‘Bring hither the fatted coo’
real-time change in Glaswegian over a century

Jane Stuart-Smith
Eleanor Lawson, Brian Jose, Tamara Rathcke, & Suzanne Richmond

English Language/Glasgow University Laboratory of Phonology

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There was a man who had two sons. The younger one said to his father, ‘father, give me my share of the estate’. So he divided his property between them. Not long after that, the younger son got together all he had, set off in a distant country and there squandered his wealth on wild living. After he had spent everything, there was a severe famine in that whole country, and he began to be in need.
There was a man whae had twa son. The youngest of them said to his faither, ‘Gie me that pairt of your guids that belongs to me’. So the faither gied him his share. No mony days afterwards, the young man gaithered aw his belongings together, and went away into a faur country. There he wasted aw that he had. When he had spent aw thing, a great famine kam ower the country, and he began to be in waant.
• How has Glaswegian changed over the past century?

• (relatively) stable?
• stable or changing?
• possibly changing?

➢ Inferring sound change in real- and apparent-time (e.g. Labov 1994; Sankoff and Blondeau 2007)
• How has Glaswegian changed over the past century?

• vowel quality, e.g. /ʊ/ (BOOT)
• vowel duration (Scottish Vowel Length Rule)
• postvocalic /r/, e.g. *father, share*

➢ Inferring sound change in real- and apparent-time (e.g. Labov 1994; Sankoff and Blondeau 2007)
Materials and resources
Fine phonetic variation and sound change: A real-time study of Glaswegian

http://soundsofthecity.arts.gla.ac.uk/

Oct 2011-Dec 2014
(target) corpus for a real-time study of Glaswegian Vernacular

<table>
<thead>
<tr>
<th>Decade of Recording</th>
<th>Old 67-90 (Decade of Birth)</th>
<th>Middle-aged 40-55 (Decade of Birth)</th>
<th>Young 10-15 (Decade of Birth)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970s</td>
<td>6 f, 6 m (1890s)</td>
<td>6 f, 6 m (1920s)</td>
<td>6 f, 6 m (1960s)</td>
</tr>
<tr>
<td>1980s</td>
<td>6 f, 6 m (1900s)</td>
<td>6 f, 6 m (1930s)</td>
<td>6 f, 6 m (1970s)</td>
</tr>
<tr>
<td>1990s</td>
<td>6 f, 6 m (1910s)</td>
<td>6 f, 6 m (1940s)</td>
<td>6 f, 6 m (1980s)</td>
</tr>
<tr>
<td>2000s</td>
<td>6 f, 6 m (1920s)</td>
<td>6 f, 6 m (1950s)</td>
<td>6 f, 6 m (1990s)</td>
</tr>
</tbody>
</table>

Private, force-aligned, electronic corpus of spontaneous speech, available for academic researchers, covering 100 years of Glaswegian in apparent- and real-time, stored in LABB-CAT.
• Wilhelm Doegen
• recordings made in prisoner of war camps in Germany between 1916 and 1918
6 speakers from western Central Belt of Scotland recorded during 1916 and 1917
Vowel quality, e.g. BOOT
• /u/ is fronting in Anglo-English (e.g. Harrington et al 2011)
• Scottish English vowel is central-to-front (/ʉ/), lowered in East (McAllister 1938; Macaulay 1977; Scobbie et al 2013)
• occurs within group of other ‘bimoraic’ vowels /i e a ɔ o u/ (cf Scobbie et al 1999)

assumption: (relatively) stable with social stratification for /ʉ a/ (cf. Macaulay 1977)
Sample for vowel quality

<table>
<thead>
<tr>
<th>Berliner Lautarchiv</th>
<th>Sounds of the City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decade of birth</td>
<td>Decade of birth</td>
</tr>
<tr>
<td>1890s</td>
<td>1890s</td>
</tr>
<tr>
<td>10X (3)</td>
<td>70O (4)</td>
</tr>
<tr>
<td>1920s</td>
<td>000O (4)</td>
</tr>
<tr>
<td>1960s</td>
<td>70Y (4)</td>
</tr>
<tr>
<td>1990s</td>
<td>00Y (4)</td>
</tr>
</tbody>
</table>
Sounds of the City (e.g. Jose et al 2014)
• Search/extraction/automatic F1 & F2 measures
• data reduction
➢ 7488 tokens

