

Mapping language experience onto phonetic categories

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Sociophonetic perspectives on linguistic variability (Docherty & Foulkes 2014; Harrington 2006) assume that adult speakers constantly update their phonetic representations as they integrate new acoustic, articulatory, and socio-indexical information.

In our proposal, we investigate the relation between the linguistic experience and the variability of sociophonetic categories in Italian-Tyrolean bilingual speakers. More precisely, we explore how social network properties (Carrington 2005) affect the production of rhotics by focusing on the duration of the constriction phase of /r/ in Tyrolean (German Dialect; Galatà et al. 2016).

We hypothesize that variability in language use and network density affect the duration of /r/s in Tyrolean (Sancier & Fowler 1997). To test this hypothesis we draw on a dataset coming from a large-scale experiment: we consider egocentric network data collected via electronic questionnaires as well as acoustic production data elicited using a list of Tyrolean words specifically designed to contain all possible contexts in which rhotics can occur.

We discuss results from a dataset of 2248 tokens as produced by 14 subjects: 8 sequential bilinguals (Tyrolean-dominant), 6 simultaneous bilinguals; gender: 11 F, 3 M; age: mean = 26.5, sd = 5.31). We treated constriction duration as dependent variable and variability of language choice (measured as entropy of choice) and network density as main predictors. Results show that both variability of language choice and network density exert a significant influence on the duration of the constriction phase of /r/ in Tyrolean.

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