Now say ‘Ah’: Internal factors of shifting and the English low vowel space

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Contents

• Labov’s theory of vowel shifting
• Historical examples of /a/ shifting
• Contemporary observations of /a/ shifting
• Conclusions (or rather, further questions!)
Internal factors of shifting

- ‘Internal’ in that they do not originate from borrowings, contact, etc.
- Not considering at *why* vowels change, but the patterns that emerge when we look at *how* vowels change
- As such, this investigation is more *exploratory* than *explanatory*
Labov’s framework

- Aims to establish universal set of unidirectional principles of sound change to account for diachronic changes observed in vowel systems of all languages
- “There are no directions of vowel shifting that are forbidden to speakers of human language… some directions are taken far more often than others” (Labov 1991)
Labov’s framework (basic)

Found from comparison of historical vowel shifts across many languages

In chain shifts,
I. Long vowels rise
II. Short vowels and nuclei of upgliding diphthongs fall
III. Back vowels move to the front
Peripherality hypothesis

Labov, Ash, and Boberg (2006): 16
Peripherality hypothesis

Labov, Ash, and Boberg (2006): 16
Labov, Ash, and Boberg (2006): 16
Labov’s framework (more detailed)

In chain shifts,

I. Peripheral nuclei rise
II. Non-peripheral nuclei fall
III. Tense vowels move to the front along peripheral paths, and lax vowels move to the back along non-peripheral paths
But then wouldn’t we have…?
Labov’s framework

In chain shifts,
I. Peripheral nuclei rise
II. Non-peripheral nuclei fall
III. Tense vowels move to the front along peripheral paths, and lax vowels move to the back along non-peripheral paths

*Low Exit Principle*: Low non-peripheral vowels become peripheral

*High Exit Principle*: One of two high peripheral morae in long vowels becomes non-peripheral

“Many apparent counterexamples... are accounted for by the fact that a set of short or lax nuclei had shifted to peripheral position” (Labov 1991: 7)
High exit principle
Low exit principle
Pre-history of English

• Proto-Indo-European (or dialects approximating our reconstructions) spoken ~6,000 years ago
• Proto-Germanic spoken ~2,500 years ago
• Despite lacking direct evidence as to vowels’ exact pronunciations, Labov’s principles allow us to model how the reconstructed systems might have moved
• Though some movements seem contradictory to the principles if we assume that long = peripheral
### PIE to PGmc

<table>
<thead>
<tr>
<th>Category</th>
<th>PIE Form</th>
<th>PGmc Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOTHER</td>
<td>PIE <em>māter</em></td>
<td>PGmc <em>mōdēr</em></td>
</tr>
<tr>
<td>NAME</td>
<td>PIE <em>hnéhmn</em>-</td>
<td>PGmc <em>namō</em></td>
</tr>
<tr>
<td>BATH</td>
<td>PIE <em>bher</em>-</td>
<td>PGmc <em>baþa</em></td>
</tr>
<tr>
<td>EIGHT</td>
<td>PIE <em>októw</em>-</td>
<td>PGmc <em>ahtōū</em></td>
</tr>
</tbody>
</table>
PIE to PGmc

\[ e \rightarrow e_1 \rightarrow e_2 \rightarrow e \rightarrow o \rightarrow o' \rightarrow a \rightarrow a' \]
<table>
<thead>
<tr>
<th>Category</th>
<th>Original</th>
<th>Translation</th>
</tr>
</thead>
</table>
| NAME     | PGmc *
namō > OE nama [nɑmə] |
| BATH     | PGmc *
baþa > OE bæþ [bæθ] |
| EIGHT    | PGmc *
ahtōu > OE eahta [æəxtə] |
| GOAT     | PGmc *
gait > OE gāt [ɡɑːt] |
| DEED     | PGmc *
dēdiz > OE dæd [dæ:d] |
PGmc to OE (West Saxon)
## OE to ME

