## Variable articulations of the fricative /3/ in the Poitevin-Saintongeais language of France

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Previous research on the fricatives of Poitevin-Saintongeais (P-S) –a Gallo-Romance language spoken only sparsely in south-western France– has described an alternative articulation for the fricative /ʒ/, but a lack of consensus as to the actual identity of the allophone remains: Hull (1968) and Carmichael (2008) both indicate the allophone of /ʒ/ to be [h], which also occurs phonemically elsewhere in the language; Gautier (1993) suggests the allophone is more like an aspirated /ʒ/; and Massignon and Horiot (1971) observed both [h] and [j] as possible articulations for /ʒ/. Given the varying descriptions found in earlier research, the present study seeks a) to clarify which sound(s) alternate(s) with /ʒ/ in P-S, and b) to identify some of the conditioning factors of the variation.

We assembled a corpus consisting of 325 tokens of /ʒ/ appearing in a variety of lexical and phonological contexts in 29 audio recordings of 12 speakers of P-S reading and/or reciting stories and poems. As each speaker was reading a different text, the character and number of tokens vary from one speaker to another. The differences between [ʒ] and its possible allophones are generally distinct enough that consonant identity can be determined impressionistically; however, the spectra of a few tokens were analyzed more closely in Praat (Boersma & Weenink, 2016) in order to determine the identity of the sound in question. This spectral analysis suggests that the approximant [j] is actually a more common allophone in our data than the fricative [j] described by Massignon and Horiot (1971).

Results suggest the distribution of variable /ʒ/ pronunciation to be heavily speaker-dependent within the P-S language: three speakers produced /ʒ/ exclusively as [ʒ] in the 49 tokens of /ʒ/ contained in their recordings (15.1% of the corpus); three speakers produced /ʒ/ as [ʒ] in 94.1% of their 101 /ʒ/ tokens (31.1% of the corpus), while the six other tokens of /ʒ/ were realized once as [h] and five times as [j]; three other speakers produced /ʒ/ as [h] in 96.3% of their 107 /ʒ/ tokens (32.9% of the corpus), with other tokens of /ʒ/ realized three times as [ʒ] and one time as [j]; greater variation was seen among the 68 /ʒ/ tokens (20.9% of the corpus) produced by the final three speakers, where 42 tokens were produced as [ʒ], 21 as [h], and 5 as [j], of which 4 were produced by a single speaker.

Based on these data, it appears that allophonic variation in the articulation of /ʒ/ is not ubiquitous among speakers of the P-S language. When speakers of this variety do have an allophone for /ʒ/ in their speech, it is primarily realized as [h], with [h] being the primary surface-level articulation for /ʒ/ among 25% of the speakers in this study.

While previous accounts of the allophones of /3/ in P-S have only described them as regional variants, we identify a number of phonological and lexical environments that appear to influence

the realization of this phoneme. Across most of the speakers, an implicational hierarchy applies. While the realization [3] is most common overall, the allophones [h] and [j] appear most commonly in word-medial position. Among some speakers, [h] and/or [j] appear word-initially as well as word-medially. These variants are only produced word-finally by the three speakers for whom [h] is the predominant form overall. Word frequency appears to play a role as well, as among speakers that produce [j] this allophone is especially common for the frequent word *jhe* 'I'. In several instances, the same word with word-initial /3/ (e.g. *jhusce* 'just', *jhour* 'day', *jhamae* 'never') is produced by the same speaker with two allophonic variants. In these cases, salience and speaker attention may explain the variation; the name *Jhob* is produced by one speaker as [hɔb] in isolation in a story's title but as [ʒɔb] within later sentences. It therefore seems that among modern speakers of P-S, phonological and lexical environments play a significant role in conditioning this allophonic variation alongside regional factors.

## Sources

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