Berliner Lautarchiv
• hand-correction of all segment boundaries
• Search/extraction/automatic F1 & F2 measures
• hand-correction of formant measures
➢ 396 tokens

Lobanov normalization in NORM; LME in R
1 = older speakers born in 1890s, recorded in 1970s
(n=265)
2 = older speakers born in 1920s, recorded in 2000s
(n=751)
3 = adolescent speakers born in 1960s, recorded in 1970s
(n=128)
4 = adolescent speakers born in 1990s, recorded in 2000s
(n=226)
X = young adult speakers born in 1890s, recorded in 1910s 
(n=56)
1 = older speakers born in 1890s, recorded in 1970s
(n=278)
/ɔ/ COT

2 = older speakers born in 1920s, recorded in 2000s
(n=568)
3 = adolescent speakers born in 1960s, recorded in 1970s
(n=146)
4 = adolescent speakers born in 1990s, recorded in 2000s (n=237)
X = young adult speakers born in 1890s, recorded in 1910s
(n=32)
1 = older speakers born in 1890s, recorded in 1970s
(n=180)
2 = older speakers born in 1920s, recorded in 2000s
(n=386)
3 = adolescent speakers born in 1960s, recorded in 1970s (n=169)
4 = adolescent speakers, born in 1990s recorded in 2000s (n=153)
X = young adult speakers born in 1890s, recorded in 1910s (n=25)
Vowel quality - summary

• (some) vowels not as stable as we had assumed
• /ʉ/ BOOT seems to have lowered
• but also shifts in other back vowels
  – /ɔ/ COT raising/fronting
  – /o/ GOAT raising
  – change with age-grading
Scottish Vowel Length Rule (SVLR)
The Scottish Vowel Length Rule (SVLR)

- vowels are short except
  - before /r/, e.g. *beer*
  - before voiced fricatives, e.g. *bees, breathe*
  - before morpheme boundary, e.g. *bee, agree*

<table>
<thead>
<tr>
<th></th>
<th>SHORT</th>
<th>SHORT</th>
<th>LONG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scottish English:</td>
<td>beat</td>
<td>bead</td>
<td>bees, beer, bee</td>
</tr>
<tr>
<td>English English</td>
<td>beat</td>
<td>bead</td>
<td>bees, beer, bee</td>
</tr>
</tbody>
</table>
• Historically, and in many Scots dialects, all monophthongs and /ai/ (e.g. Aitken 1981)
• in Scottish varieties in high contact with Anglo-English, SVLR weakening and shifting to voicing effect (e.g. Hewlett et al 1999; Llamas et al 2011)
• assumed to be strong in Glasgow, only for /i ʉ ai/ (Scobbie et al 1999)

assumption: SVLR in Glaswegian is stable but perhaps some erosion
## Sample for SVLR

<table>
<thead>
<tr>
<th>Berliner Lautarchiv decade of birth</th>
<th>Sounds of the City decade of birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1890s 10X (3)</td>
<td>1920s 70M (4)</td>
</tr>
<tr>
<td>1920s 70M (4)</td>
<td>1950s 00M (4)</td>
</tr>
<tr>
<td>1950s 00M (4)</td>
<td>1960s 70Y (4)</td>
</tr>
<tr>
<td>1960s 70Y (4)</td>
<td>1990s 00Y (4)</td>
</tr>
</tbody>
</table>
Sounds of the City (e.g. Rathcke/Stuart-Smith 2013)
• Hand-corrected vowel boundaries
• Coding for number of segments/syllables and prosodic factors (prominence/phrase)
  ➢ 1520 tokens for /i ʉ/ and /a/

Berliner Lautarchiv
• Hand-correction of all segment boundaries
• Coding for number of segments/syllables and prosodic factors
  ➢ 517 tokens for /i u ai/ and /e a c o/

LME in R
/i ʉ/ are longer in SVLR ‘long’ contexts in phrase-final position, but shorten over time in that position.

