

The Intersection of Sex and Ethnicity in Language Variation and Change

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Sex/Gender in Language Variation and Change

- The received wisdom ...
 - Women are more conservative in situations of stable variation
 - Women are more innovative in situations of ongoing change
- Intersection with other social factors:
 - Social class (Labov, Trudgill)
 - Social networks (Milroy & Milroy)
 - Communities of practice (Eckert)
 - Ethnicity?



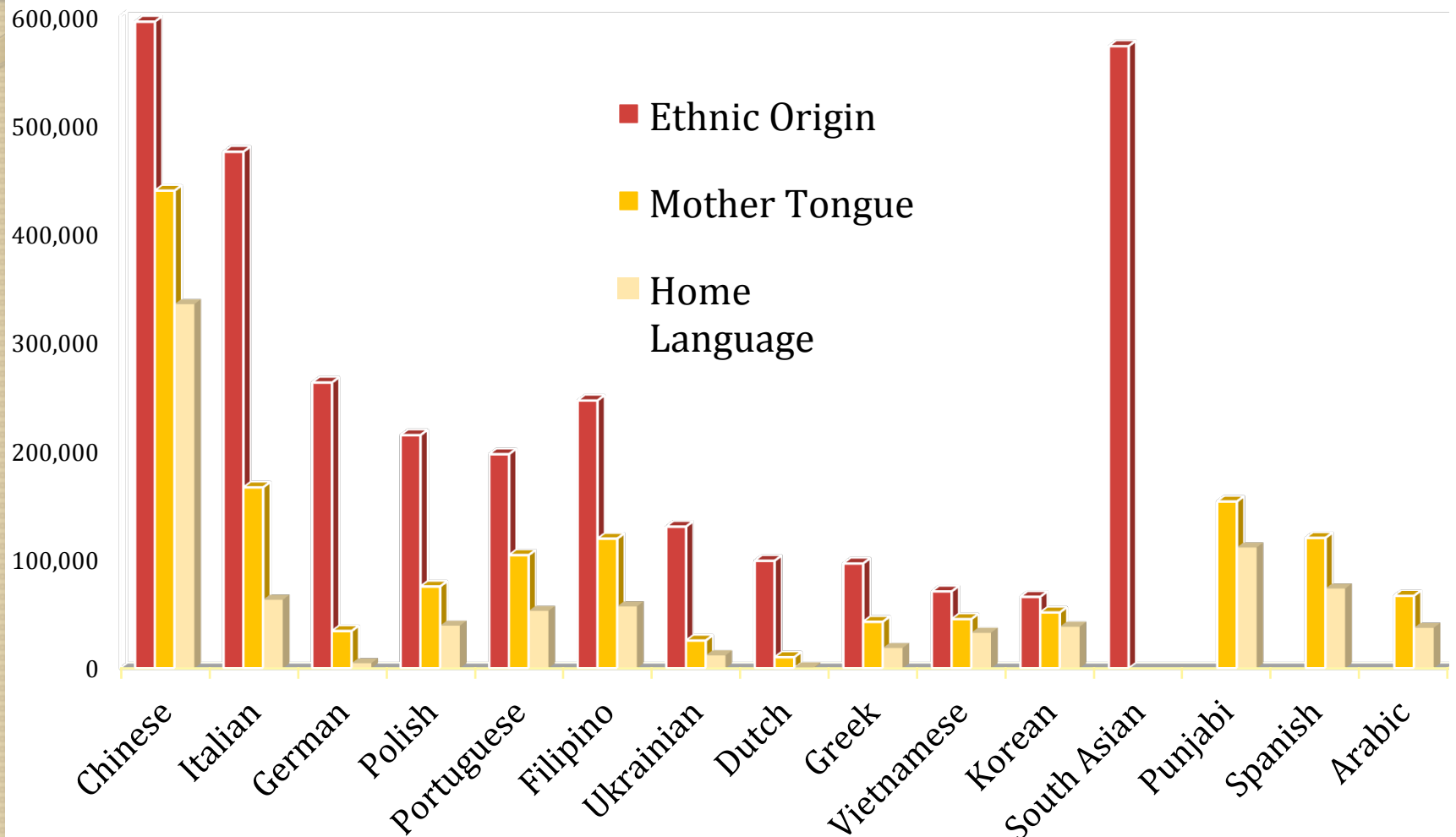
Ethnicity in Language Variation and Change

- Important in maintaining sociolinguistic boundaries
 - Participation (or not) in ongoing changes
- ‘Ethnolects’
 - Ethnically marked ways of speaking
 - Language transfer?
- Interaction with other social factors:
 - Social networks (Ash & Myhill)
 - Sex/gender?

