Who's afraid of homophones? An experimental study on homophony avoidance between present and past tense in Dutch

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Keywords: cognitive grammar, language change and grammaticalization, language processing

Homophony avoidance is often cited as a motivation for certain patterns in language change. Throughout the history of Dutch, several instances of morphophonological change have been claimed to have occurred or been inhibited to avoid homophony between present and past tense (Van Bree 1987; Van Loon 2014). For example, the schwa apocope in Early Modern Dutch that affected nearly all Dutch words did not take place in weak preterites (*hoopte* PST-3SG 'hope'), which would render them indistinguishable from the present (*hoopt* PRS-3SG). It did take place however in irregular preterites (*kocht < kochte* PST-3SG 'buy') which remained distinguishable from their present counterparts (*koop* PRS-3SG) without schwa.

Yet, how plausible is this homophony avoidance explanation? Do language users actually take this into account? While the topic is not uncontroversial (King 1967, Lass 1987; 1997a; 1997b: 355-361, Sampson 2013), initial experimental research indeed suggests homophony avoidance to be a cognitively plausible explanation for certain patterns in language change (Kaplan 2011; Kaplan & Muratani 2015; Yin & White 2018). In this paper, we seek further experimental substantiation of homophony avoidance as a cognitive factor in language change. We specifically test whether language users avoid homophony between present and past tense. In a Wug-test, we focus on Dutch non-verbs ending in a dental which, when used in the preterite plural, become homophonous with the present plural (compare *vatten* PST-3PL to *vatten* PRS-3PL 'understand'). Language users can avoid this homophony by switching to a perfect (*ze hebben gevat* PERF-3PL) which has become semantically interchangeable with the preterite in many contexts in present day Dutch.

Participants (n=255) were presented with a forced-choice-task requiring them to choose between the perfect or preterite of non-verbs to fill a blank in a stimulus sentence. The non-verbs either showed a double dental, causing the preterite plural to be both homophonous and homonymous with the present plural (compare vatten PST-3PL to vatten PST-3PL), a single dental, causing the preterite plural to be homophonous, but not homonymous with the present plural (compare duldden PST-3PL to dulden PST-3PL 'tolerate') or no dental, causing no homophony. Two between-subject conditions were created: one with only singular verbs and one with only plural verbs. Half of stimuli sentences in each condition contained the explicit past tense marker gisteren 'yesterday', while the other half did not. We hypothesized that the presence of such marker would diminish the ambiguity in the sentence by rendering the homophony less problematic.

Results show that avoidance of the preterite is indeed highest for verbs with a double dental. This effect is largest for plural verbs without explicit adverbial past tense marker, followed by plural verbs with explicit marker. For singular verbs the effect was not significant. This suggests that language users indeed try to avoid homophony. More generally, this paper contributes to a better understanding of the role of cognition in community wide processes of language change.

References

Kaplan, Abby. 2011. How much homophony is normal? *Journal of Linguistics* 47(3), 631–671.

Kaplan, Abby & Yuka Muratani. 2015. Categorical and gradient homophony avoidance: Evidence from Japanese. *Laboratory Phonology* 6(2). 167–195.

King, Robert D. 1967. Functional load and sound change. Language 43(4). 831-852

Lass, Roger. 1987. The shape of English. London: Dent.

Lass, Roger. 1997a. Arse longa, vita brevis: last words on 'harmful homophony'. *Studia Anglica Posnaniensia* 32. 21-31.

Lass, Roger. 1997b. *Historical linguistics and language change*. Cambridge: Cambridge University Press.

Sampson, Geoffrey, 2013, A counterexample to homophony avoidance, Diachronica 30(4), 579-591.

Van Bree, Cor. 1987. Historische grammatica van het Nederlands. Dordrecht: Foris.

Van Loon, Jozef. 2014. Historische fonologie van het Nederlands. Schoten: Universitas.

Yin, Sora Heng & James White 2018. Neutralization and homophony avoidance in phonological learning. *Cognition* 179. 89–101.