# Now say 'Ah': Internal factors of shifting and the English low vowel space

#### **Thomas Kettig**

University of Cambridge 6 July 2015





St Edmund's College University of Cambridge

# 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)

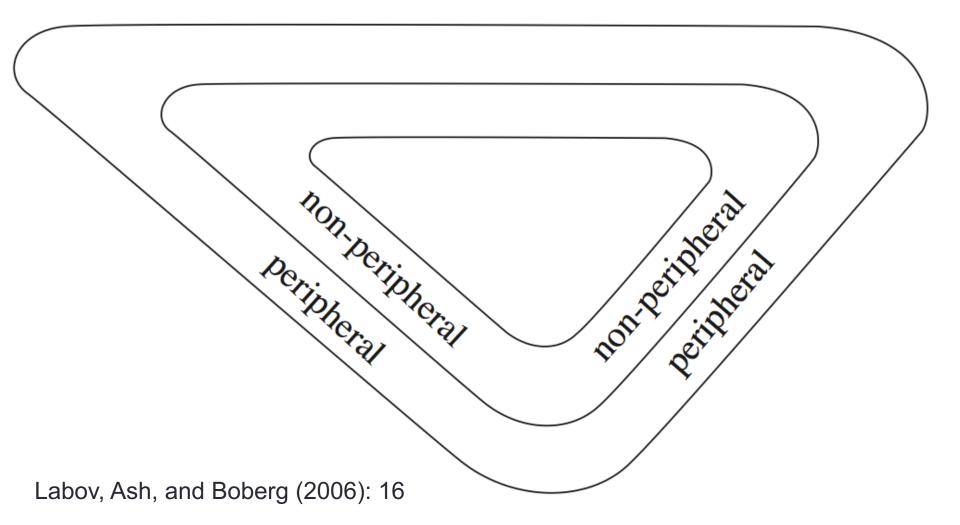
# Labov's framework (basic)

Found from comparison of historical vowel shifts across many languages

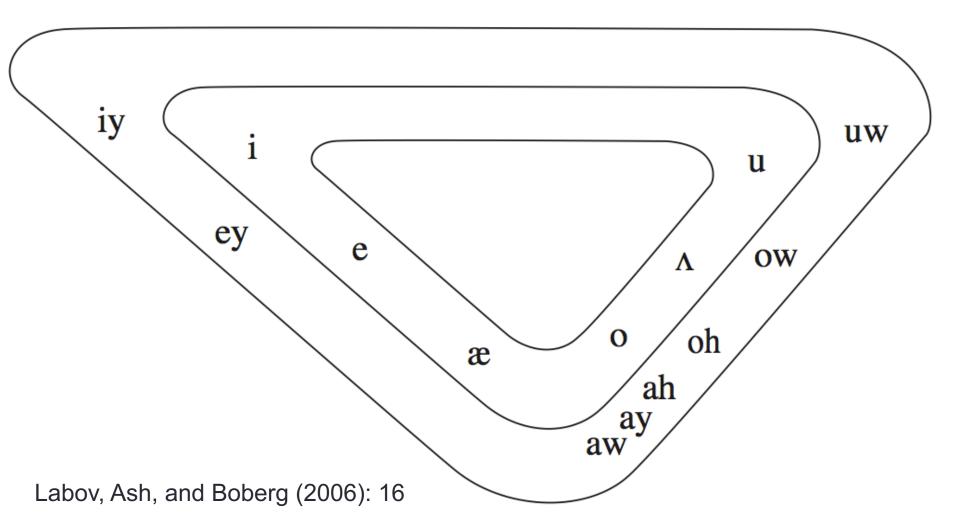
In chain shifts,

- Long vowels rise
- II. Short vowels and nuclei of upgliding diphthongs fall
- III. Back vowels move to the front