N=982
/i ʉ/ are longer in SVLR ‘long’ contexts in phrase-final position, but shorten over time in that position.
/i ʉ/ are longer in SVLR ‘long’ contexts in prominent (nuclear) syllables, but shorten over time in that position.

N=982
/i ʊ/ are longer in SVLR ‘long’ contexts in prominent (nuclear) syllables, but shorten over time in that position.
Scottish Vowel Length Rule - summary

• SVLR is only found in /i u ai/ in 1916-17 (cf Scobbie et al 1999)
• especially in stronger prosodic positions (phrase final position, nuclear position)
• it also appears to be weakening over time in these positions (cf Nakai et al 2012) (role of contact weak in Sounds of the City sample; cannot be checked for Berliner Lautarchiv)
postvocalic /r/
• weakened postvocalic /r/ attributed to ‘degenerate Glasgow-Irish’ (Trotter 1901 in Johnston 1997:511)

• articulatory studies reveal presence of covert tongue gestures (e.g. Lawson et al 2011; Lawson et al 2014), audible for those with experience of Glaswegian (Lennon 2014)

assumption: derhoticisation is a long-term, gradual, system-internal, change in progress
### Sample for postvocalic /r/  

<table>
<thead>
<tr>
<th>Berliner Lautarchiv decade of birth</th>
<th>Sounds of the City decade of birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1890s (10X) (6)</td>
<td></td>
</tr>
<tr>
<td>1940s (90M) (4)</td>
<td>1940s (90M) (4)</td>
</tr>
<tr>
<td>1950s (00M) (6)</td>
<td>1950s (00M) (6)</td>
</tr>
<tr>
<td>1980s (90Y) (4)</td>
<td>1980s (90Y) (4)</td>
</tr>
<tr>
<td>1990s (00Y) (18)</td>
<td>1990s (00Y) (18)</td>
</tr>
</tbody>
</table>
Sounds of the City (e.g. Stuart-Smith 2003; Stuart-Smith et al 2014)
• narrow auditory transcription by Claire Timmins/JSS
  ➢ 3697 tokens

Berliner Lautarchiv
• narrow auditory transcription by Eleanor Lawson
  ➢ 361 tokens
weak /r/ in read wordlists

- 1990s
- 2000s
- derhotic
- vowel

% weak /r/

1940s 1950s 1980s 1990s
weak /r/ in read wordlists

<table>
<thead>
<tr>
<th>Decade</th>
<th>1890s</th>
<th>1940s</th>
<th>1950s</th>
<th>1980s</th>
<th>1990s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(34)</td>
<td>(42)</td>
<td>(81)</td>
<td>(72)</td>
<td>(468)</td>
<td></td>
</tr>
</tbody>
</table>

- **1890s**: 34
- **1940s**: 42
- **1950s**: 81
- **1980s**: 72
- **1990s**: 468

- derhotic
- vowel

% weak /r/
Weak /r/ in individual speakers in Berliner Lautarchiv

% weak /r/

- Maryhill
- Glasgow
- Newarthill
- Kirkintilloch
- Blantyre
- Hamilton

Categories:
- derhotic
- vowel
Postvocalic /r/ - summary

• pattern of derhoticisation seems to be fairly stable until the period of urban regeneration, with an increase after that
• also age-grading in younger speakers?
• this may also apply to the BL speakers who were in their mid-twenties and performing
• but more data for the years between 1890s and 1950s is needed
Discussion
• How has Glaswegian accent changed over the past century (for these features)?

• BOOT seems to be lowering (and COT and GOAT are raising)

• SVLR seems to be changing, erosion apparent in stronger prosodic positions

• derhoticisation of postvocalic /r/ may be a long-term change, but seems to be characterized by long-term periods of stability, and possible age-grading
• methodological challenge of achieving comparison
• linguistic/prosodic factors promoting change
• patterns inferred as longer term changes in progress, also show age-grading and stylistic variability (Sankoff e.g. 2006)

➢ inference of sound change depends on the resolution with which we inspect our data
and the ‘fatted coo’?
and the ‘fatted coo’?

Bring forth the best claes, and pit them oan him, and put a ring on his haun, and shoes on his feet. And bring hither the fatted coo and kill it, and let us eat and be merry, for this mason was deid and is aleeve again.
Thank you!