Peak alignment and downstep revisited: Language contact and gender in Peruvian Spanish Intonation

Previous work on Peruvian Spanish Intonation has found tonic peak alignment and distinct use of downstep and upstep for Spanish in contact with Quechua, in particular in utterance-final position (O'Rourke, 2004, 2006). In their study of prosodic marking of focus, Muntendam and Torreira (2016) also identify two tonal configurations they attribute to bilingual transfer from Quechua, suggesting a directionality of influence from the indigenous language to Spanish but not vice versa. Similarly, Stewart (2015) finds use of Quichua-like intonation patterns in Pijal Media Lengua. Earlier aligned peaks have been observed in other Spanish varieties in contact, e.g., with Italian (Colantoni, 2011), with early peaks from Palenquero lexical high tones (Hualde & Schwegler, 2008) (see Rao & Sessarego, 2016 for discussion of default aligned tonal configuration and the role of L2 acquisition with reference to Afro-Spanish varieties). Sociolinguistic and linguistic factors have been analyzed as contributing to peak alignment and tonal configuration for languages in contact, including: gender and age (Barnes & Michnowicz, 2015; Enbe &Tobin, 2008;) language dominance (Baird, 2015; Simonet, 2011); number of intervening syllables and lexical stress patterns (Elordieta & Calleja, 2005); and closed/open syllables (Michnowicz & Barnes, 2013, among other factors).

Based on this prior work, the goal of the present study is to determine how peak alignment and downstep may differ among monolingual Peruvian Spanish speakers from Lima and Cuzco, and Quechua-Spanish bilinguals, and the role that other social factors (gender, language use, attitude) may play in this realization. Study participants completed a contextualized reading task which included *wh*-question and answer pairs that were constructed from a grid with potential answers. Responses included between 1-4 stressed syllables in the subject and 2-3 stressed syllables in the predicate. Target stressed syllables were both open and closed and appeared in final, penultimate, and antepenultimate positions. (see Figure 1). Utterances from both males (N=15) and females (N=6) are examined with each participant producing10 utterances twice, resulting in 20 utterances per speaker.

Preliminary analysis of seven speakers (4m, 3f) is based on 431 prenuclear peaks and 442 adjacent peak pairs. As shown in Figure 2, Cuzco early bilinguals (C21m,f) produce more tonic-aligned peaks than the late bilingual (C31m), which is still more than Cuzco and Lima monolinguals (C01m,f and L01m,f). With peak height, these early bilinguals behave most similarly between genders and act as an intermediate group with characteristics of greater use of downstep and upstep compared to monolingual males (L01m, C01m), but less upstep than the late male bilingual (C31m). Females in general show more variability in peak height across groups. This study demonstrates the degree of variability within a given speech community, and the importance of taking social factors into account when determining the effect of a given contact language, in this case Quechua on the production of Spanish, and the degree to which observed linguistic structural norms and intonation features can be generalized to different populations within the larger linguistic community.

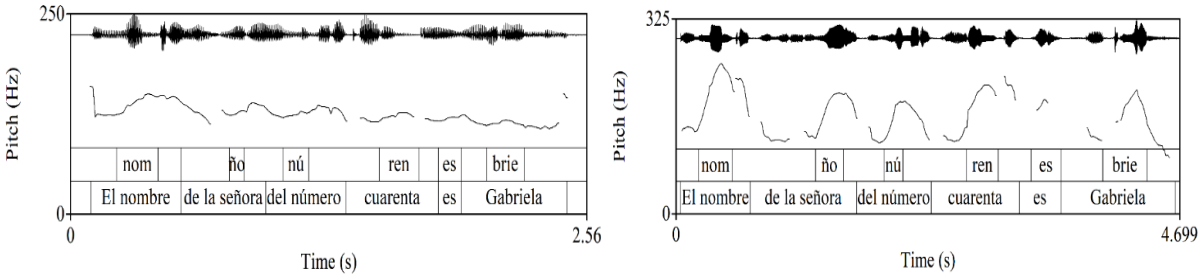
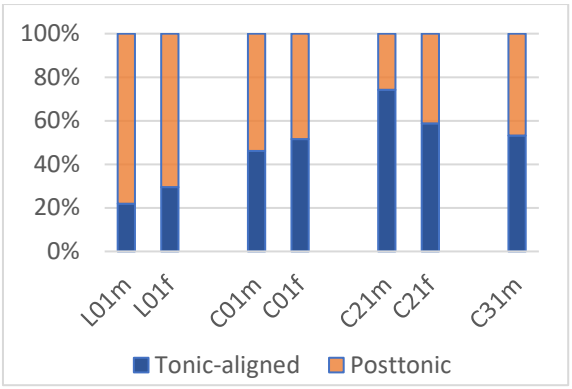


Fig. 1. Left – Lima male monolingual (L01m); Right – Cuzco late Quechua-Spanish male bilingual (C31m). "The name of the woman of the number forty (apartment) is Gabriela".



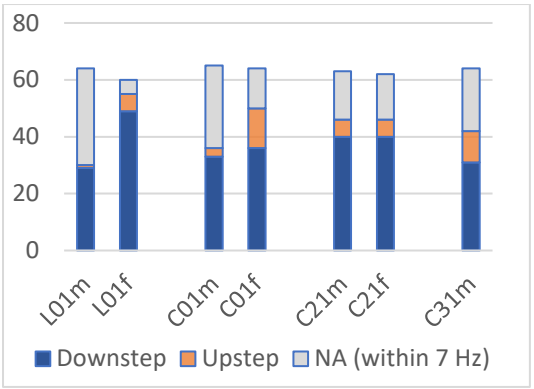


Fig. 2. a) Peak alignment by dialect, group, gender b) Peak height by dialect, group, gender
L=Lima, C=Cuzco; 01=monolingual, 21=early bilingual, 31=late bilingual; m=male, f=female

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