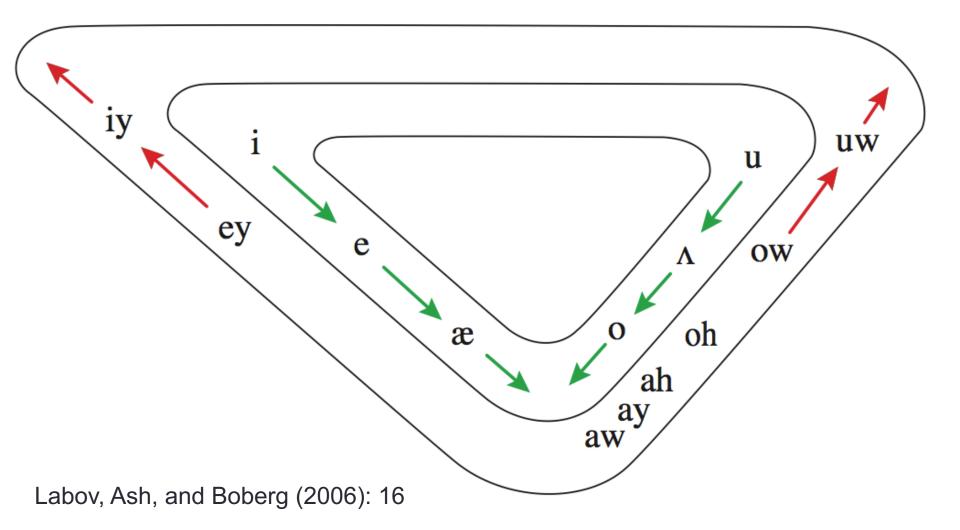
# **Peripherality hypothesis**



# **Peripherality hypothesis**



# **Peripherality hypothesis**

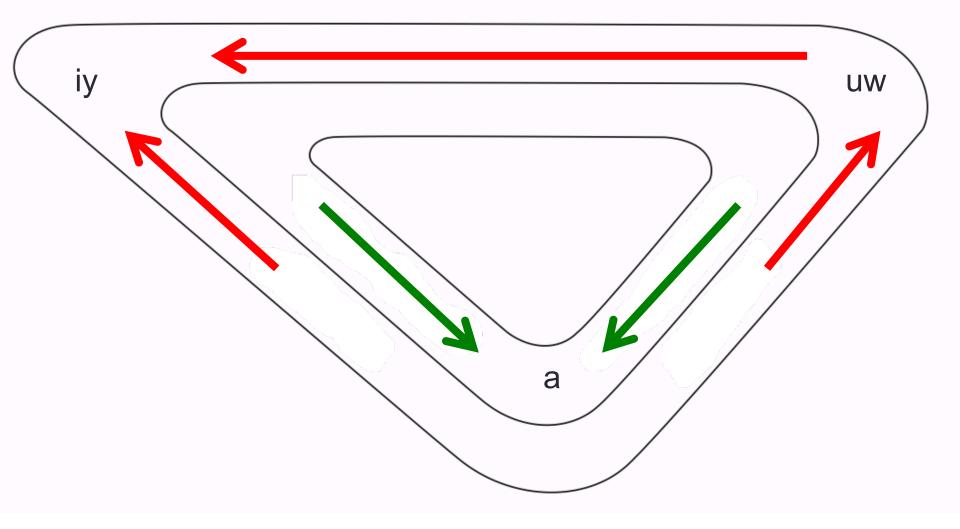


# Labov's framework (more detailed)

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,

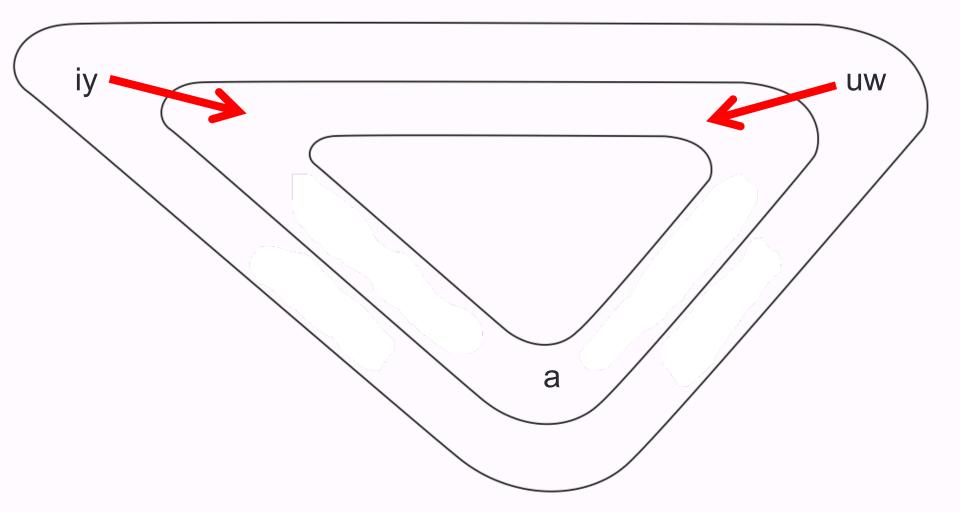
- I. Peripheral nuclei rise
- II. Non-peripheral nuclei fall
- III. Tense vowels move to the front along peripheral paths, and lax vowels move to the back along non-peripheral paths

