

## Words Floating on the Current of Sound Change

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One of the central questions of the mechanism of linguistic change concerns the unit of change: is it sounds or words that change? In recent decades, it has been demonstrated that some changes proceed by lexical diffusion (Wang and Chen 1977, Phillips 1980, Labov 1989, Shen 1990, Krishnamurti 1998), where change proceeds gradually through the lexicon by more or less arbitrary selection of individual words. In most such cases, there is a correlation of word frequency with order of selection (Phillips 1984, Fidelholtz 1975, Hooper 1976). For most historical and comparative linguists, the regularity of sound change is the basic working principle, and the finding that a given change follows a regular Neogrammarian path is not a publishable result. Though there has been some critical reaction to evidence for lexical diffusion (Pulleyblank 1978, Labov 1994), there has not yet been any systematic effort to demonstrate the regularity of sound change in which the basic unit of change is the phoneme.

The current report is an examination of three changes in progress which appear to be examples of regular Neogrammarian change. The study makes use of 144,000 measurements of individual words spoken by 440 subjects of the *Atlas of North American English*. Data are drawn from the fronting of /uw/ in all of North America; the fronting of /ow/ in the Midland and the South, and the general raising of the short **a** class in the Inland North. Multiple regression is used to determine the relative influence of phonetic environment, contextual style, social factors, lexical identity and word frequency, based on the Brown corpus (Kucera and Francis 1957).

The study of the raising and fronting of /ae/ in the Inland North is based on 2467 tokens. F2 is found to be governed by 8 phonetic factors, all at the  $p < .0001$  level, which account for 28.5% of the variance; social factors for 4.7%, style for 1.3%. Twenty words were tested for the effect of lexical identity: the 10 most frequent in the Brown corpus and the 10 most frequent in the Telsur records. One word, *Saturday*, was found to make a significant contribution, independent of its phonetic form; this accounted for .2% of the variance. Frequency was not significant.

The study of the fronting of /ow/ and /uw/ show a number of lexical effects, accounting for less 1% of the variance. For F2 of /ow/, four words were found to significantly favor fronting beyond what would be predicted from their phonetic composition: *ocean*, *go*, *ago* and *old*, while *home* disfavored fronting. Frequency was again not a significant factor.

These results support the view that lexical identity can influence the course of sound change. However, the distribution of the lexically significant tokens does not indicate the existence of any discrete process of lexical selection. Rather, these words are carried along in the same current of change that moves all others. Through some semantic, social or affective influence not yet determined, they drift significantly faster or slower than other members of their phonetic cohort.

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