Variables of /x/-pronunciation in Spanish

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The analysis of the linguistic characteristics of Spanish in the world faces particular challenges due to its pluricentricity: the geographical dimension interacts in a complex way with the social, medial and stylistic dimensions, as well as with aspects of linguistic contact. These connections have yet been disregarded in previous research on the realisation of the Spanish phoneme /x/, which corresponds to the graphemes <j>, <g> and <x> (i.e. in *reloj, gente, México*) [1]. Based on the corpus *Fonología del Español Contemporáneo* FEC, this study examines the influence of different factors on the pronunciation of /x/. It considers three parameters: first, the phonological context; second, the diatopic dimension; and third, the diastratic factors of age, gender and education. The corpus under investigation is part of the *Fonología del Español Contemporáneo* FEC project [2, 3] that intends to document and analyse Spanish pronunciation in the world. It includes data from seventeen regions in Spain and Hispanic America. Its research protocol consists of a reading task and a semi-structured interview [4]. According to the FEC guidelines, in each location, at least 12 speakers were recorded who must not have lived in another location for more than one year and who are evenly distributed in terms of gender, age and education.

So far, traditional approaches have pointed out the following geographical distribution in the pronunciation of /x/: In northern and central Spain, /x/ is usually realised as strident postvelar or uvular fricative, while in Andalusia, the Canary Islands, the Caribbean, Central America and Colombia, the glottal fricative [h] is most common [5]. In Argentina, Peru and Mexico, velar [x] seems to be the standard, whereas, in Chile, we can observe an assimilation process to [ç] before vowels [6, 7, 8]. The data, drawn from the FEC-corpus and consisting of audio-visual phonetic transcriptions using the software Praat [9], confirm that geography is a decisive factor for these pronunciation variants (p<0,001). Figure 1 shows these four pronunciation variants of /x/ in an association plot [10] for speakers from Madrid, Bogotá, Mexico City, Santiago de Chile and Punta Arenas. The corpus data confirm the uvular pronunciation in Madrid as well as the glottal variant in Bogotá. However, the palatal pronunciation is not a unique characteristic of Chilean speakers, but it is also frequent in Mexico City. Contrary to expectations, velar pronunciation is not the standard in Mexico City. Moreover, further variation has to be considered: [k], as well as the combinations [kx] and [kç], and elision occur in the corpus.

Apart from this, the data support the idea that phonological studies of spoken Spanish cannot be reduced to geographical factors. Besides diatopic distribution, the phonological context is the second decisive factor (p<0,001). First, velar pronunciation occurs mainly after the back vowels /o/ and /u/, regardless of whether it is in the onset or the coda of a syllable (i.e. in *escrújulo* or *reloj*). In the onset of the initial syllable of a word, the palatal variant is preferred if the right segmental context is a front vowel (i.e. in *jinete*), but the glottal variant if /x/ is followed by a back vowel (i.e. in *juzgar*). The uvular pronunciation is most frequent when /x/ is between central or front vowels (i.e. in *queja*). The sociolinguistic factors age, gender and education have no significant influence on the examples studied in the FEC corpus. However, there is a tendency, which is to be discussed in the conference: the velar pronunciation [x] is most frequent in the group of people over 60, whereas the glottal variant [h] is for the most part used by people under the age of 30.
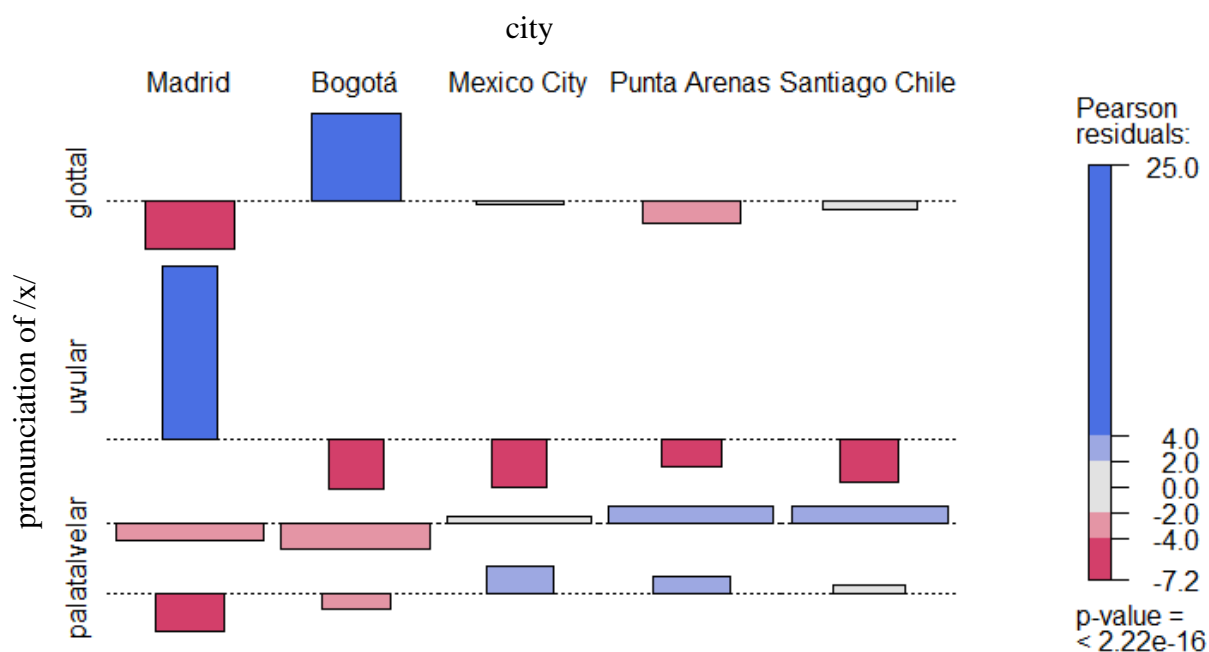
(1)

Figure 1. P*ronunciation variants of /x/ in Madrid (Spain), Bogotá (Colombia), Mexico City (Mexico), Punta Arenas and Santiago de Chile (both in Chile).*

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