Investigating the role of speech planning in the production of sociolinguistic variation

Variationist research traditionally identifies two types of factors that condition variability: "external" factors represent non-linguistic characteristics of the speaker or situation; "internal" factors comprise linguistic elements surrounding the variable item (Cedergren & Sankoff, 1974). However, often unacknowledged (though see Preston, 2004) is that *psycholinguistic* factors, such as those implicated in language processing, must also play a role in shaping the surface distribution of linguistic variants. This paper describes the importance of one such psycholinguistic factor—the incremental planning of speech—in the conditioning of sociolinguistic variation, and presents results from an experiment probing its effects on language production.

Psychologists have long recognized that speech is planned and produced in discrete units, and that task demands, such as a cognitive load, may compromise a speaker's ability to plan ahead (Ferreira and Swets, 2002). This incremental, variable production planning has a natural connection to sociolinguistic variation, specifically in the case of sociolinguistic variables which are conditioned by adjacent linguistic elements: if the conditioning element and the varying element have not both been planned together, said conditioning is not expected to operate. Though this idea is not novel (see M. Wagner, 2012; Tanner et al., 2015), it has not yet been tested via a paradigm in which techniques for manipulating a subject's ability to plan their speech are employed.

We present results from a map task (Brown et al., 1984) investigating planning effects on variable contraction of *is* (e.g. *The park{'s ~ is} down the road*). As a complex subject is known to interfere with the planning of the verb phrase that follows it (Ferreira, 1991), we manipulate subject complexity, predicting that complex subjects will lead to separate planning of subject and verb phrase and, hence, inhibition of contraction. We compare our experimental results to those from corpus data (MacKenzie, 2012).

References

- Cedergren, Henrietta, and David Sankoff. 1974. Variable rules: Performance as a statistical reflection of competence. *Language* 50:333–355.
- Ferreira, Fernanda. 1991. Effects of length and syntactic complexity on initiation times for prepared utterances. *Journal of Memory and Language* 30:210–233.
- Ferreira, Fernanda, and Benjamin Swets. 2002. How incremental is language production? Evidence from the production of utterances requiring the computation of arithmetic sums. *Journal of Memory and Language* 46:57–84.
- MacKenzie, Laurel. 2012. Locating Variation Above the Phonology. Doctoral Dissertation, University of Pennsylvania.
- Preston, Dennis R. 2004. Three kinds of sociolinguistics: A psycholinguistic perspective. In *Sociolinguistic Variation: Critical Reflections*, ed. Carmen Fought, 140–158. Oxford University Press.
- Tanner, James, Morgan Sonderegger, and Michael Wagner. 2015. Production planning and coronal stop deletion in spontaneous speech. In *Proceedings of the 18th International Congress of Phonetic Sciences*.

Wagner, Michael. 2012. Locality in phonology and production planning. *McGill Working Papers in Linguistics* 23.1.