The long and short of prothesis in early French word-initial /sC/ clusters

Francisco Antonio Montaño, Lehman College (CUNY)

Sibilants enjoy a unique status with respect to other obstruents throughout the history of French, evidenced by their ability to surface in phonotactic environments where other obstruents cannot. In the earliest stages of French, /s/ is distinctive from other obstruents in that it may form a word-initial cluster with another obstruent (Latin *sponsa* 'spouse.FEM'), later undergoing postlexical prothesis (*sponsa* > *espuse* 'spouse.FEM') when not following a vowel-final word (Pope 1952; Rohlfs 1970). Furthermore, it persists as a coda word-internally well beyond other obstruents, eliminated from this position in Gallo-Romance (*rupta* > *rute* 'route' vs. *festa* > *feste* 'party') (Pope 1952; Jacobs 1995; Gess 1998, 1999, and later work), and unlike other obstruents triggers word-internal epenthesis before a rhotic (*essere* > **es're* > *estre* 'to be') (Hartkemeyer 2000).

When /s/ ceases to surface as a licit word-internal syllable coda during the Old French period (Gess 1998, 1999, and later work), its deletion is accompanied by compensatory lengthening of the preceding vowel (*feste* [fɛs.tə] > *fe:te* [fɛ:tə]) (Gess 1998). The deletion phenomenon occurs in stages, conditioned by the sonority of the following onset segment (Montaño 2017). In close chronological proximity to coda /s/ deletion, the prothetic vowel of words containing an etymological word-initial /s/ + obstruent cluster becomes a fixed element of surface forms (e.g. /spusə/ \rightarrow [es.pu.zə] ~ [spu.zə] > /spusə/ \rightarrow [es.pu.zə] 'spouse.FEM') (Pope 1952), pointing to one of two possible conclusions: (1) that prothesis shifted from the postlexical to the lexical phonology (input form /spusə/ \rightarrow [es.pu.zə]), or (2) that the prothetic vowel had been reanalyzed as part of the input form during acquisition via lexicon optimization (input form /spusə/ \rightarrow [es.pu.zə]). Interestingly, the inability of /s/ to occupy a word-internal coda position interferes with prothesis in that simply epenthesizing a word-initial vowel no longer yields a harmonic output once Old French coda /s/ deletion is underway, since such an output would also violate a critical constraint against /s/-initial syllable-contact clusters (e.g. /spusə/ \rightarrow *[spu.zə], *[es.pu.zə]). Unsurprisingly, /s/ does delete (/spusə/ \rightarrow [e.pu.zə]), but critically no compensatory lengthening accompanies deletion as in word-internal contexts (Pope 1952).

Contrary to the position that the now fixed prothetic vowel became re-analyzed as part of the input form of these lexical items, thus feeding coda /s/ deletion as in (2) above, I claim a more abstract analysis in which these lexical items remain underlyingly /sC.../. Given this, word-initial /s/ deletion, as evidenced by the evolution of words such as [es.pu.zə] > [e.pu.zə] and exhibiting no compensatory lengthening, then represents a distinct evolution of the prothesis phenomenon in which the prosodic position of unharmonic underlying word-initial /s/ is filled by the only licit segment in this structural position, i.e., a vowel. Since such a phenomenon does not constitute a true deletion, by which the prosodic node of the deleted segment would be preserved via vowel lengthening, but rather involves segmental substitution, no compensatory lengthening occurs in these contexts. This particular distinction is corroborated by the lack of long vowel or diphthongs in modern varieties of French (e.g. Québec French) that otherwise preserve long vowels in erstwhile compensatory lengthening contexts (Walker 1984; Picard 2004; Gess 2008; Côté 2012), as well as by suggestive evidence from the output forms of morphological concatenation involving /sC/-initial stems, thus providing supporting evidence to my claim that prothesis remained an active phenomenon in the lexical phonology throughout the Old French period. I further claim that once coda /s/ deletion took hold, prothesis underwent a fundamental transformation on a phenomenological level. It in fact represents a case of non-surface-apparent opacity (McCarthy 1999) since the prothetic vowel surfaces in output forms in which the conditioning environment of word-initial [s] + obstruent clusters is absent. My analysis, supported by the reflexes of such clusters in present-day varieties of French as well as their apparent behavior in morphological concatenation, succeeds in characterizing both the Old French synchronic reality of the opaque prothesis phenomenon alongside coda /s/ deletion, as well as the diachronic developments leading up to it within a single, unified evolving phonological system.

