

## Dental affricates realization in young speakers in Pavia and Bolzano: a sociophonetic perspective

This work investigates Italian dental affricates realization in two groups of young speakers in Pavia and Bolzano. In Italian dialectological literature, it has been shown how dental affricates have a low degree of phonological contrast in Italian lexicon (De Dominicis 1999), and how their realization varies among the different Italo-Romance dialects and the different regional pronunciations (Loporcaro 2009, Canepari 1983). Due to this, our hypothesis is that dental affricates could be a good marker to highlight processes of sound change and language variation within a community of speakers, as it has already been tested for other fricative sounds (recently, Nocchi & Filipponio 2012).

For this research, we choose two groups of young speakers, aged between 18 and 35 years old, in two different sociolinguistic context. For the Pavia corpus, we collected the speech of 12 speakers (7 men, 5 women), all students at the academic boarding school “Giasone del Maino” in Pavia. The corpus is also balanced according to place of origin of the speakers, and year of enrollment at university (freshmen vs. near-graduated). The 6 freshmen were recorded twice, that is right at their arrival in Pavia and after 11 months of staying in the city boarding school. For the Bolzano corpus, we refer to the CITABOL corpus collected in Meluzzi (2014), by selecting only those speakers matching the criteria of the previous group, thus selecting 7 young speakers (4 men, 3 women). The speakers of both corpora were asked to read a word-list, tongue-twists and to perform a short sociolinguistic semi-structured interview with the researcher. At the present state of the research, both the Pavia corpus and the selected sub-corpus of CITABOL consists of about 3 hours of recording.

For the purpose of this research, only the instances of dental affricates belonging to the more formal task (i.e., word-list reading) have been selected; the wordlist considers only real words in different phonological contexts (i.e., post-sonorant, word initial, singleton, and geminate). A total of 615 tokens have been selected, 462 from the CITABOL corpus, and 213 from the Pavia corpus. The annotation has been performed in PRAAT 5.4.12 following the protocol in Meluzzi (2014: 65-75). Since the size of the two corpora is different, we decided to analyze the two corpora separately, with a comparative discussion of the results, in order to highlight possible similarities or difference among the two group of speakers. This will allow the researcher to emphasize the presence of similar variation patterns in the realization of dental affricates, which are phonemes with a very low degree of productivity in the voiceless-voiced opposition (De Dominicis 1999).

During the annotation process, a new kind of dental affricate seems to emerge for what it concerns the sonority degree. Indeed, some tokens exhibit the characteristic sonority bar only during the occlusive phase, but not in the fricative phase subsequent the spike (see also Meluzzi 2014). Table 1 shows the distribution of the sonority degree in dental affricates between male and female speakers in the two sub-corpora: it appears that mixed affricates are preferred by women in both groups, and that Bozen speakers, in particular the male ones, produced more voiced affricates than their peers in Pavia.

	<b>Bolzano</b>		<b>Pavia</b>	
	<b>Men</b>	<b>Women</b>	<b>Men</b>	<b>Women</b>

<b>Voiceless</b>	41,2%	37%	50,4%	46,9%
<b>Voiced</b>	43,1%	31,4%	36,8%	28,1%
<b>Mixed</b>	15,7%	31,6%	12,8%	25,0%
<b>Total</b>	100,0%	100,0%	100,0%	100,0%

Table 1. Distribution of the three sonority degree of dental affricate realization in the two corpora of Bolzano and Pavia, divided by the gender of the speaker.

Moreover, within the Pavia corpus is important to highlight a change in progress affecting the group of freshmen: indeed, they tend to produce more voiceless affricates after 11 months of residence in Pavia, as shown in table 2. This change in real-time diachrony could be related to the acquisition of a more “northern” accent, since voiceless dental affricates appear to be more frequent in students from the north, both in the group of freshmen and in the group of nearly-graduated.

	<b>Freshmen 1 (arrival)</b>	<b>Freshmen 2 (after 11 months)</b>
<b>Voiceless</b>	42,9%	54,2%
<b>Voiced</b>	32,9%	29,2%
<b>Mixed</b>	24,3%	16,7%
<b>Total</b>	100%	100%

Table 2. Production of dental affricates by freshmen at their arrival in Pavia and after 11 months of residence.

In conclusion, dental affricates pronunciation shows some similarities in the two corpora of young speakers in Pavia and Bolzano. In both groups female speakers have a more frequent presence of an atypical affricate with a mixed degree of sonority, which could lead to the different interpretation of this variant, due to the famous sociolinguistic gender-paradox (Labov 2001). Moreover, the difference within the Pavia corpus, and in particular in real-time diachrony within the group of the freshmen, could be explained as a levelling process (Kerswill & Trudgill 2005) towards a more northern variety. A major role could also be played by the context of Pavia students, who forms a sort of community of practice (Meyerhoff 2002) related to life in a boarding school.

## References

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