

# PRODUCTION AND PERCEPTION OF SHORT VOWELS IN MONTREAL

---

Thomas Kettig

McCCLU

Sunday, 18 March 2013

# Notation used in this presentation

/ɛ/ = /e/ = BET

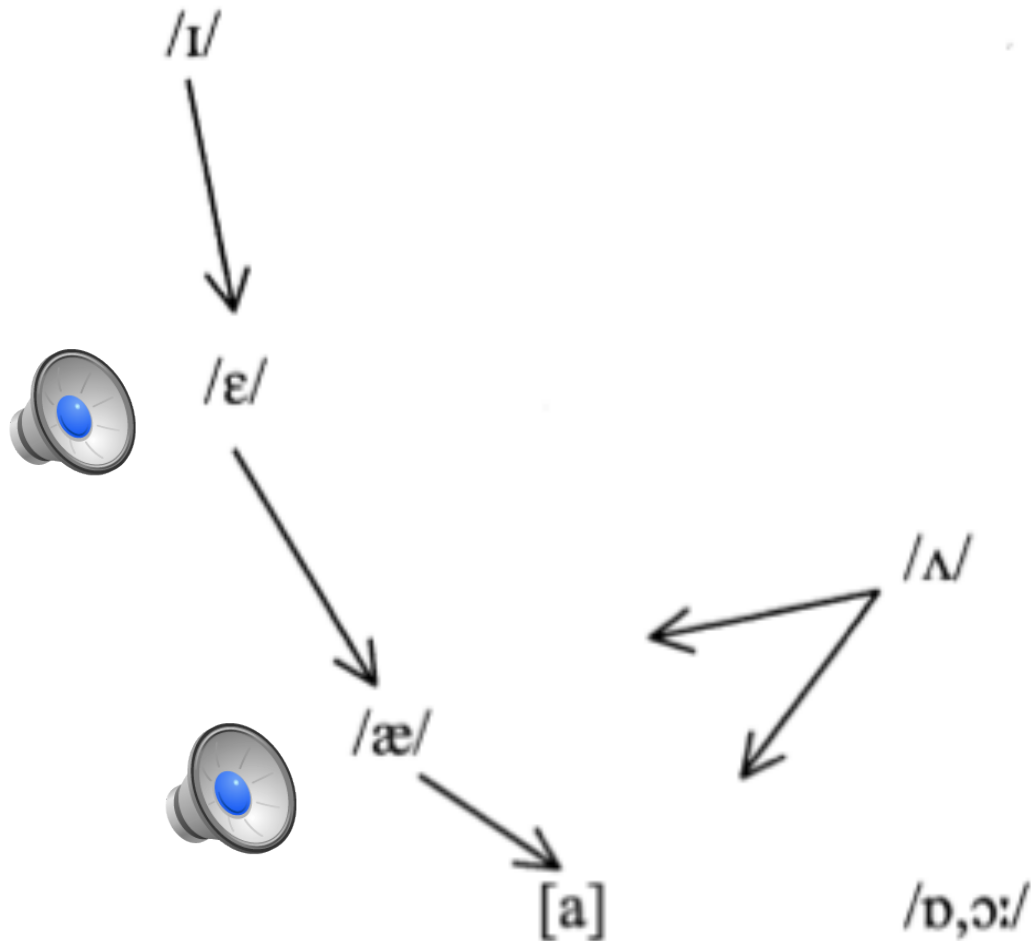
/ɪ/ = /i/ = BIT

/æ/ = /ae/ = BAT

/ɔ/ = /o/ = BOT=BOUGHT (merged low back vowel)