I formalize the interrelated nature as well as the predictably ordered chronology of these changes in consonant cluster licensing by use of the Split Margin Approach to the Syllable (Baertsch 2002; Baertsch & Davis 2003; and later work) in a constraint-based optimality-theoretic analysis. The rich network of implicational structural relationships among syllable and word-level constraints on margin segments and their interaction with faithfulness constraints elegantly capture how the phenomena of prothesis and coda /s/ preservation and deletion evolve over the course of Late Latin through Old French, as well as how the two phenomena intersect in

critical ways. I offer a comprehensive and informative schematization of the clustering possibilities of /s/ and of prothesis in particular throughout early French phonology.

<u>References</u>

- Baertsch, Karen. 2002. An optimality-theoretic approach to syllable structure: the split margin *hierarchy*. Indiana University dissertation.
- Baertsch, Karen and Stuart Davis. 2003. The split margin approach to syllable structure. *ZAS Papers in Linguistics 32*, ed. by Tracy Alan Hall and Silke Hamaan, 1-14.
- Baertsch, Karen and Stuart Davis. 2008. Decomposing the syllable contact asymmetry in Korean. *Asymmetries in phonology*, ed. by Haruo Kubozono, 27-47. Tokyo: Kurosio.
- Baertsch, Karen and Stuart Davis. 2009. Strength relations between consonants: A syllable-based OT approach. *Strength relations in phonology*, ed. by Kuniya Nasukawa and Phillip Backley, 285-316. Berlin/New York: Mouton de Gruyter.
- Côté, Marie-Hélène. 2012. Laurentian French (Quebec): Extra vowels, missing schwas and surprising liaison consonants. *Phonological variation in French: Illustrations from three continents*, ed. by Randall Gess et al., 235-74. Amsterdam: Benjamins.
- Davis, Stuart and Karen Baertsch. 2005. The diachronic link between onset clusters and codas. *Annual Meeting of the Berkeley Linguistics Society* 31.397-408.
- Davis, Stuart and Karen Baertsch. 2011. On the relationship between codas and onset clusters. *Handbook of the syllable*, ed. by Charles E. Cairns and Eric Raimy, 71-97. Leiden: Brill.
- Hartkemeyer, Dale. 2000. An OT approach to atonic vowel loss patterns in Old French and Old Spanish. *New approaches to old problems: Issues in Romance historical linguistics*, ed. by Steven N. Dworkin and Dieter Wanner, 65-84. Amsterdam/Philadelphia: Benjamins.
- Gess, Randall. 1998. Old French NoCoda effects from constraint interaction. Probus 10.207-18.
- Gess, Randall. 1999. Rethinking the dating of Old French syllable-final consonant loss. *Diachronica* 16.261-96.
- Gess, Randall. 2001. Distinctive vowel length in Old French: Evidence and implications. *Historical Linguistics 1999*, ed. by Laurel Brinton, 145-56. Amsterdam: Benjamins.
- Gess, Randall. 2008. More on (distinctive!) vowel length in historical French. *Journal of French Language Studies* 18.175-87.
- Gess, Randall. 2012. Compensatory lengthening in historical French: The role of the speaker. *Research on Old French: The state of the art (Studies in Natural Language and Linguistic Theory 88)*, ed. by Deborah L. Arteaga, 87-105. Dordrecht: Springer.
- Jacobs, Haike. 1995. Optimality theory and sound change. *NELS 25*, ed. by Jill N. Beckman, 219-32. Amherst, MA: GLSA, University of Massachusetts.
- McCarthy, John. 1999. Sympathy and phonological opacity. Phonology 16.331-99.
- Montaño, Francisco. 2017. An optimality-theoretic split-margin approach to the evolution of consonant clusters in historical French phonology. Indiana University dissertation.
- Passino, Diana. 2013. The phonotactics of word-initial clusters in Romance: Typological and theoretical implications. *Romance languages and linguistic theory 5*, ed. by Sergio Baauw et al., 175-91. Amsterdam: Benjamins.
- Picard, Marc. 2004. /s/-deletion in Old French and the aftermath of compensatory lengthening. *Journal of French Language Studies* 14.1-7.
- Pope, Mildred Katharine. 1952. From Latin to Modern French with especial consideration of Anglo-Norman (2nd ed.). Manchester: Manchester University Press.
- Rohlfs, Gerhard. 1970. *From Vulgar Latin to Old French* (2nd ed.). Detroit: Wayne State University Press.

Walker, Douglas. 1984. *The pronunciation of Canadian French*. Ottawa: University of Ottawa Press. Online: http://people.ucalgary.ca/~dcwalker/PronCF.pdf