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Classic feature theory assumes that distinctive features have two functions: they are phonetically descriptive and phonologically classificatory. Phonologically active classes are thus natural, as they are grounded in phonetics. This view has recently come under attack, most notably in Mielke (2008), who argues that features only define phonological classes, that the interface to phonetics thus has to be sought elsewhere. Crucial to his argument is the existence of phonetically unnatural classes of sounds that are phonologically active. Particularly striking here are what Mielke calls 'crazy' classes of sounds, a notorious example of which is found in Evenki (Tungusic).

In Evenki, suffix-initial v, s, g become homorganic nasals if preceded by a nasal (see examples in (1)). Mielke argues that, given the inventory in (2), adapted from Nedjalkov (1996), these do not form a natural class of sounds that could be captured by a single phonetically grounded distinctive feature: they comprise only a subset of fricatives, plus one single voiced stop. Additionally, there is a gap in the palatal series, which does not have an undergoer.

This talk will argue that these sounds do indeed form a natural class: it is the class of continuants. This analysis requires a more detailed look at the phonological system of Evenki and the constraints operating on it, for which we will draw upon a variety of sources not considered by Mielke. The main argument goes as follows:

1. g is underlyingly a continuant. Phonetically, it is $[\gamma]$ intervocalically and in codas and also behaves as a continuant phonologically (e.g. it is exempt from an otherwise general ban on final voiced stops and unlike other voiced stops it doesn't trigger voicing assimilation, Konstantinova 1964). Its onset realisation as [g] is a result of fortition (which is evidenced independently).

2. The assimilation process is motivated by a general constraint against nasal+continuant clusters that can be deduced from Gorcevskij's (1939) and Boycova's (1966) descriptions of Evenki cluster phonotactics.

3. Other continuants undergo different, independently motivated repairs. Considering the palatal gap, the continuant *j* (erroneously classified as [3] by Mielke) does not become [n] suffix-initially but is deleted instead because [n] is systematically banned from clusters. That is, *j* is subject to the same phonotactic constraint, although a different repair is chosen. The same can be said of suffix-initial liquids *l*, *r*, where we find suppletive allomorphs in postnasal contexts.

4. The claim that the class of undergoers is phonetically arbitrary is further undermined when looking at dialectal data; phonological changes affecting these sounds also disrupt the alternations in different ways (see e.g. Vasilevič 1948, Romanova & Myreeva 1964, Malchukov 1995), providing further evidence that the seemingly crazy process is indeed phonetically grounded.

This talk will therefore argue that it is possible to analyse nasal assimilation in Evenki as a natural process. An important corollary, however, is that underlying representations are only contrastively specified; the surface differences between the different continuants (e.g. regarding voicing and sonorancy) are non-contrastive. We will therefore propose the revised inventory in (3) and analyse the Evenki consonant system in a model of contrastive privative

specifications based on a version of the Parallel Structures model of Feature Geometry (Morén 2003, Iosad 2012) and Optimality Theory, arguing that a 'myopic' look at individual processes is insufficient to determine whether they are natural or unnatural. Instead, we call for a more holistic view of phonology that takes the notion of contrast in a system more seriously.

(1) Nasal assimilation in Evenki (examples from Konstantinova 1964, Boldyrev 2007):

bira-va	'river (acc.def.)'	but	laaŋ-me	'trap (acc.def.)'
ju-vi	'his/her house'	but	oron-mi	'his/her reindeer'
ju-sun	'your (pl.) house'	but	oron-nun	'your (pl.) reindeer'
ile-git	'human (elative)'	but	kurim-ŋit	'wedding (elative)'

(2) Evenki consonants (Mielke 2008)

(3) Reanalysis

р		t		k	
b		d		g	
			t∫		
			d3		
		S		х	h
	v		3		
m		n	ŋ		
		r			
		1			

t	č	k	
d	Ĭ		
n	n	ŋ	
S	j	¥	h
1			
r			
	t d n s l r	t č d j n n s j l r	t č k d j n n ŋ s j ɣ l r

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