

Acquiring a boundary category: the development of dental affricates in Italian L1

Affricates occupy a typologically marked position in the consonantal space, since they share both articulatory and acoustic properties with both stops and fricatives. In a diachronic perspective, affricates have usually evolved from or into fricatives in different languages, in particular within Romance family (Recasens 2011, *inter alia*). Among this language group, to date only Italian preserved both voiceless and voiced dental affricates /ts/ and /dz/ with an almost null phonological productivity. Synchronically, Italian dental affricates show a great geographical variability, with possibly sociolinguistic values (Meluzzi 2020).

In this framework, we aimed at investigating the acquisition of dental affricates in Italian L1. In particular, we address the following interrelated research questions: (1) do children treat affricates as a category distinct from stops and fricatives?; (2) do voicing and durational contrasts in child speech show parallel or divergent developmental trajectories?; (3) is regional variation in adult input modulated in children's performance?

The analysis is based on three speech corpora of Italian, similar for data collection protocols and annotations on affricates sounds. The COLIMBI corpus comprises semi-spontaneous speech elicited from 75 children equally divided in four age groups from 6 to 10 years old (Rossi & Sbacco 2023, Sbacco 2025). The ITAL2D2 corpus includes the productions of 8 young adult speakers (mean age 21 years) in both read and map-task dialogues (see also Nese & Meluzzi, *accepted*). Finally, a comparison will be made with the speech of 42 adults, balanced by age and place of origins, as collected in the town of Bolzano (South Tyrol, Italy, cf. Meluzzi 2016, 2020).

Results indicate that children's realizations of dental affricates display considerably greater variability than those of adults and young adults, especially in the distribution of the voiced-voiceless opposition across phonological context. Crucially, children's productions frequently include a bi-phonetic sequence of a stop and a fricative, in place of the expected affricate. This could suggest that affricates are not yet developed as a phonological distinct category for children. Adults, by contrast, show a much clearer categorical distribution, pointing to a prolonged and non-linear developmental trajectory for this sound class.

The L1 developmental profile presented here could also provide empirical evidence for understanding what the affricate category demands, and where L2 learners are more likely to encounter systematic difficulty.

Keywords: phonological acquisition; dental affricates; Italian; sociophonetic variation.

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