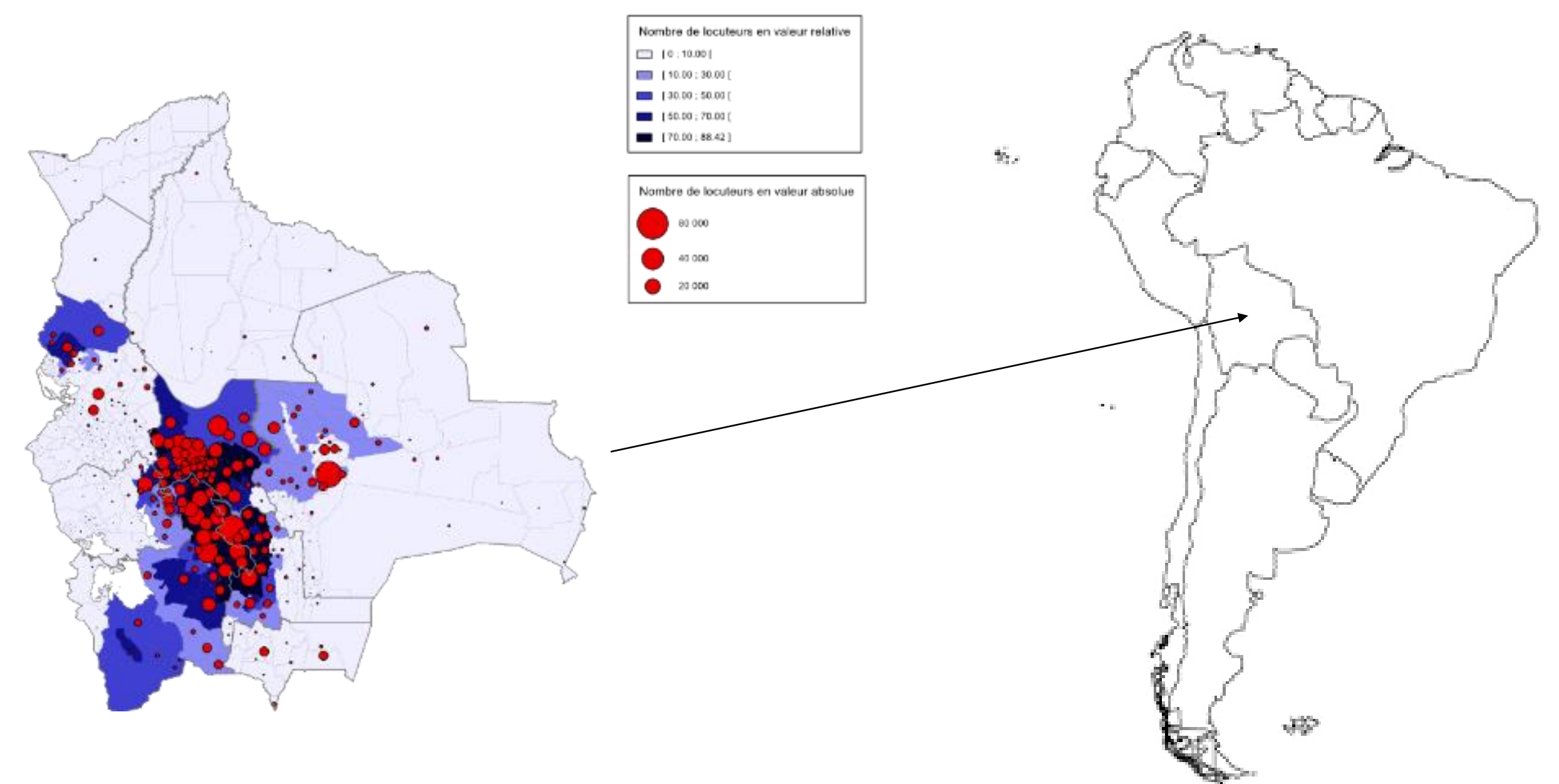


# Embedding sociophonetics in grammar: aspects of structural complexity in Southern Bolivian Quechua

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## Language background

Southern Bolivian Quechua (SBQ) is a very homogeneous dialectal network, phylogenetically linked to the QIIC Quichuan languages subgroup and largely mutually intelligible, despite some noticeable differences, e.g. with the other *cuzqueño-bolivianos* dialects (Cerrón-Palomino 1987). SBQ consonantism is characterized by the absence of voicing correlation and by the presence of an autosegmental glottal trait involved in the realization of ejectives and aspirated stops in five places of articulation (labial, dental, palatal, velar, uvular). Nevertheless, ejectives in SBQ are strongly constrained, as they are contact-induced, and therefore, embedded in specific lexical sets. SBQ proceed by concatenation of derivational and flexional suffixes on mono- or disyllabic (more rarely trisyllabic) lexical roots, whose template has the shape CV(C)CV(C)-. SBQ shows a very strong phonological and morphological homogeneity, which may explain the absence of systematic dialectological previous works and the limited place given to variability in existing grammars, dictionaries and textbooks (notes available in Albó 1964; Bills 1969; Plaza 2010; Laime 2007).

