Exploring online perceptions of clustered variability: Towards an integrated model of phonetic and morphosyntactic variation

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Recent research has examined how listeners evaluate different frequency distributions of sociolinguistic variables, both overall (Labov et al. 2011; Levon & Fox 2014; Wagner & Hesson 2014) and in real-time (Watson & Clark 2013). To date, this research has focused primarily on a single target variable at a time, examining, for example, whether increasing the frequency of a particular non-standard feature has a significant influence on listener judgments of the speaker. While this work has been crucial in helping us to better understand the relative contribution of subsequent occurrences of variants to perceived indexical meaning, we still lack information on how listeners perceive clusters of variables that co-occur in the speech signal.

In this paper, we present a first attempt to address this issue. We describe results from an online experiment that investigates the real-time sociolinguistic processing of both phonetic and morphosyntactic variability in the speech of two individuals (one woman and one man) from the North East of England. Specifically, we use a bespoke sliding evaluation tool (adapted from Watson & Clark 2015) to examine listeners' real-time reactions to both singular and cumulative occurrences of regional phonetic features (e.g., monophthongization of FACE, alveolar/velar realization of ING) and morphosyntactic ones (e.g., stative possessives, the Northern Subject Rule, relative pronouns). We include both phonetic and morphosyntactic variables since recent evidence demonstrates that while listeners attend to both types of features, they do so in systematically different ways (Levon & Buchstaller 2015). We, therefore, integrate an examination of reactions to features across different linguistic levels in an effort to investigate the processing of sociolinguistic heterogeneity in the most ecologically valid manner possible.

Results of change-point and linear regression analyses of evaluations from 115 listeners indicate that respondents are sensitive to the production of both phonetic and morphosyntactic features in real-time. The two types of features differed, however, in their characteristic response pattern. For phonetic features such as FACE and ING, we find no evidence for the type of logarithmic evaluative pattern in perception first reported by Labov et al. (2011). For morphosyntactic features, in contrast, we do find such a pattern. We hypothesise that this difference may be due to the types of overt prescriptive norms associated with different levels of variation and, consequently, the processing that is required to evaluate phonetic versus morphosyntactic variables in context. It seems that in naturally-occurring vernacular speech, multiple occurrences of phonetic variation are required before listeners arrive at a consolidated evaluative reaction, whereas for morphosyntactic variables this is achieved more quickly. In the paper, we discuss the ramifications of findings like this for the development of a theory of how listeners process sociolinguistic heterogeneity in real time. We also describe how social differences among both speakers and listeners (e.g., gender, region) affect evaluations, thus further highlighting the contingent nature of sociolinguistic perception more generally.

References:

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