Social and Phonological Factors in \( (r) \) Variation in 1930s Inland Massachusetts

Bloch’s 1935 dissertation [1] presents a seemingly untapped wealth of data and observations about the \( (r) \) variable in New England based on LANE records [2, 3]. This paper builds on his work in a study of the 50 informants in the areas Bloch classifies as Western and Central Massachusetts, which lie at the crossroads of the North-South and East-West New England isoglosses in ANAE [4]. We find that:

1. \( (r) \) had a complex social distribution in this area in the 1930s: non-rhoticity was prevalent amongst upper middle class urban speakers in Northampton and Springfield and amongst rural speakers to the east and north, while to the west rhoticity prevailed.
2. \( (r) \) was subject to a gradient phonological constraint that mirrors a categorical constraint for contemporary Eastern Massachusetts \( (r) \)

Bloch chose 145 words with final or preconsonantal \( (r) \) that occur in most informants’ records, divided into three phonological classes: stressed vocalic (e.g. nurse), unstressed vocalic (e.g. letter), and post-vocalic (e.g. part). For each informant and word, he registered whether the fieldworker transcribed \( (r) \) as fully retroflex, weakly retroflex or non-retroflex.

We calculated a retroflexion score for each informant for each phonological class that ranges from 0 for no retroflexion to 1 for consistent full retroflexion (weak retroflexion contributed 0.5 to the numerator in the proportion-like formula). Means and standard deviations for each class in each county appear in (1). Berkshire has the highest rate of retroflexion, and Franklin and Worcester the lowest, with Hampshire and Hampden intermediate. Across all of them, stressed vocalic is the class that is most often retroflexed. McCarthy [5] claims that retroflexion occurs always and only in stressed vocalic position in late 20\(^{th}\) century Eastern Massachusetts English. The 1930s inland Massachusetts data demonstrate that the preference for stressed nucleus rhoticity can also hold as a tendency (see relatedly [6]). Individual informant data, as well as fieldworker notes and recordings, confirm that the patterns of variation hold at an individual as well as community level.

A mixed effects logistic regression with integer-rounded retroflexion scores as a dependent variable appears in (2). More education predicts lower retroflexion \( (p = 0.034) \), and stressed vocalic position predicts higher retroflexion \( (p = 0.096) \). Informants that LANE labels “cultured” are predicted to have lower retroflexion scores, though the effect is not significant. The association of lower retroflexion with relatively “higher class” informants is confirmed in other LANE records. This contrasts markedly with the situation in NYC thirty years later [7].

This study lays the groundwork for two ongoing projects. The first examines archival oral histories [8] and contemporary data [9] to trace the subsequent changes in the socio-phonology of \( (r) \) in this area. The second examines the vowel systems of these 50 informants to better understand the role of this area in the genesis of the Northern Cities Shift [10] and the relationship to other developments in Western New England [11]. A general conclusion is that not only the LANE recordings [12], but also the transcriptions provide valuable insight into variation and change.

500 words
(1) Means and standard deviations for informants’ rhoticity scores for stressed vocalic (NURSE), unstressed vocalic (LETTER) and post-vocalic (PART) positions by county of residence

(2) Mixed effects logistic regression with integer rounded rhoticity scores as a dependent variable and random effects of Informant and County

| Fixed Effects     | Estimate | Std. Error | z value | Pr(>|z|) |
|-------------------|----------|------------|---------|---------|
| (Intercept)       | -3.456   | 3.380      | -1.02   | 0.307   |
| Cultured          | -5.182   | 4.973      | -1.04   | 0.297   |
| Education*        | -6.273   | 2.964      | -2.12   | 0.034   |
| Gender (Male)     | 5.583    | 3.615      | 1.54    | 0.122   |
| Age               | -0.136   | 0.136      | -1.00   | 0.315   |
| Stressed Vocalic  | 1.789    | 1.076      | 1.66    | 0.096   |

*+1 = at least some college, 0 = at least some high school but no college, –1 = no high school

References