

Phonetic alignment of /x/ in interaction

Lotte Eijk¹, Herbert Schriefers² and Mirjam Ernestus¹

¹*Centre for Language Studies, Radboud University Nijmegen, the Netherlands*

²*Donders Institute for Brain, Cognition and Behaviour, Radboud University Nijmegen, the Netherlands*

Alignment is the process of adapting speech to another interlocutor's speech. We investigated phonetic alignment to two variants of the Dutch /x/, also known as the "hard g" or "soft g". We set out to explore whether phonetic alignment is caused only by short-term priming, long-term priming or by speakers remembering features of the speech of their interlocutor. Phonetic alignment effects are usually found in rather controlled environments (e.g., shadowing tasks; Pardo et al., 2013) or using an AXB assessment (Pardo, 2006). We studied this phenomenon in less constricted environments and using automatised measurements.

Participants interacted with two different confederates, one producing a "hard g" and one a "soft g" in a sentence completion task. Participants completed a total of 268 sentences. In a pre-test, participants first completed sentences by themselves. Then, they interacted with Confederate 1 in Round 1, with Confederate 2 in Round 2, and again with Confederate 1 in a so-called inter-test and in Round 3, and lastly by themselves again in the post-test.

We investigated the duration (van der Harst, van de Velde & Schouten, 2007) and Centre of Gravity of the 15085 fricatives of 36 participants. We investigated three different predictors: the last produced /x/ of the confederate, the average of the ten last produced /x/s of the confederate and the average of all heard /x/s. None of the predictors showed significant effects. Descriptive analyses showed tremendous variation among speakers, likely unrelated to alignment. We conclude that alignment at the sound level is not as clear as previously demonstrated in less ecologically valid studies.

References

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