Perceptual categorization as a source of palatalization sound changes: Experimental evidence from Romanian

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Consonants with secondary palatal articulation are known to be diachronically unstable, undergoing a number of common changes (Bhat 1978), including depalatalization, vowel diphthongization and fronting, coronal backing, labial coronalization, and assibilation. The phonetic mechanisms of these changes are not well understood, with some researchers deriving them from grammatical constraints on minimization of effort and maximization of auditory distinctiveness (Flemming 2002). Others see the source of the changes in listeners' misperception and re-categorization of an acoustically ambiguous signal (Ohala 1978, Blevins 2004), which is particularly likely in a language contact situation (Thomason & Kaufman 1992). This paper experimentally tests the second approach by examining the perception of Russian palatalized stops in coda and onset (t^ja, p^ja at^j, ap^j) by native speakers of Romanian, a language that has palatalized consonants in coda (ats¹, ap¹) and various consonant + glide/diphthong sequences in onset (tea, tja, tsea, tsja, etc.). Utterances containing combinations of Russian stops /p pⁱ t tⁱ/ were presented to 33 Romanian speakers who had to write them down orthographically. All responses (n=1584) were classified as representing one or more palatalization processes. The results revealed a range of interpretation strategies consistent with the typology of palatalization (1), thus providing evidence for the role of perceptual categorization in sound change.

(1)	ť	\mathbf{p}^{j}
loss of palatalization (within σ)) 13%	33%
diphthongization	39%	43%
vowel fronting	8%	19%
backing (coronals)	38%	
coronalization (labials)		20%
assibilation	83%	4%