

On the Phonological Representation of Contrasting Coronal Sibilants

Haïke Jacobs

University of Nijmegen

In Hall (1997) it is claimed that no language can have contrasts such as [ʃ] ~ [ç] or [ʒ] ~ [ʒ̥], that is, no language can contrast palatoalveolars and alveopalatals. The rationale behind this is that postalveolar fricatives share the feature specification [COR, -ant] and that the only feature left to make further distinctions is the feature [distributed]. Given that [ʃ], [ç], [ʒ] and [ʒ̥] are all laminal or blade-articulated they all are [+distributed] and, hence, cannot appear contrastively within one and the same language. This is illustrated in chart (1).

(1) dental	alveolar	palatoalveolar	retroflex	alveopalatal	palatal
[ʃ̥]/[ʒ̥]	[s]/[z]	[ʃ]/[ʒ]	[ʂ]/[ʐ]	[ç]/[ʝ]	[ç]/[j]
CORONAL [+anterior] [-distributed]	CORONAL [+anterior] [+distributed]	CORONAL [-anterior] [+distributed]	CORONAL [-anterior] [-distributed]	CORONAL [-anterior] [+distributed]	DORSAL [-back]

Languages that apparently contrast palatoalveolars versus alveopalatals can be reanalyzed as involving oppositions between retroflexes and alveopalatals, which according to Hall (1997) is the case for Polish. Rochoń (2002) argues, on the basis of electropalatographical data, that this is indeed the case for Polish and that the sibilants "previously known as [ʃ] and [ʒ] are produced with the tongue tip bent backwards [and] have to be described as retroflexes [ʂ] and [ʐ]". Rochoń (2002) (cf. Rubach (2003) for a more or less similar view) proposes to use the feature [round] to characterize a four-way contrast, as in (2) below.

(2) alveolar	palatoalveolar	retroflex	alveopalatal
[s]/[z]	[ʃ]/[ʒ]	[ʂ]/[ʐ]	[ç]/[ʝ]
CORONAL [+anterior] [+distributed] [-round]	CORONAL [-anterior] [+distributed] [+round]	CORONAL [-anterior] [-distributed] [+round]	CORONAL [-anterior] [+distributed] [-round]

In this paper we will critically discuss this proposal. We will start by discussing Ubykh, a North-Caucasian language of the Abkhazo-Adygan branch (cf. Ladefoged (2001)), which illustrates a system like the one in (2) and where the postalveolar sibilants can be plain (as in (2)) or, in addition, rounded. After that we will discuss and reject an alternative view relying on characterizing postalveolars as doubly articulated [CORONAL] and [DORSAL] (cf. Gussenhoven/Jacobs (1998) and finally we will show that the representation we propose is not only simple, given that no double primary articulation is used for simple consonants, but also adequately accounts for the fact (cf. Rubach (2003)) that Polish alveopalatals do not have palatalized variants.

References:

- Gussenhoven, C. and H. Jacobs. 1998. *Understanding Phonology*. Arnold, London.
- Hall, T.A. 1997. 'The historical development of retroflex consonants in Indo-Aryan' *Lingua* 102, 203-221.
- Ladefoged, P. 2001. *Consonants and Vowels*. Blackwell, Oxford.
- Rochoń, M. 2002. 'Sibilants in Slavic, Germanic and Indo-Aryan Languages. Phonetic and Phonological Typology' (handout)
- Rubach, J. 2003. 'Polish palatalization in derivational optimality theory' *Lingua* 113, 197-237.