Toronto



Toronto's Ethnolinguistic Diversity: Number of Heritage Language Residents



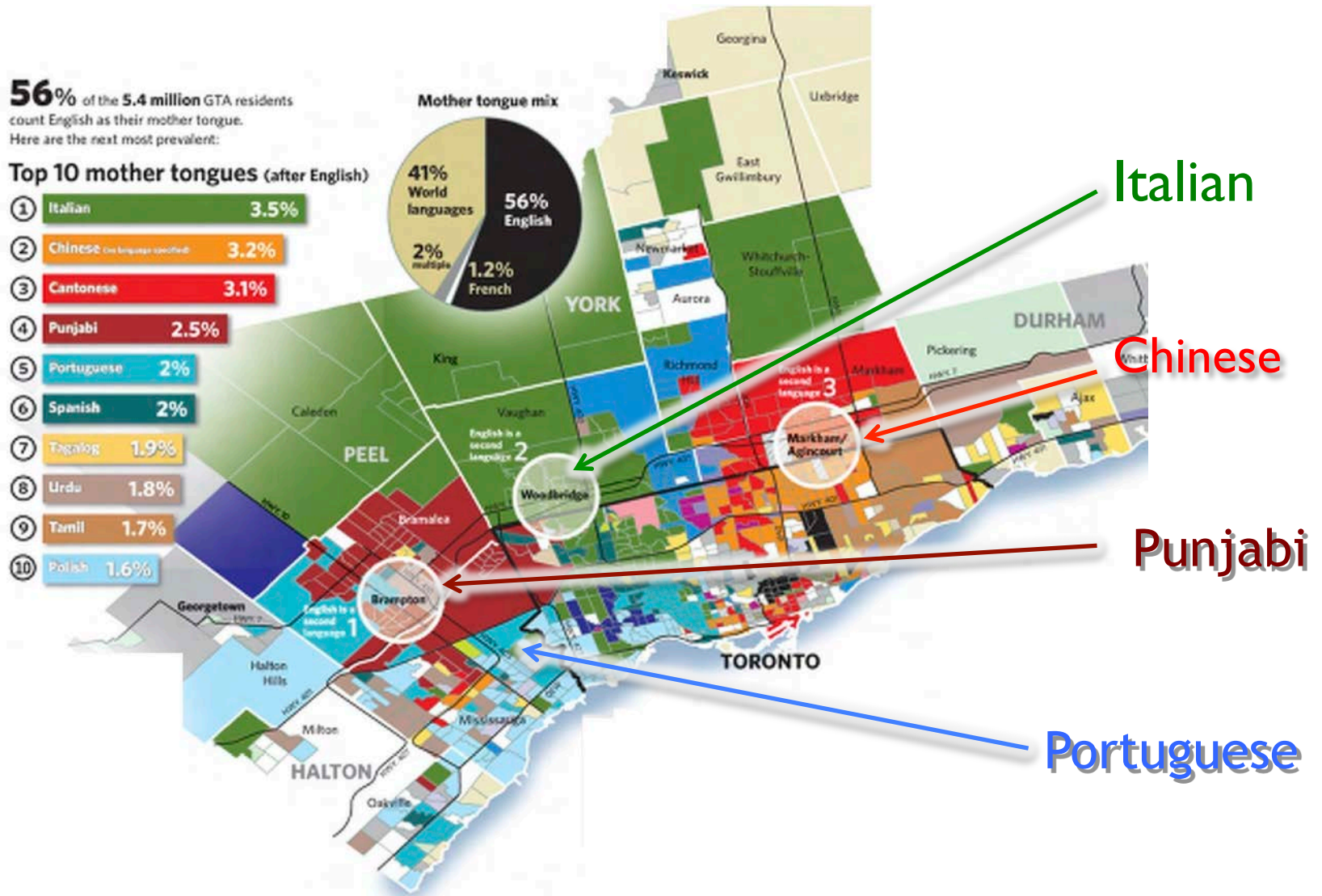
(Source: Canada Census 2011)

“Ethnic Enclaves” in Toronto

56% of the 5.4 million GTA residents count English as their mother tongue. Here are the next most prevalent:

