

## Italian Roots In Australian Soil: dynamics of contact and inter-language influence in first generation bilinguals

1. Many studies report consistent evidence of native language (L1) attrition due to the persistent contact with an L2 in certain communication settings (e.g. Clyne, 1972; Scaglione, 2000; de Leeuw, 2008; Opitz, 2010; Schmid, 2011; Nagy 2015). This phenomenon is frequently experienced by migrants, who are massively exposed to the host country's variety and have to negotiate between their home language(s) and the new one (e.g. Busà, 1992; Munro et al., 1996; Celata, Cancila, 2010; Avesani et al., 2015; Avesani et al., in press), thus triggering dynamics of attrition involving the different linguistic systems. Also, it has been demonstrated that L2 pressure can affect L1 oral productions (e.g. Flege, 1995, 2007; Flege et al., 1999, Flege et al., 2003, Bergmann et al., 2016), hence leading proficient late bilinguals experience phonetic assimilation towards the other language in both the varieties in contact (Schmid, 2011).

A peculiar field of analysis on these phenomena is offered by Italians who left their country in the post-World War II years (mid '40s-early '60s) and moved to Australia. These subjects show regional/local dialect as L1, acquired from birth, Italian as L2, learned formally at age 6 in primary school, and English as the third language acquired by immersion in the new country.

2. The present study explores the phonetic influence exerted by English L3 on dialect L1 in two Italian-Australian speakers from Cadore (province of Belluno, Northern Veneto), who migrated to Australia in the late '40s. Their productions are compared to those of two monolingual speakers (controls) who never moved from Italy and live in the same area of origin of the immigrants. More specifically, in this work we will map phenomena of attrition, maintenance and loss in their spoken productions by investigating fine phonetic details of the following coronal consonants: interdental fricatives [θ] and [ð], shared by dialect L1 and English L3 but absent in the Italian phonological inventory, [s] and [ʃ], present in all the three repertoires.

The theoretical basis of our surveys sets in the Speech Learning Model (Flege, 1995). It predicts that L2 phones that are sufficiently divergent from any L1 sound will undergo dissimilation/polarization and will be perceived and produced accurately by late L2 learners; that a L2 sound perceived as correspondent to an existing sound in L1 will be assimilated and the perceptual mechanism of equivalence classification will block the formation of a new L2 category; that for L2 phones that are "partially similar" (i.e., differ from L1 sounds for subtle phonetic details) the equivalence classification will hamper the formation of a new L2 category and language experience would be the primary factor driving changes in L1 production. That is, sounds that are perceived cross-linguistically equivalent would be produced similarly (Chang, 2012), while new sounds would trigger the formation of new perceptual categories (Munro et al., 1996).

Taking into consideration the above-mentioned assumptions, our purpose is therefore to assess: whether persistent contact between the L1 and L3 categories that have comparable/similar phonetic realizations in the two systems would favor the maintenance of target sounds through equivalence classification; which fine-grained features target fricatives produced by Italian-Australian and Belluno monolingual speakers, respectively, would display in the same linguistic contexts. To verify these hypotheses, further aspects will be here considered: age of arrival in the host country, length of residence, amount, frequency, type of input and exposure to L3 (Schmid, Köpke & de Bot, 2013), with regard to the subjects' social interactions within and outside the communities.

3. The fine phonetic features of fricatives [θ], [s], [ʃ] and [ð] in the dialectal speech of the two Italian-Australian speakers of the present study have been already analyzed in Avesani et al. (2015), as part of a larger study with speakers of the *IRLAS* corpus (Galatà et al., in preparation). The target sounds have been identified in elicited productions of 64 words, have been IPA transcribed and acoustically analyzed (duration, rms, spectral peak, spectral shape and spectral moments: Center of Gravity, Standard Deviation, Kurtosis and Skewness). Statistical evaluations revealed that both subjects have generally preserved L1 interdental fricatives in contact with the correspondent categories of English L3, thus verifying the predictions of the SLM.

In order to obtain data comparable to the productions of those Italian-Australian speakers, original data for the monolingual speakers have been elicited by adopting the same recording procedure, experimental design and target words (we refer to Avesani et al. (2015) for the methodological details). Preliminary acoustic and statistical evaluations on the controls show significant distance among the coronal fricatives' places of articulation, similarly to what had already been shown for the two Italian-Australian speakers. In both informants of the control group, however, values for the spectral moments of [s] indicate both a more advanced and laminal position with respect to [θ]. This behavior has thus raised questions about the nature of these fricatives' fine phonetic features and place of articulation, which should be further investigated.

Hence, this comparative study aims at acquiring more fine-grained details on the class of coronal fricatives in the speakers' inventories, in order to understand in depth and describe the reasons behind phenomena of attrition, maintenance and loss of subtle native phonetic features.

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