<table>
<thead>
<tr>
<th>English</th>
<th>Old English</th>
<th>Middle English</th>
<th>Modern English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>OE nama [nɑmə] &gt; ME [næmə] &gt; [næːm]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bath</td>
<td>OE bæþ [bæθ] &gt; ME [bæθ]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eight</td>
<td>OE eahta [æəxtə] &gt; ME [ɛːxt]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goat</td>
<td>OE gāt [ɡɑːt] &gt; ME [ɡɔːt]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deed</td>
<td>OE dæðd [dæːd] &gt; ME [dɛːd]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
OE to ME
<table>
<thead>
<tr>
<th>ME to ModE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME</td>
<td>ME [næːm] &gt; EModE [neɪm]</td>
</tr>
<tr>
<td>EIGHT</td>
<td>ME [ɛːxt] &gt; EModE [eɪt]</td>
</tr>
<tr>
<td>DEED</td>
<td>ME [dɛːd] &gt; EModE [diːd]</td>
</tr>
<tr>
<td>BATH</td>
<td>ME [bæθ] &gt; EModE [bæθ]</td>
</tr>
<tr>
<td></td>
<td>&gt; ModE [bæθ] (Std AmE)</td>
</tr>
<tr>
<td></td>
<td>&gt; ModE [baːθ] (Std S BrE)</td>
</tr>
<tr>
<td></td>
<td>&gt; ModE [beəθ] (NYC, NCS)</td>
</tr>
</tbody>
</table>
ME to EModE
### Within Mod English dialects

<table>
<thead>
<tr>
<th>Vowel class</th>
<th>ME</th>
<th>RP</th>
<th>StdNAE</th>
<th>NYC</th>
<th>NCS</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>FATHER</td>
<td>[fæðər]</td>
<td>[faːðə]</td>
<td>[fæðə]</td>
<td>[fæðə(ɪ)]</td>
<td>[fæðər]</td>
<td>[fæðər]</td>
</tr>
<tr>
<td>START</td>
<td>[stɑːt]</td>
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<td>[stɑːt]</td>
<td>[stɑːt]</td>
<td>[stɑːt]</td>
<td>[stɑːt]</td>
</tr>
<tr>
<td>NAME</td>
<td>[næmə]</td>
<td>[neɪm]</td>
<td>[neɪm]</td>
<td>[neɪm]</td>
<td>[neɪm]</td>
<td>[neɪm]</td>
</tr>
<tr>
<td>BATH</td>
<td>[bæθ]</td>
<td>[bæθ]</td>
<td>[bæθ]</td>
<td>[beθ]</td>
<td>[beθ]</td>
<td>[baθ]</td>
</tr>
<tr>
<td>TRAP</td>
<td>[træp]</td>
<td>[træp]</td>
<td>[træp]</td>
<td>[træp]</td>
<td>[træp]</td>
<td>[træp]</td>
</tr>
<tr>
<td>THOUGHT</td>
<td>[θθθθt]</td>
<td>[θθθθt]</td>
<td>[θθθθt]</td>
<td>[θθθθt]</td>
<td>[θθθθt]</td>
<td>[θθθθt]</td>
</tr>
<tr>
<td>LOT</td>
<td>[lɔt]</td>
<td>[lɔt]</td>
<td>[lɔt]</td>
<td>[lɔt]</td>
<td>[lɔt]</td>
<td>[lɔt]</td>
</tr>
</tbody>
</table>
Northern Cities Shift
Canadian Shift

Clarke, Elms & Youssef (1995)
Canadian Shift – Montreal

Boberg (2005)  
\( \varepsilon \rightarrow 1919-1946 \)  
\( \text{æ} \rightarrow 1946-1965 \)  
\( 1965-1981 \)

Kettig (2014)  
\( \varepsilon \rightarrow 1937-1961 \)  
\( \text{æ} \rightarrow 1984-1995 \)
Canadian Shift – Toronto


ε → 1920-1935

1930-1958

1951-1965

1983-1995

1966-1985

ae →

(middle and youngest
groups pattern together)
Canadian Shift – Vancouver

Esling & Warkentyne (1993)  
\( \epsilon \)  
- pre-1920  
- 1920-1955  
- 1956-1964

Sadlier-Brown & Tamminga (2008)  
\( \epsilon \)  
- 1922-1972  
- 1981-1986

(oldest and middle groups pattern together)
Canadian Shift
Questions that emerge

• Is there a direct relationship between long vowels and peripherality?
• In the NCS, how does a low lax vowel both become peripheral and move to the back along a non-peripheral path?
• Does backing in the Canadian Shift undermine the universality of these shifting rules?
Thank you!