Class, Gender and Rhoticity:
The Social Stratification of Postvocalic /r/ in Edinburgh Speech

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Introduction
While Scottish English is considered a rhotic variety, recent research has demonstrated increasing de-rhotisation in Edinburgh and Glasgow. This trend is socially stratified, with the highest rates of de-rhoticisation occurring among speakers of lower socioeconomic status (e.g., Lawson et al. 2014: 53).

Most work on the social stratification of linguistic variation has defined socioeconomic status in terms of a dichotomy between Working Class (WC) and Middle Class (MC) speakers. We address the lack of research on speakers whose socioeconomic status has changed over the course of their life.

Research Question
Given differences in motility between Working Class and Middle Class speakers in Edinburgh, what is the rate and type of motility for speakers born Working Class but who became Middle Class by retirement?

Participants (N=16)
WC: School-leavers from age 16 or younger, work in blue-collar jobs, parents in similar jobs.
MC: University graduates; attended private schools; white-collar jobs; parents in similar jobs.
NMC: Either first in their family to go to university or in white-collar jobs; parents in blue-collar jobs.

Table 1: Participants

<table>
<thead>
<tr>
<th>Gender</th>
<th>Socioeconomic Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>WC</td>
<td>N=6</td>
</tr>
<tr>
<td>MC</td>
<td>N=6</td>
</tr>
<tr>
<td>NMC</td>
<td>N=4</td>
</tr>
</tbody>
</table>

Procedure
- 1.5 hour sessions, Nov 2013 to Jan 2014.
- Same-sex same-IEC groups of 2-3 speakers.
- Sessions led by 1st author; F, MC Edinburgh.
- Talk prompted by a written list of topics: childhood, education, family work and life in Edinburgh.
- Interpersonal dynamics similar across groups; most had met previously or had mutual friends.

Auditory Coding (N = 5212)
See Table 2 and the notes for it, below.

Excluded Contexts
- /r/ followed by a vowel
- /r/ followed by a word-initial /th/ that is deleted
- /r/ followed by a word-initial /r/
- /r/ in a missing duration < 30ms

Table 2: Auditory coding categories of postvocalic /r/ along a continuum (adapted from Lawton et al. 2014: 63). We used six initially, but based on confidence, collapsed them to:

<table>
<thead>
<tr>
<th>Category</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retroflex/swar</td>
<td>[sh]</td>
</tr>
<tr>
<td>Alveolar/tap</td>
<td>[t]</td>
</tr>
<tr>
<td>Trill/trill</td>
<td>[l]</td>
</tr>
<tr>
<td>Approximant</td>
<td>[ɾ]</td>
</tr>
<tr>
<td>Most rhotic</td>
<td>[ɾ]</td>
</tr>
<tr>
<td>Least rhotic</td>
<td>[ɾ]</td>
</tr>
</tbody>
</table>

Conclusions
The results support previous findings of stronger and more frequent /r/ production among MC speakers than WC speakers (Lawton et al. 2014: 53). Our contribution is that speakers from the NMC group demonstrated the highest rates of non-rhoticity, we think that the "r" category conflates two differently indexed variants: RP non-rhotic & WC de-rhotic.

Model Results
All linguistic factors either eliminated or not convergent.

Table 3: Best-fit Model Estimates

<table>
<thead>
<tr>
<th>Factor (Socioeconomic Status)</th>
<th>Estimate</th>
<th>StdError</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>WC</td>
<td>1.0278</td>
<td>0.1245</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>MC</td>
<td>0.5000</td>
<td>0.1622</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>NMC</td>
<td>0.2608</td>
<td>0.2078</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Summary
NMC speakers produce the most motility of all the social groups.

WC men produce the least amount of motility of any group.

The biggest gender difference is among the WC speakers.

Since MC speakers, especially women, have the 2nd highest rates of non-rhoticity, we think that the "r" category conflates two differently indexed variants: RP non-rhotic & WC de-rhotic.

Analysis
NMC speakers and WC men are particularly distinctive (and opposed) in their production of postvocalic /r/.

Is the NMC pattern surprising? Should we expect them to sound more like WC speakers?
No: class attainment seems to be a stronger predictor than the social class of one’s parents.
- "terms" orientations to local social structures are more predictive than parents’ class (e.g., Eckert 1989: 2000)
- "terms" class aspirations are predictive prior to their entrance into the workforce (e.g., Wagner 2012)
- adults’ occupation, alone, is an effective predictor of class-based variation (e.g., Masarany 1977; Horvath 1985)
- class might better be defined according to consumption than production (e.g., McMillan 2007)

Do NMC speakers show higher rates of motility than MC speakers because of hypercorrection?
No: rather than "linguistic insecurity", consider language ideologies (e.g., Yaeger-Dror 1993; Mistry 1999; Preston 2013)
- e.g., an exemplified in American gawk gill speech (Bucholtz 2008), ‘superstandard English’ contrasts ideologically with both standard and non-standard varieties.
- In urban Scotland, superstandard speech has been long associated with Morningside- & Kelvinside Englishes (Johnston 1985), both have been described as having exceptionally high rates of motility.
- Our claim: stylisation, not hypercorrection.

What about the de-rhotic, tapped, and trilled variants among WC men?
- MC speakers use the variants situated in the middle of the rhotic continuum.
- WC speakers, especially men, index their class identity through divergence from these central MC variants.
- This divergence occurs in both directions along the continuum, resulting in the use of both strongly rhotic variants (taps and trills) and the least rhotic variants (vocalised, derhotic).
- Our claim: stylisation towards a (masculine) Scottish Working Class style.