Top 10 mother tongues (after English)

- ① Italian 3.5%
- ② Chinese (as language spoken at home) 3.2%
- ③ Cantonese 3.1%
- ④ Punjabi 2.5%
- ⑤ Portuguese 2%
- ⑥ Spanish 2%
- ⑦ Tagalog 1.9%
- ⑧ Urdu 1.8%
- ⑨ Tamil 1.7%
- ⑩ Polish 1.6%



Source: *Toronto Star*, December 30, 2007

“Contact in the City”

(Hoffman & Walker 2010)



Social Sciences and
Humanities Research
Council of Canada

Conseil de recherches
en sciences humaines
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Stratification of Informants by Ethnic Origin, Generation and Sex

Ethnic Origin:

Gen/ Age:	British/ Irish		Italian		Chinese		Punjabi		Portuguese		Greek	
	F	M	F	M	F	M	F	M	F	M	F	M
1 st (40+)	8	6	6	4	5	5	3	1	1	5	6	3
2 nd /3 rd (18-30)	6	6	9	8	12	11	12	16	4	2	2	3
Total:	14	12	15	12	17	16	15	17	5	7	8	6
Ethnicity Total:	26		27		33		32		12		14	
Grand Total:	144											

In progress: Filipino, Jewish, Korean, Ukrainian, Vietnamese



Linguistic variables

- Phonetic/phonological
 - Stable variables
 - (t/d)-deletion
 - (ing)
 - Changes in progress
 - Canadian Vowel Shift (CVS)
 - Canadian Raising
 - (aw)-fronting
- Grammatical
 - Plural existential *there is/there's*



Phonetic Variables

Stable Variation

Stable Variation

- (t/d)-deletion

- Variable deletion of word-final /t/ and /d/ in consonant clusters

west ~ wes'

sand ~ san'

- (ing)

- Variable alveolar realization of the velar nasal in final unstressed syllable

singing ~ singin'

every/no/something ~ every/no/somethin'

(t/d)-deletion

Hoffman & Walker (2010)

Generation, Ethnicity and Ethnic Orientation

Chinese, 1 st generation	.77
Chinese, 2 nd /3 rd generation, high EO	.56
Chinese, 2 nd /3 rd generation, low EO	.55
Italian, 2 nd /3 rd generation, low EO	.47
Italian, 1 st generation	.45
British/Irish, younger	.44
Italian, 2 nd /3 rd generation, high EO	.42
British/Irish, older	.30