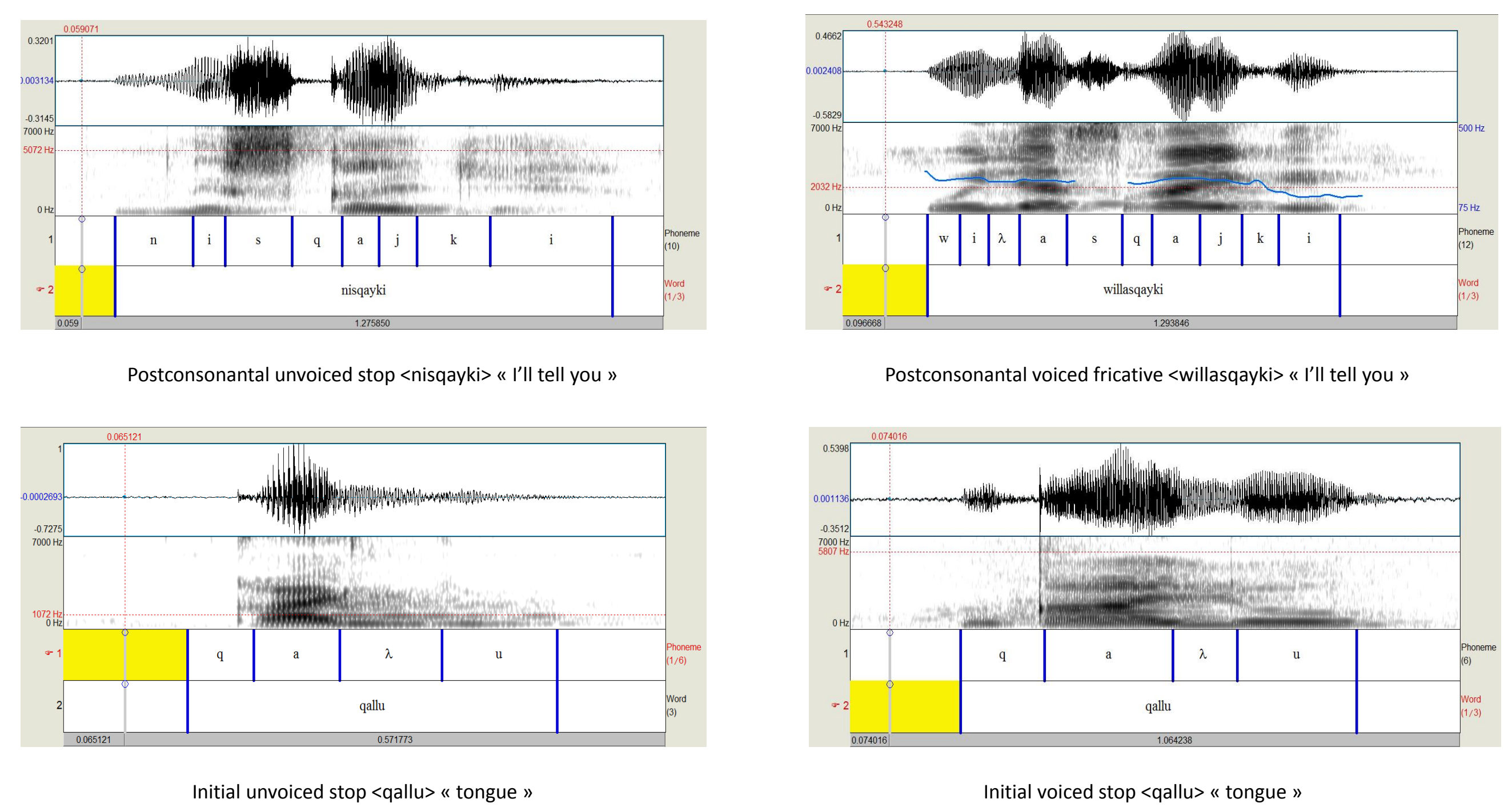


Quechua speakers (main language) in relative and absolute values (own draft based on Census 2012)

	Labial	Alveolar	Palatal	Velar	Uvular	Laryngeal
Stop	p	t	tʃ	k	q	ʔ
Fricative		s				h
Nasal	m	n	ɲ			
Lateral		l	λ	Lexical root may receive [α glottis] specification linked to the first onset stop		
Vibrant		r				
Glides	w		j			

SBQ consonant inventory

## Uvular realizations



Postconsonantal unvoiced stop <nisqayki> « I'll tell you »

Postconsonantal voiced fricative <willasqayki> « I'll tell you »

Initial unvoiced stop <qallu> « tongue »

Initial voiced stop <qallu> « tongue »

## Allophonic microvariation and sociolinguistic complexity

Nonetheless, the diversity of territories, local and regional identities, along with deep socio-economic changes in Bolivian society, do have an impact on the complexity of social and sociolinguistic profiles of the individuals and the language communities, since the second half of the 20th century (Pierrard *forthcoming*). This ecological and sociological intricacy seem propitious to the presence of sociophonetic variations, actually only available through a fine-grained observation of allophonic microvariations, embedded in grammar. In this work, we are wondering how these variations represent a challenge for the description of SBQ, and we make an attempt for the understanding of patterns of structural stability and change, through sociophonetic variation, from the standpoint of linguistic ecology.

We will only focus here on the observation of uvular stops. Typologically rare, uvular stops have the advantage of being present in all syllabic position and of being absent in Spanish, the dominant language in Bolivia and mostly spoken by Quechua speakers. Existing descriptions mention the existence of unvoiced uvular stops in onset position and of a fricative allophone in coda position, phenomenon described by:  $q \rightarrow \chi / \_ \# ; \_ C$ .

