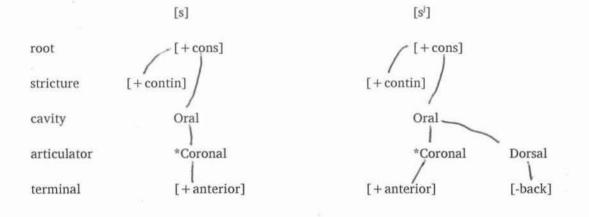
PS# 6 Barra Gaelic and Secondary Articulations

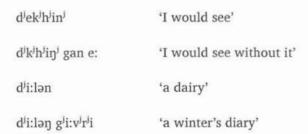
In the original feature geometry proposed by Halle (1982), the secondary articulation features of palatalization and velarization are a function of the tongue body features [-back] and [+back], which are terminal features of the Dorsal articulator. The astrisk is used to indicate that the major articulator, which implements the structure feature of [continuant] as well as the root node [consonantal]. Thus, plain vs. palatalized /s/ are represented as below.



Examine the following paradigm of data from Barra Gaelic on next page. In this language there is a contrast between plain and palatalized consonants. There is also a process inserting an epenthetic vowel in a sonorant-obstruent consonant cluster. The problem concerns the features defining the inserted vowel. Assume that they are assigned by autosegmental spreading from the preceding context. What node in the feature tree is the site of spreading? What problems arise in trying to maintain the feature geometry above? Do the data bear on the question of radical vs. contrastive underspecification? Palatalized consonants are marked by C' in the data source. Also c denotes $/x'/ = [x^j]$

A second paradigm of data from Modern Irish (Ni Chiosáin & Padgett 1993) concerns the alternation below. What issues does it raise?

1



(1)	í	i	u	p	t	ť	k	k'	
	e	٨	0	b	d	ď	g	gʻ	
	æ	a	э	f	S	s'	х	x'	
				v		z'	Y		
				m	n	n'			
					r	r'			
					1	ľ			
(2)	mar[a]v			'dead'					
	or[o]m				'on me'				
		d'al[a]v				'picture'			
	ur[u]pəl				'tail'				
	dun[u]xəy				'Duncan'				
	a.l[a]pə				'Scotland'				
	tho	thor[o]mæt				'Norman'			
	bo.r[o]y			'Borg'					
	šal[a]k				'hunting'				
	mʌr'[e]v				'the dead'				
	bul'[i]k'				'bellows' gen.sg.				
	dɨr'[i]çə			'darker'					
	t ^h Ar'[e]v				'bulls'				
	lur	lur'[i]k'n'ən				'legs'			
	šær[a]v			'bitter'					
	fær[a]k			'anger'					
	šæn[a]xəs			'conversation'					
	æm[æ]šir'			'time'					
	th'i	m[i]	çal		'round about'				

PS#6 Colloquial Bengali

[1] Below is the table of consonants in colloquial Bengali. In addition to labial and velar, the language distinguishes three coronal places of articulation: dental-alveolar [t], palato-alveolar [č], and retroflex [t]. Assume that dental-alveolars are [+anterior, - distributed], palato-alveolars are [-anterior, + distributed], and retroflexes are [-anterior, -distributed].

t č t k p ph th čh th kh b d ĭ d g dh ĭh dh gh bh f S š h ŋ m n r τ rh 1

[2] [s] and [š] are in complementary distribution¹. Examine the data below and state their distribution. Which one is the default? Postulate the relevant OT constraints and/or default rules.

šəkal	morning	bəsta	sack	khəšra	draft
beši	more	khasta	crispy	duštu	naughty
šahoš	courage	šustho	healthy	aščorjo	surprise
utšo	origin	əsthir	restless	bašpo	vapour
bərša	rain	tiris-din	thirty days	nišphol	unproductive
porši	neighbor	tin mas-dhore	e for three months	čaš-baš	agriculture
kalšite	bruise	osru	tears	bhaškər	sculptor
panše	bland	bisri	ugly	aškara	indulgence
bakšo	box			čəšma	pair of glasses
jhapša	blurry			kəšto	pain

[3] What is the significance of the following data?

bišnu	Vishnu		
mošla	spices		

¹ English loans such as sinema 'cinema' and laisens 'license' retain [s] in educated speakers but are replaced with [š] in informal speech.

ušno	warm		
boš-lo	sit 3rd past		

[4] Adjust your analysis to account for the following data.

sli:1	proper	sri	name prefix (Mr.)
smito	subtle	stabok	flatterer
skəndho	shoulder	stri	wife
sneho	affection	spošto	clear
sthir	calm	stešan	station

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