/ʌ/ = /u/ = BUT

# Canadian Shift (Clarke, Elms and Youssef 1995)



# Canadian Shift in Montreal (Boberg 2005)

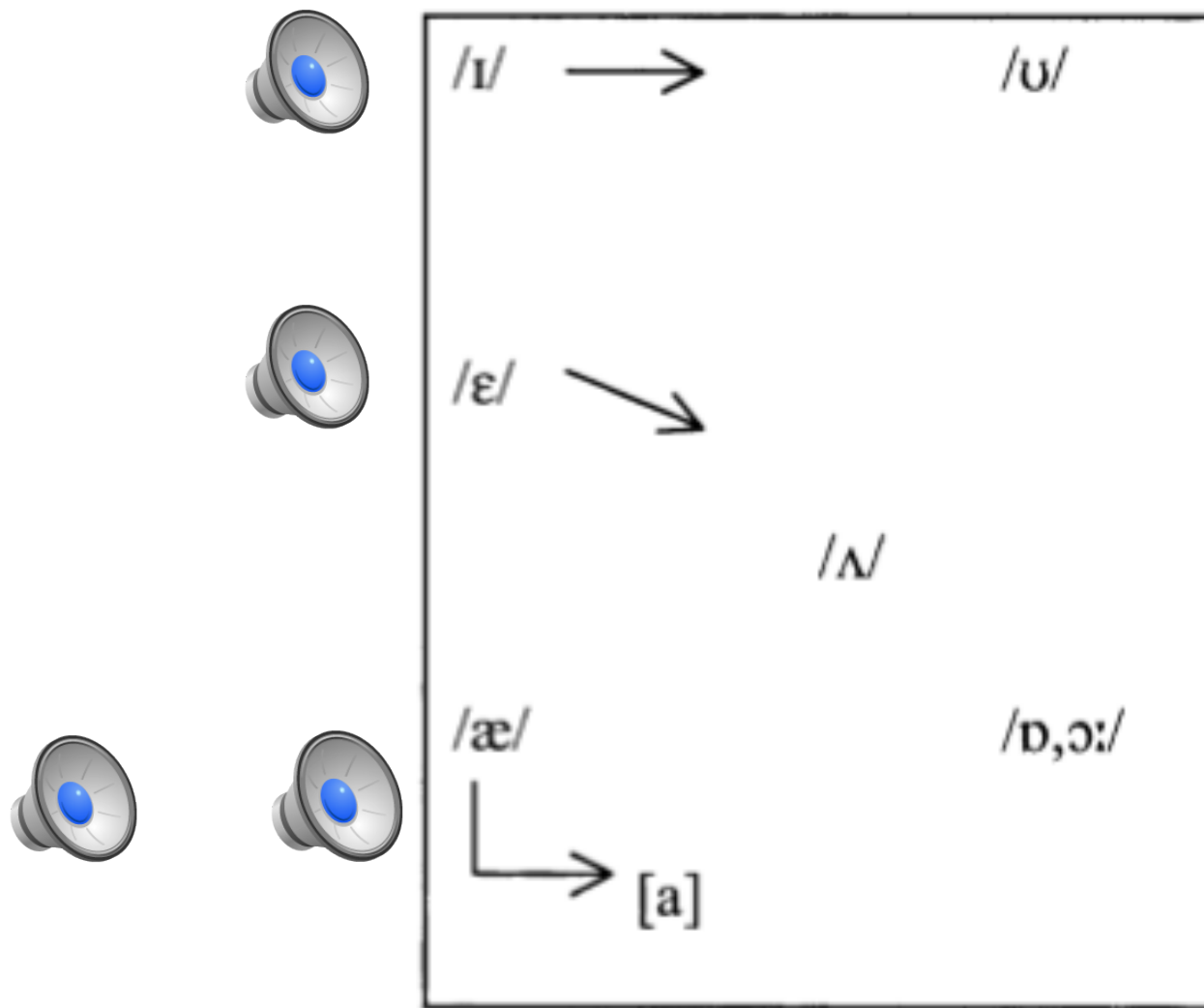


FIGURE 4. The Canadian Shift in Montreal.

