

continues to describe the analysis, with appropriate references to other works that are relevant; IMPORTANT: avoids saying "A solution will be presented" without actually showing what the solution is

plosive release (cf. Bakovic 1994:9, fn.11).¹ Conversely, taps may occur after plosives and fricatives, as in (2c), and after vowels, as in (1b) and (2d), precisely because these segments provide the necessary preceding oral aperture.² Although CONTEXTCUES(extra-short closure) determines the positions in which taps may occur, it does not fully explain why contrast is possible only between vowels and not in complex onsets or codas. I argue that the ban on trills in (2c) and (2d) stems from their articulatory markedness, captured formally by the effort minimization constraint LAZY (cf. Kirchner 1998). The ranking CONTEXTCUES(extra-short closure) » LAZY » PRESERVE(rhotic) predicts a general preference for the less effortful tap when its perceptual cues are otherwise not at stake. This is a typical complementary distribution ranking in which the rhotic pattern is determined by the dominance of a specific markedness constraint, CONTEXTCUES, over context-free markedness, LAZY. The question of which rhotic is underlying now becomes irrelevant, except, of course, in the case of intervocalic contrast, as shown in (1). The possibility of such contrast is explained in terms of positional faithfulness to input rhotics occurring between vowels, captured formally via the ranking PRESERVE(rhotic/V_V) » LAZY » PRESERVE(rhotic).

Remaining to be accounted for is the impossibility of emphatic trilling cum resyllabification, as shown in (3d). Drawing upon the theory of Local Conjunction (Smolensky 1997, inter alia), I argue that this impossibility is due to the conjunction of R-ANCHOR(Word; σ) and LAZY. Since ONSET-driven (re)syllabification of a word-final consonant violates anchoring at the right word edge, and a surface trill violates LAZY, the higher-ranked conjunction of these two constraints rules out a candidate such as **ma*[.ra]zul, thus allowing *ma*[.ra]zul to surface as optimal.

References cited

- Bakovic, E. 1994. "Strong Onsets and Spanish Fortition." In C. Giordano and D. Ardrón (eds.), MIT Working Papers in Linguistics 23, 21-39.
- Bonet, E. and J. Mascaró. 1997. "On The Representation of Contrasting Rhotics." In A. Morales-Front and F. Martínez-Gil (eds.), Issues in The Phonology and Morphology of The Major Iberian Languages, 103-126. Washington, DC: Georgetown University Press.
- Harris, J.W. 1983. Syllable Structure and Stress in Spanish. Cambridge: MIT Press.
- Kirchner, R. 1998. An Effort-based Approach to Consonant Lenition. Doctoral diss., UCLA.
- Lipski, J. 1990. "Spanish Taps and Trills: Phonological Structure of An Isolated Opposition." Folia Linguistica 24, 153-174.
- Ladefoged, P. and I. Maddieson. 1996. The Sounds of The World's Languages. Cambridge: Blackwell.
- Morales-Front, A. 1999. "Remnants of Geminates in Spanish: Rhotics." Handout of talk given at LSRL XIX, University of Michigan, April 8-11.
- Prince, A. and P. Smolensky. 1993. Optimality Theory: Constraint Interaction in Generative Grammar. Ms., Rutgers University and University of Colorado, Boulder.
- Quilis, A. 1993. Tratado de fonología y fonética españolas. Madrid: Arco.
- Smolensky, P. 1997. "Constraint Interaction in Generative Grammar II: Local Conjunction." Paper presented at the Hopkins OT Workshop/Maryland Mayfest 1997, Baltimore, MD.
- Steriade, D. 1997. Phonetics in Phonology: The Case of Laryngeal Neutralization. Ms., UCLA.
- Walsh, L. 1997. The Phonology of Liquids. Doctoral diss., UMass, Amherst.

¹ Word-initial rhotics neutralize to trill even after a vowel, despite the preference for intervocalic taps. Following Steriade (1997:56), I account for this with a constraint enforcing morpheme invariance across phrasal contexts. Word-initial trills thus appear utterance-medially via correspondence to the same word in utterance-initial position.

² Note that the illicit fricative/affricate + tap clusters *[sr] and *[tʃr] are independently ruled out by a constraint on alveolarity in complex onsets (Harris 1983:31-34). [xr] is allowed, but apparently only in the foreign word *Jruschef*.