**Category Instability of the Palatal Fricative in Berlin German**

From a typological point of view, /ç/ is relatively rare in the languages of the world. However, standard German contrasts the palatal fricative /ç/ as in /fɪçtə/ ('spruce') and the postalveo-palatal fricative /ʃ/ as in /fɪʃtə/ (1. and 3. P. sg. past tense 'to fish'). Nevertheless, several dialects from the central region of Germany (such as Moselle Franconian, Hessian, Thuringian, Saxonian) do not contrast these two sounds and canonical /ç/ is realized as /ʃ/.

Auer (1999) observed a synchronic alternation of /ç/ and /ʃ/ in a variety spoken by young multi-ethnic speakers in urban areas of Germany (Hamburg) where this alternation is unexpected. We have followed up on this observation and conducted production and perception studies in Berlin where we also find larger multi-ethnic neighborhoods where this alternation is quite pervasive and noticeable. It is mocked and stigmatized and there is a general awareness in the Berlin population that many young speakers from Kreuzberg, Wedding or Neukölln substitute /ç/ with /ʃ/.

A forced choice perception test was designed to test for listeners' identification of stimuli from a 13 step acoustic continuum ranging from a palatal fricative as in /fɪçtə/ to a postalveolar fricative as in /fɪʃtə/. Color pictures of a spruce and of a young man holding a fishing rod were attached to the response box. 99 male and female listeners were instructed to press the appropriate response button for each stimulus they heard. Different groups of listeners were tested under three CONDITIONS: group 1 saw the word *Kreuzberg* written on the response box, group 2 saw the word *Zehlendorf* and group 3 did not get any such information. Also, in group 1 and 2, the listener's attention was implicitly and subtly directed to his group membership by casually mentioning the CONDITION under the assumption that s/he would derive inferences from that. In total, listeners were presented with 11 Blocks (each in a different random order) of 13 stimuli. Responses from Block 1 were excluded from the analysis.

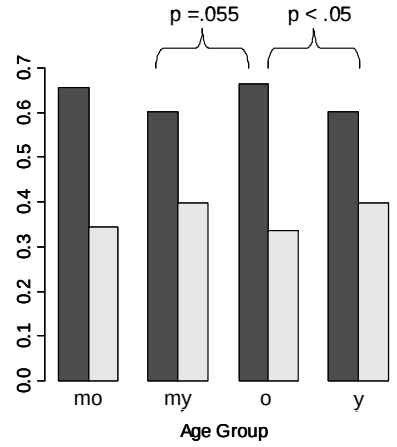


Fig. 1: Distribution of responses (in %) by Age Group (black = 'Fichte', grey = 'fischte').

| Age Group | No. of Subjects | No. of Responses |
|---|---|---|
| **Y**oung (mean=22.9, SD=1.9) | 61 | 8529 |
| **M**iddle **Y**oung (mean=29.1, SD=1.7) | 23 | 3205 |
| **M**iddle **O**ld (mean=35, SD=0.9) | 6 | 840 |
| **O**ld (mean=50.1, SD=5.1) | 9 | 1242 |

Tab. 1: Number of Subjects and Responses by Age Group.

A linear mixed effects model (lme) revealed significant results for the factors CONDITION ($p<.05$) and AGE ($p<.05$). Thus, suggesting that listeners adjust their interpretation of synthesized acoustic continua in accordance with their expectation, indicating that both perceptual cues and inferred social factors play a role in the categorization of speech stimuli. The results show that the mere suggestion of where the speaker may come from even within the confines of a city is enough to trigger such inferences. Also, younger listeners perceive more /ʃ/- variants than old listeners. Arguing in the same vain of expectation guiding perceptual categorization younger speakers hear more /ʃ/ because this variant is prevalent in their environment.