# Two parts:

- Production experiment
  - Classic sociophonetic experiment
  - Participants read 44 sentences at their own pace
  - Vowel formant information extracted from key words in sentences
- Perception experiment
  - Participants listen to synthetic vowel sounds through headphones
  - Classify as BET, BAT, BUT, or BOUGHT by clicking on screen
  - Program reports their answer and their response time
- Data all taken within one interview
- Possible to compare the two?

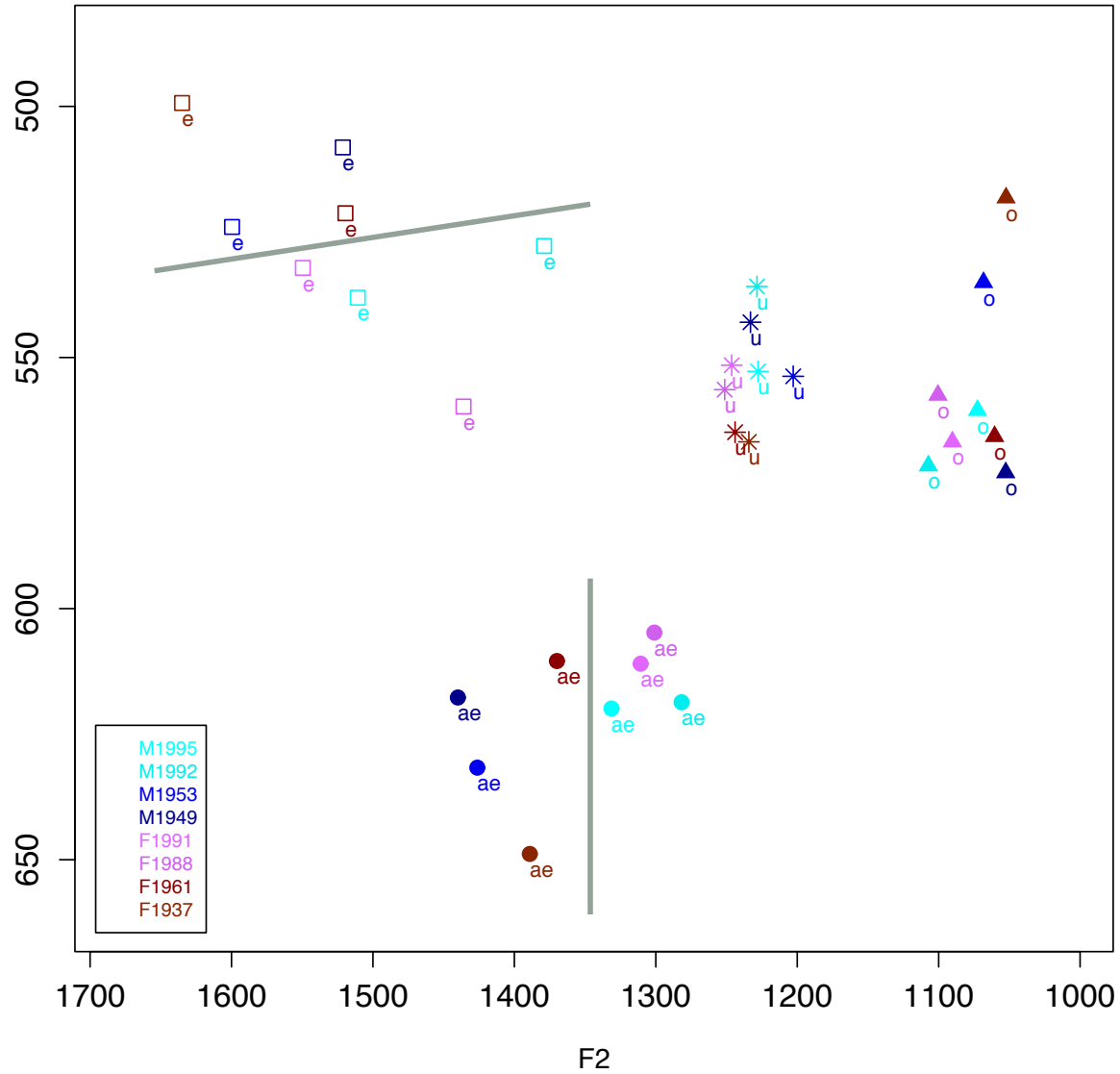
# Research subjects

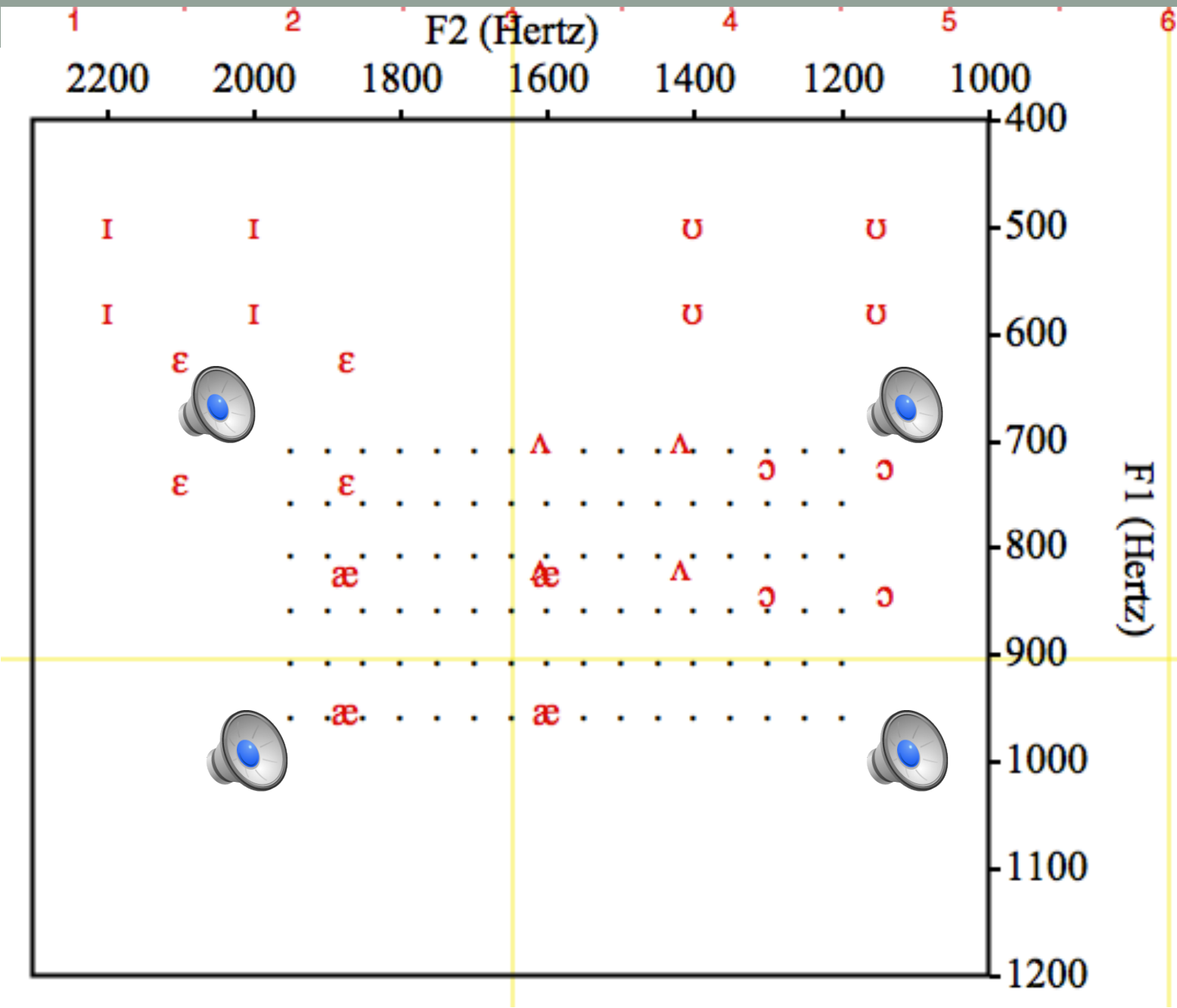
- Have at least one Jewish parent
- Grew up speaking English as a first or home language
- Grew up in Montreal

