ŋ]ción	'redemption'		
i[ŋ]servible	'useless'	cf. i[n]acabable	'endless'
rató[ŋ]	'mouse'	cf. rató[n]e	'mice'
		rató[n]a	'fem. mouse'
pa[ŋ]	'bread'	cf. pa[n]e	'breads'

Cuban Spanish

conce[k]to
'concept'

cf. conce[β]ir
'to conceive'

rece[ɣ]tor
'receptor'

cf. reci[β]ir
'to receive'

su[k]desarrollado
'(sub)under-
developed'

cf. su[β]arrendado
'subleased'

Spanish: Maracaibo, Venezuela

- *obsequio* [oksekio] 'gift'
- *este* [exte] 'this'
- *conce[k]to* 'concept'
- *apto* [akto] 'fit'
- *acto* [akto] 'act'
- *é[g]nico* 'ethnic'

Rhotics

- Alveolar and uvular rhotics alternate freely in many dialects of European languages. Interestingly, in several such dialects [r] is favored in syllable-initial position while [ʀ] is favored in syllable-final position.

Rhotics

- Zhirmunksii (1962) first reported this distribution for some Cologne dialects of German. For instance, he found that syllable-final [ʀ] in, e.g., *Ferkel*, *werfen*, *Sturm* is realized [r] if these words are pronounced with anaptyxis (added vowel): *fɛrəkəl*, *vɛrəpə*, *ʃtorəm* (p. 378).

English loans in Hawaiian

■ kikiki	'ticket'	wekeke	'whiskey'
■ Kamuela	'Samuel'	kopa	'soap'
■ laiki	'rice'	kipikelia	'diphtheria'
■ kaukani	'thousand'	pika	'pitcher'
■ waina	'wine'	Nolewai	'Norway'
■ koloke	'crocket'	palaoa	'flour'

Exercise

- How many English words begin with skVC, where V is a vowel and C is [dorsal]? What do you suspect is happening?