Low Exit Principle: Low non-peripheral vowels become peripheral

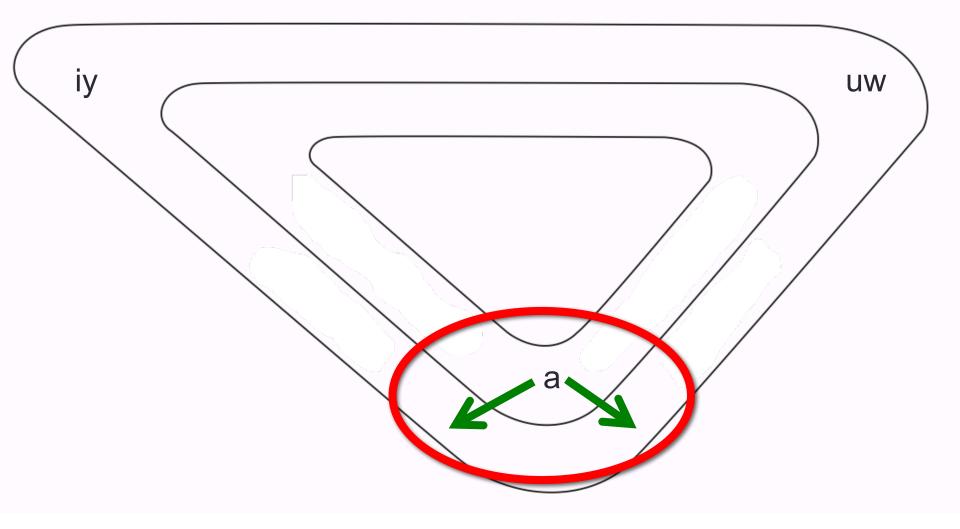
*High Exit Principle*: One of two high peripheral morae in long vowels becomes non-peripheral