Range: 47

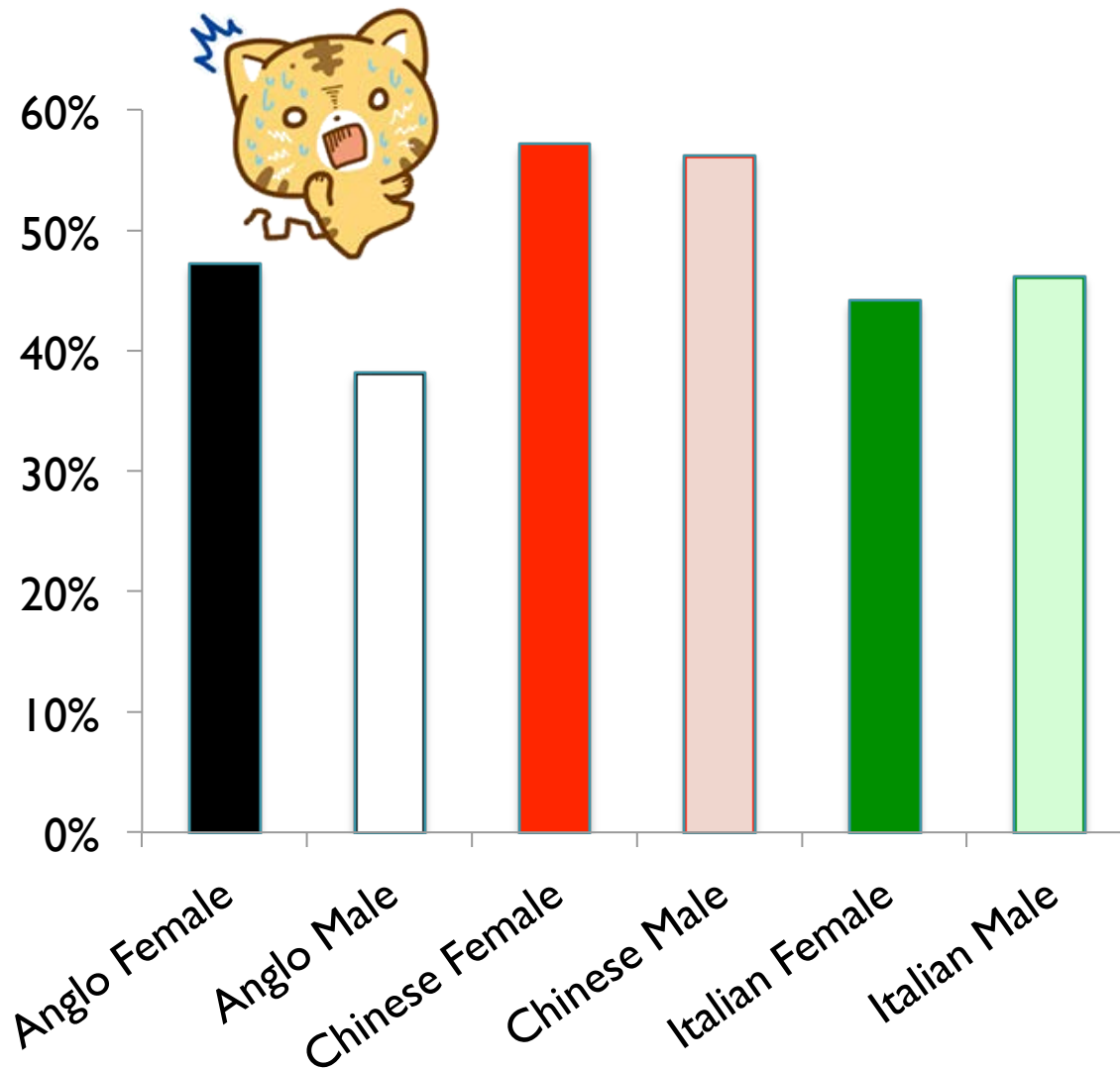
Sex

Male	.52
Female	.48

Range: 4

3,030 tokens!

