## Occupational Networks and Linguistic Differences among White-Collar Speakers

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The growth of the service sector presents challenges for traditional sociolinguistic occupational categories. For example, a financial account manager, a software engineer, and a lawyer may have the same number of years of education and similar economic circumstances, but each job entails a unique interactional network and linguistic needs. Milroy and Milroy (1992) observe this problem with big-class stratification schema, and they propose an integration of class dynamics with network analysis. Similarly, the body of sociological research on workplace interactions points to strong network homophily with respect to ties between coworkers and ties with clients (McPherson et al. 2001, Ibarra 1992; Marks 1994). While sociolinguists have used interactional sociology in terms of expanded identity (Hazen 2002) or educational aspirations and peer networks (Eckert 2000), these ideas are rarely implemented in large corpora. This paper implements a measure of network relations in the workplace in addition to the occupation variable in order to account for linguistic variation among white collar workers.

The data are drawn from a corpus of conversational interviews in Raleigh, NC, where the Southern Vowel Shift is reversing due to in-migration of non-Southern white collar speakers (Dodsworth and Kohn 2012). The five front vowels, all implicated in the SVS, are the dependent variables with an average of 50 tokens per vowel per speaker. In addition, the binary ING/IN variable, which is showing increasing rates of ING in Raleigh (Forrest 2014), is examined with an average of 96 tokens per speaker. Vowels were automatically measured from textgrids resulting from forced alignment of audio files and transcripts. Measurements were taken at 25% and 75% of the vowel's duration, and the first two formants were Lobanov-normalized. Tokens of ING were impressionistically coded as ING or IN, and each token was also coded for lexical category (progressive, participle, etc.) and following place of articulation (velar, coronal, etc.).

The central question is whether a speaker's occupational network correlates with the production of Southern linguistic variants, while controlling for year of birth, sex, and a three-way occupational variable. Each speaker's occupational network was classified with a binary Local/Extra-Local variable indicating whether contacts within the workplace would primarily be within the South, based on the speaker's discussion of his/her occupation during the interview. The division between Southern contacts and non-Southern contacts attempts to capture the motivations for dialect levelling in Raleigh; Southern features have linguistic capital within the state, while they are devalued outside of it. A more gradient schema would require detailed network information not present in the sociolinguistic interview.

Linear mixed-effects models were run with a subset of 54 speakers' vowel data and logistic mixed-effects models were run on 63 speakers' ING data. In all six models, the addition of the network variable improved the overall predictive power of a model including both internal factors and social factors (Sex, Occupation, and Year of Birth). These results suggest that an indicator of occupational networks within sociolinguistic models has promise for the explanation of variation among white-collar workers.

## References

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