"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**

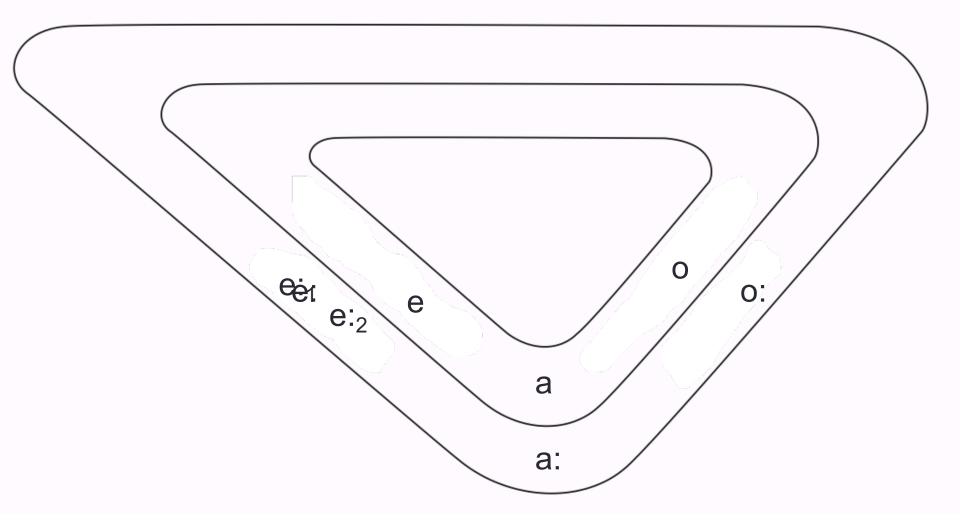
MOTHER PIE \*māter > PGmc \*mōdēr

NAME PIE \*hneħmn- > PGmc \*namō

BATH PIE \*bher- > PGmc \*baþa

EIGHT PIE \*oktow- > PGmc \*ahtou

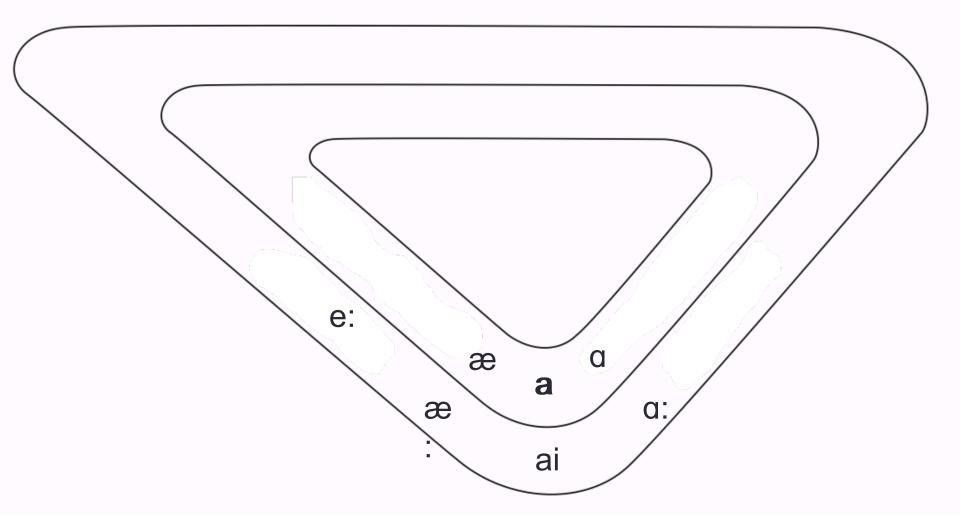
#### **PIE to PGmc**



# PGmc to OE (West Saxon)

- NAME PGmc \*namō > OE nama [nɑmə]
- BATH PGmc \*baba > OE bæb [bæ $\theta$ ]
- EIGHT PGmc \*ahtou > OE eahta [æəxtə]
- GOAT PGmc \*gait > OE gāt [gɑːt]
- DEED PGmc \*dēdiz > OE dæīd [dæːd]

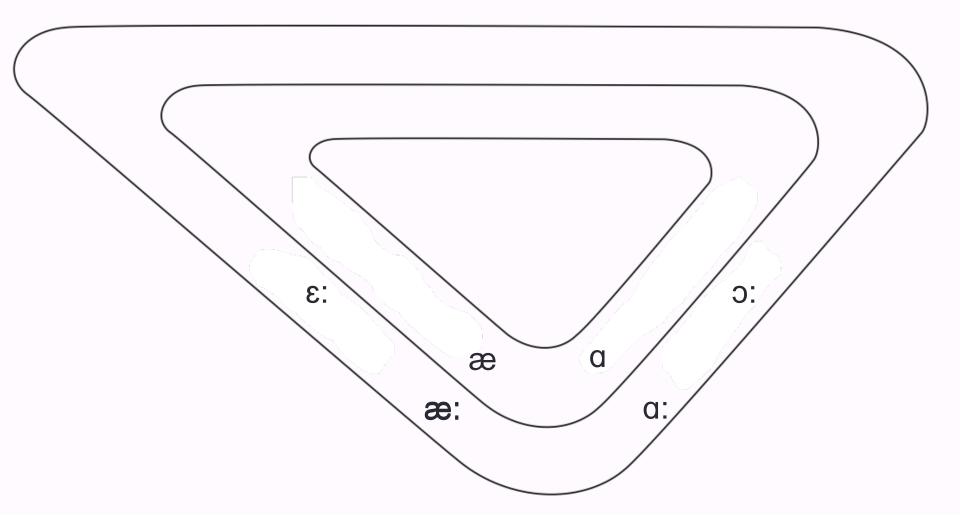
# PGmc to OE (West Saxon)