(t/d)-Deletion by Ethnicity and Sex

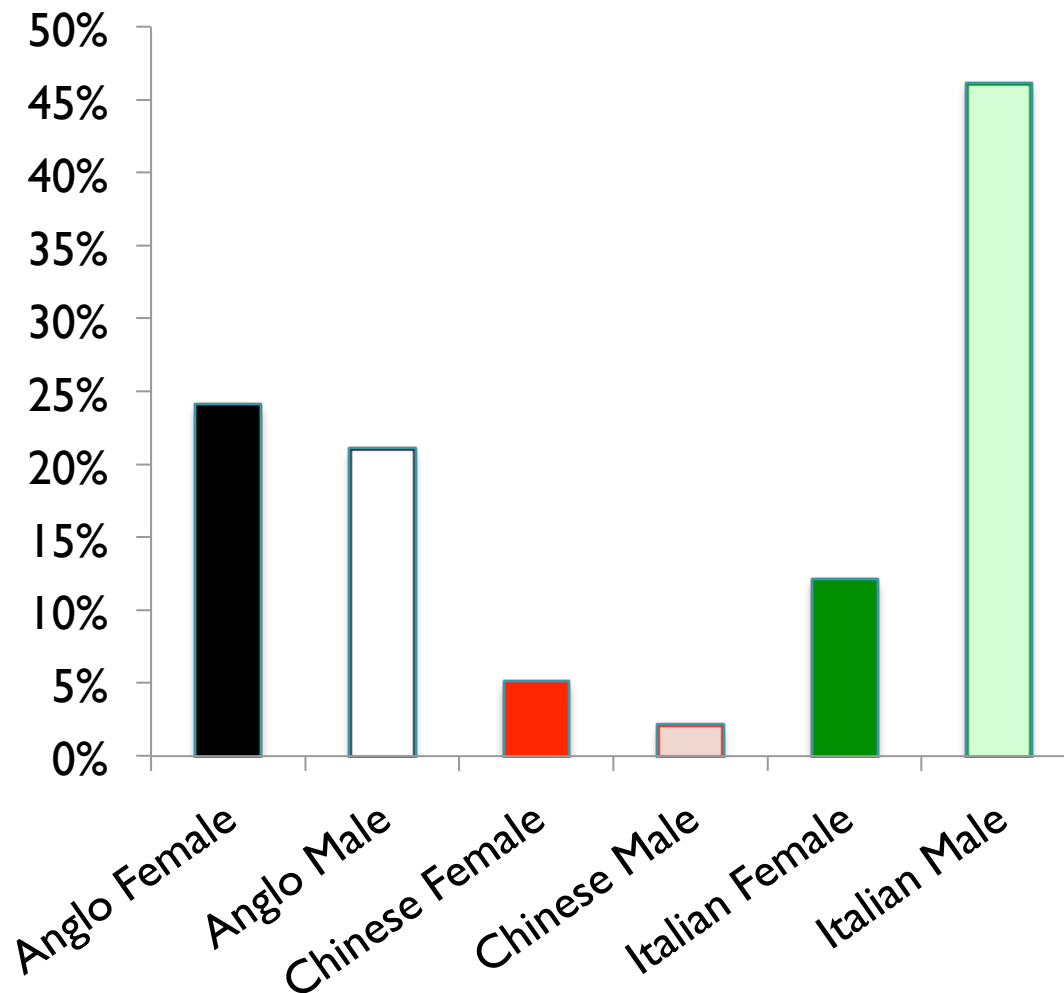


AF	0.138
AM	-0.138
CF	-0.042
CM	0.042
IF	-0.096
IM	0.096

Logodds of deletion; mixed-effects model with speaker as random effect

4,388 tokens!

Alveolar (ING) by Ethnicity and Sex



AF	0.222
AM	-0.222
CF	0.540
CM	-0.540
IF	-0.761
IM	0.761

Logodds of *-in'*; mixed-effects model with speaker as random effect

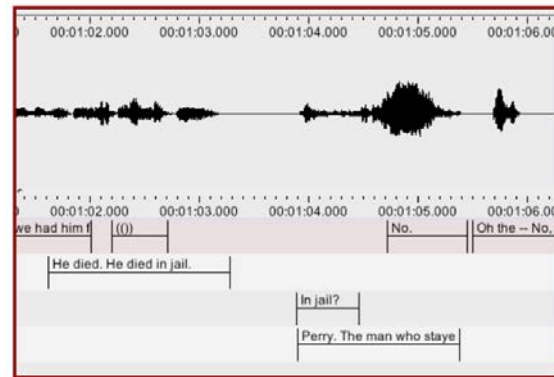


Phonetic Variables

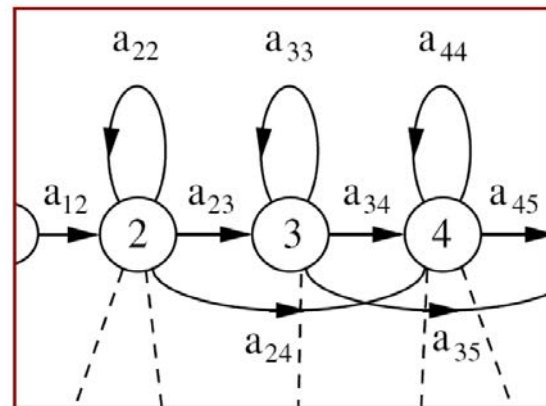
Changes in Progress

Methods

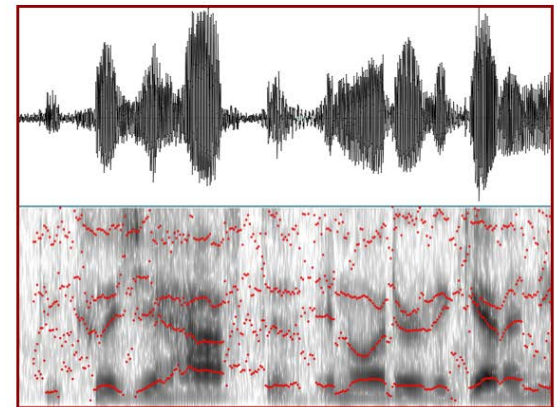
- FAVE
(<http://fave.ling.upenn.edu>)
 - Force-aligns vowels in transcription (in ELAN) with waveform in sound file (*.wav)
 - Produces TextGrid
 - Extracts and measures vowel formants using TextGrid and sound file
 - Normalizes tokens using Lobanov method