## Sub-sample under consideration:

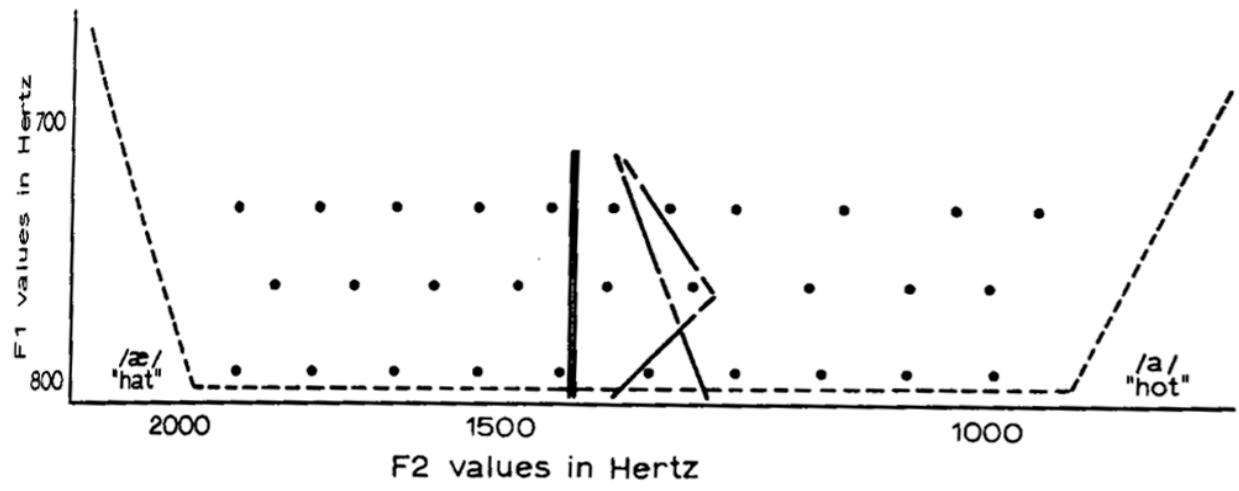
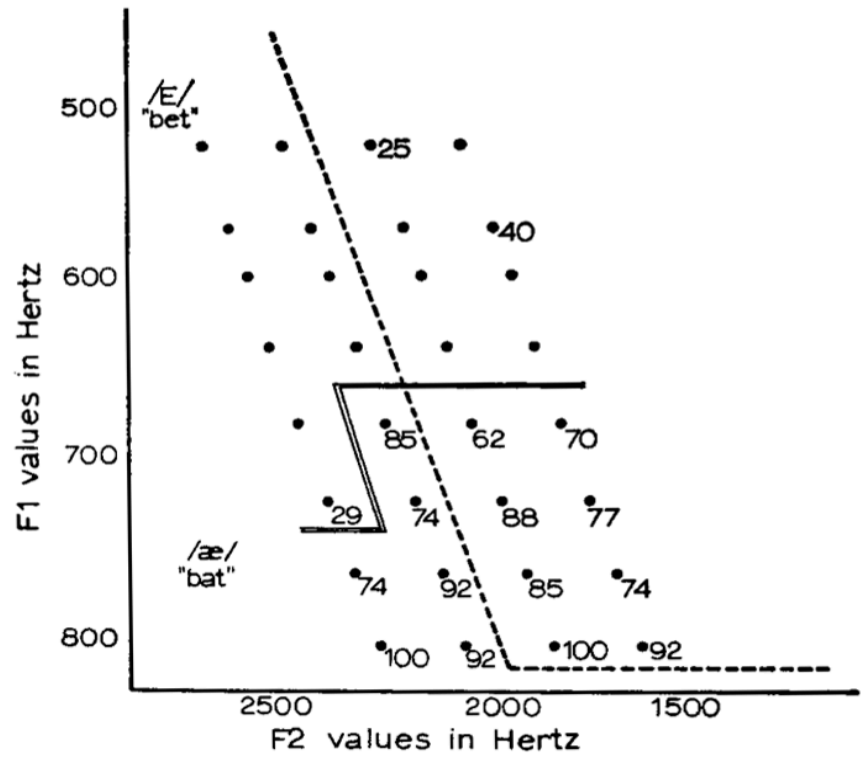
- Male, born 1992
- Male, born 1995
- Female, born 1991
- Female, born 1988
- Male, born 1949
- Male, born 1953
- Female, born 1937
- Female, born 1961