### OE to ME

- NAME OE nama [nɑmə] > ME [næmə] > [næːm]
- BATH OE bæ $[bæ\theta] > ME [bæ\theta]$
- EIGHT OE eahta [æəxtə] > ME [ɛːxt]
- GOAT OE gāt [gɑːt] > ME [gɔːt]

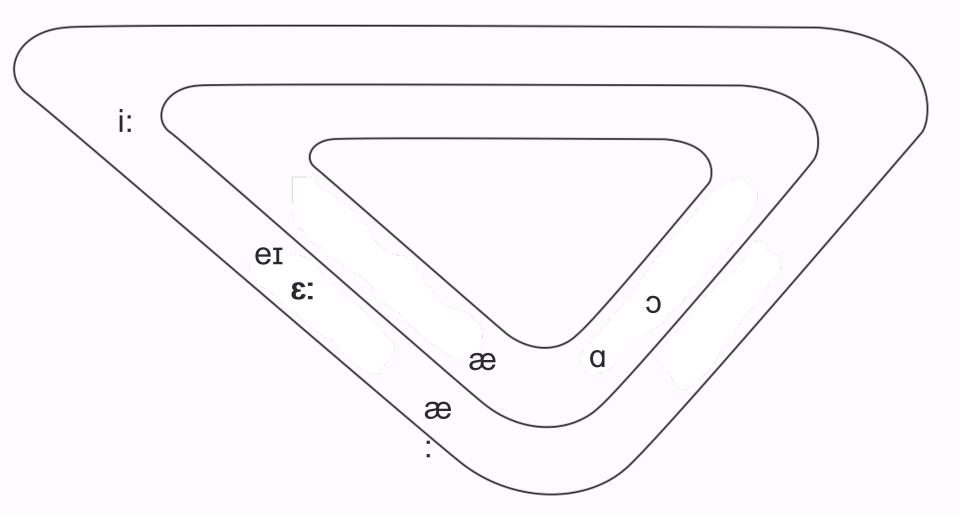
# **OE to ME**



#### **ME to ModE**

- NAME ME [næːm] > EModE [neɪm]
- EIGHT  $ME [\epsilon:xt] > EModE [ert]$
- DEED  $ME [d\epsilon:d] > EModE [di:d]$
- BATH  $ME [bæ\theta] > EModE [bæ\theta]$ 
  - > ModE [bæ $\theta$ ] (Std AmE)
  - > ModE [ba: $\theta$ ] (Std S BrE)
  - > ModE [beə0] (NYC, NCS)