#_	C_	V_V	_C	_#
/qallu/ « tongue »	/sinqa/ « nose »	/qaqa/ « rock »	/laqta/ « city, village »	/qanpaq/ « for you »
[q]	[q]	[q]	[χ]	[χ]

Common alleged uvular allophonic grammar

This idealized pattern seems to be actually limited to the peripheral (with respect to the Quechua dialectal network) region of the *Altiplano*. Qualitative observation by listening and spectrogram reading of native speakers recordings from the whole Quechua speaking area show a great richness of micro variations implying phenomena such as voicing, affrication, spirantization, approximantization, even elision or pharyngealization. These lenition phenomena show us an instability in the realization of the uvular phoneme that allows us to draw different idio-, geo- or sociolects on the basis of a single variable. In order to catch the complexity of the coexisting grammars and the interactions with social parameters we have to take into account different dimensions of phonetic or phonological properties such as syllabic position (lenition is not random but follow a strength scale), intrinsic intensity of the nucleus or consonantal correlation. This multidimensional approach is an attempt to embed sociophonetic variables as coexisting grammars in a single dialectal network.

## Different uvular allophonic grammars

#_	C_	V_V	Coda
	q		χ
q		ɸ	χ
q	χ	ɸ	χ
G		ɸ	χ
G		χ	
		χ	

The table above shows the main coexisting allophonic grammars observed into the dialectal network of SBQ. This is the first necessary step before a sociophonetic analysis of the uvular stop phoneme. This analysis must be searching the dependent variables responsible not only of the distribution of two variants of a single phoneme, but of the whole set of lects or allophonic grammars.

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