# Individual means, normalized (Lobanov method)











F1961

ε	ε	ε	ε	ε	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ
ε	ε	ε	ε	ε	Λ	ε	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Ϸ	Ϸ
ε	ε	ε	ε	ε	æ	Λ	Λ	Λ	Λ	ε	æ	Ϸ	Ϸ	Ϸ	Ϸ
æ	æ	æ	ε	æ	ε	æ	æ	æ	æ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ
ε	ε	æ	æ	æ	æ	æ	æ	æ	æ	æ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ
æ	æ	æ	æ	æ	æ	æ	æ	æ	æ	æ	Λ	Ϸ	æ	æ	Ϸ

F1937

ε	ε	ε	ε	Λ	ε	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ
ε	ε	ε	ε	ε	ε	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Ϸ
ε	ε	ε	ε	ε	Λ	Λ	ε	Λ	Λ	Λ	Λ	Ϸ	Ϸ	Ϸ	Ϸ
ε	ε	æ	ε	æ	ε	æ	æ	æ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ
æ	æ	æ	æ	æ	æ	æ	æ	æ	æ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ
æ	æ	æ	æ	æ	æ	æ	æ	æ	æ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ

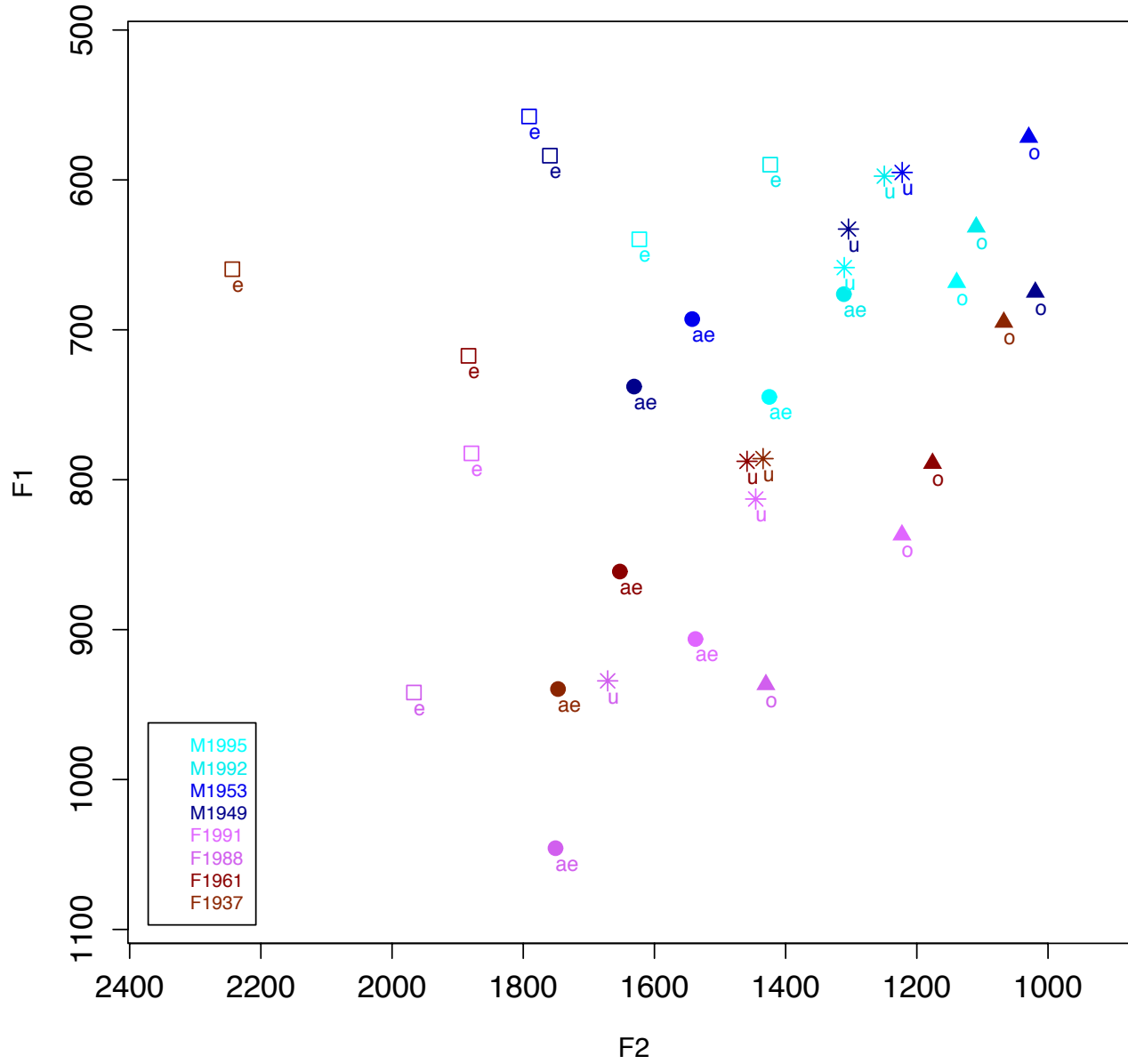
M1949

ε	Λ	ε	ε	Λ	ε	Λ	Λ	Λ	Λ	Λ	Λ	Ϸ	Λ	Ϸ	Ϸ
ε	ε	ε	ε	ε	ε	Λ	Ϸ	Λ	Λ	Λ	Λ	Ϸ	Ϸ	Ϸ	Ϸ
ε	ε	ε	æ	ε	æ	Λ	Λ	Λ	Ϸ	Λ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ
ε	æ	æ	æ	æ	æ	æ	æ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ
æ	æ	æ	æ	æ	æ	æ	æ	æ	æ	Ϸ	æ	Ϸ	Ϸ	Ϸ	Ϸ
æ	æ	æ	æ	æ	æ	æ	æ	æ	æ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ

M1953

ε	ε	ε	ε	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ
ε	ε	ε	ε	ε	ε	Λ	Ϸ	Λ	Λ	Λ	Λ	Λ	Ϸ	Ϸ	Ϸ
ε	ε	ε	ε	ε	æ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Ϸ	Ϸ	Ϸ
æ	æ	æ	æ	æ	æ	æ	æ	æ	æ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ
æ	æ	æ	æ	æ	æ	æ	æ	æ	Λ	Ϸ	æ	Ϸ	Ϸ	Ϸ	Ϸ
æ	æ	æ	æ	æ	æ	æ	æ	æ	æ	æ	Ϸ	Ϸ	Ϸ	Ϸ	Ϸ

# Mean vowel formant values non-normalized



# Individual means, normalized (Lobanov method)