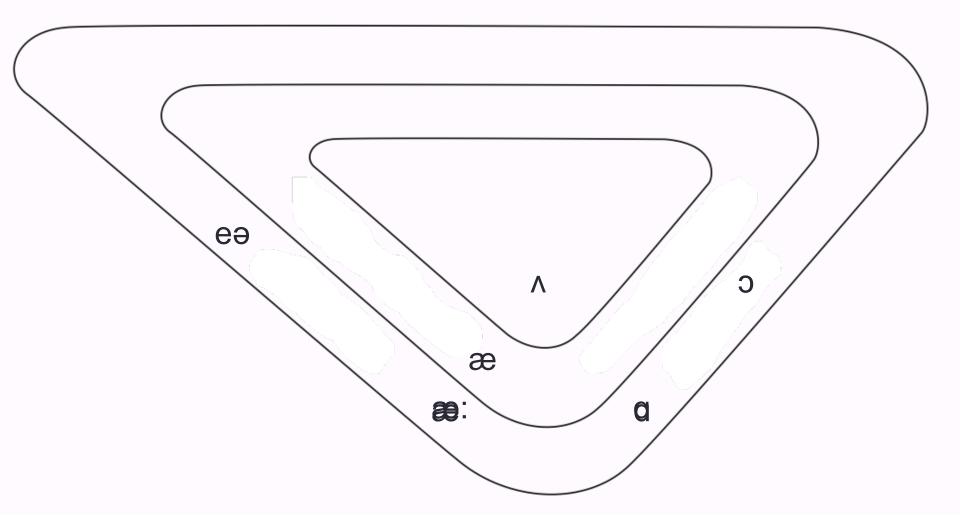
#### **ME to EModE**



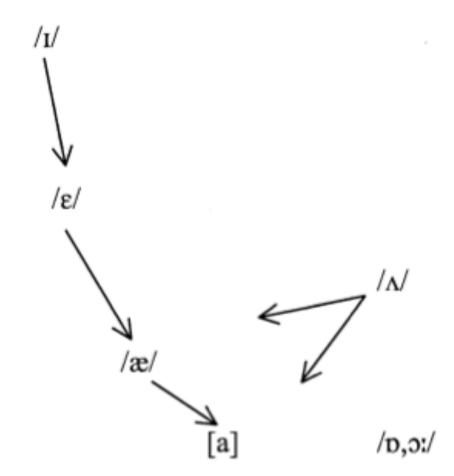
# Within Mod English dialects

Vowel class	ME	RP	StdNAE	NYC	NCS	Canada
FATHER	< [re@æJ] >	[fa:ðə]	[faðəı]	[faðə(ı)]	[faðə.]	[teðct]
	[fa:ðəɪ]					
START	[sta.t]	[sta:t]	[sta.t]	[stɔət]	[sta.t]	[sta.t]
NAME	[namə] >	[neim]	[neim]	[neim]	[neim]	[neim]
	[næ:m]					
BATH	[bæθ]	[ba:θ]	[bæθ]	[beə0]	[beətb]	[baθ]
TRAP	[tıæp]	[tıæp]	[tıæp]	[tıæp]	[tıeəp]	[trop]
THOUGHT	[ $\theta$ pwt]	Cent	[ $\theta pt$ ]		[ $\theta$ at]	[θɔt]
LOT	[lət]	[lɒt]	[lat]	[lat]	[læt]	[lət]

#### **Northern Cities Shift**



#### **Canadian Shift**



Clarke, Elms & Youssef (1995)

#### **Canadian Shift – Montreal**

Boberg (2005) Kettig (2014)



1984-1995

#### **Canadian Shift – Toronto**

Roeder & Jarmasz (2009) Hoffman (2010)



1983-1995

(middle and youngest groups pattern together)

#### **Canadian Shift – Vancouver**

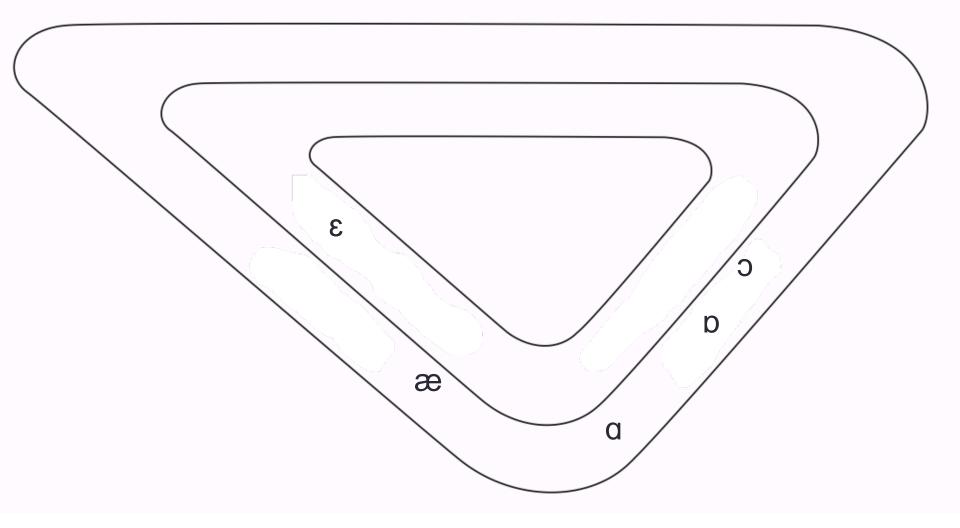
Esling & Warkentyne (1993)

Sadlier-Brown & Tamminga (2008)



(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!