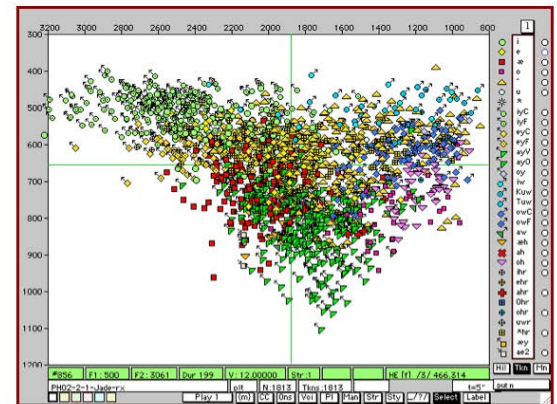
Transcription



Forced alignment

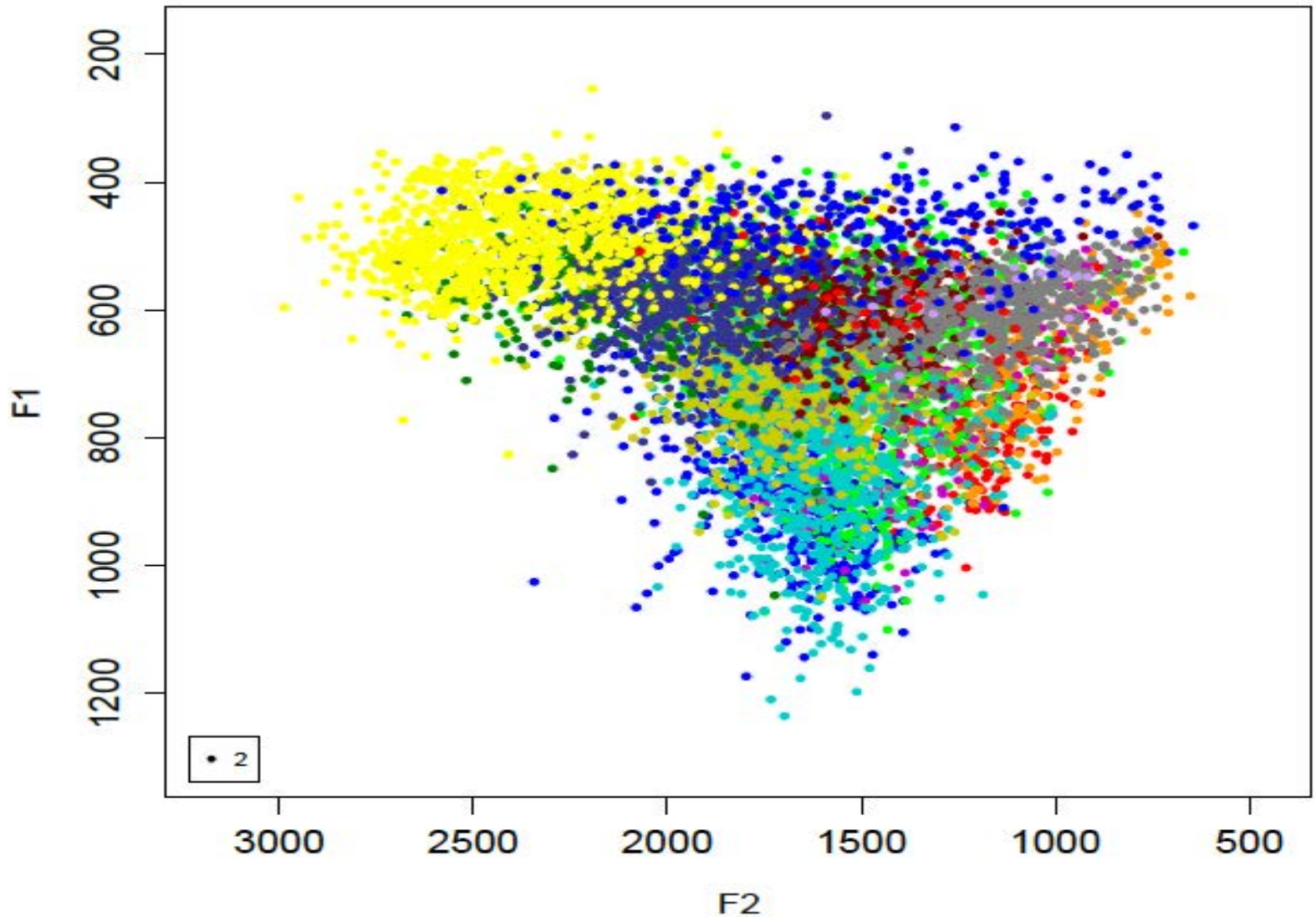


Vowel extraction



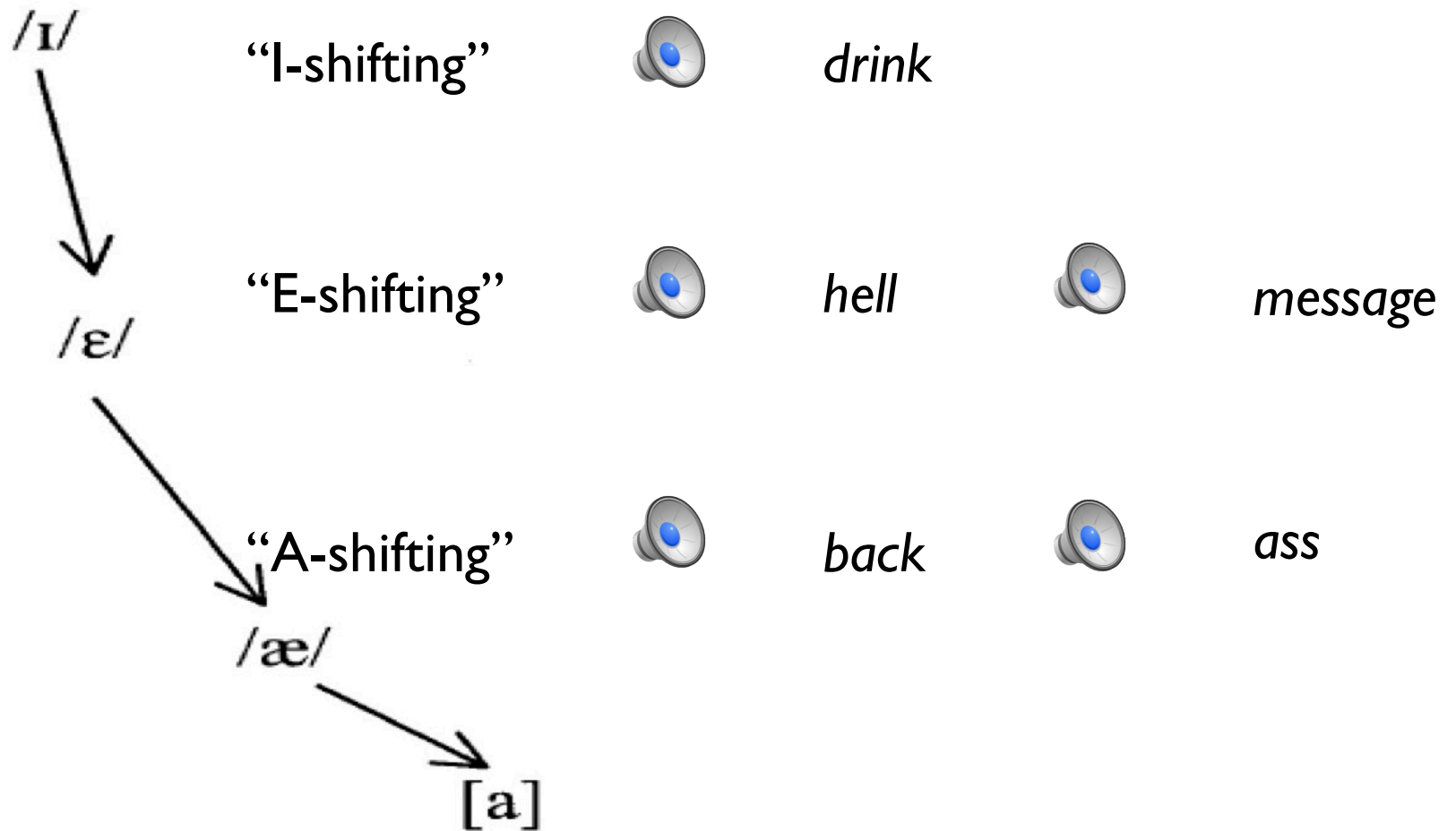
Vowel analysis

All stressed vowels for speaker 002 (Female G2 Italian)



(All vowel plots created using the `vowels` package in R)

Canadian Vowel Shift (CVS)

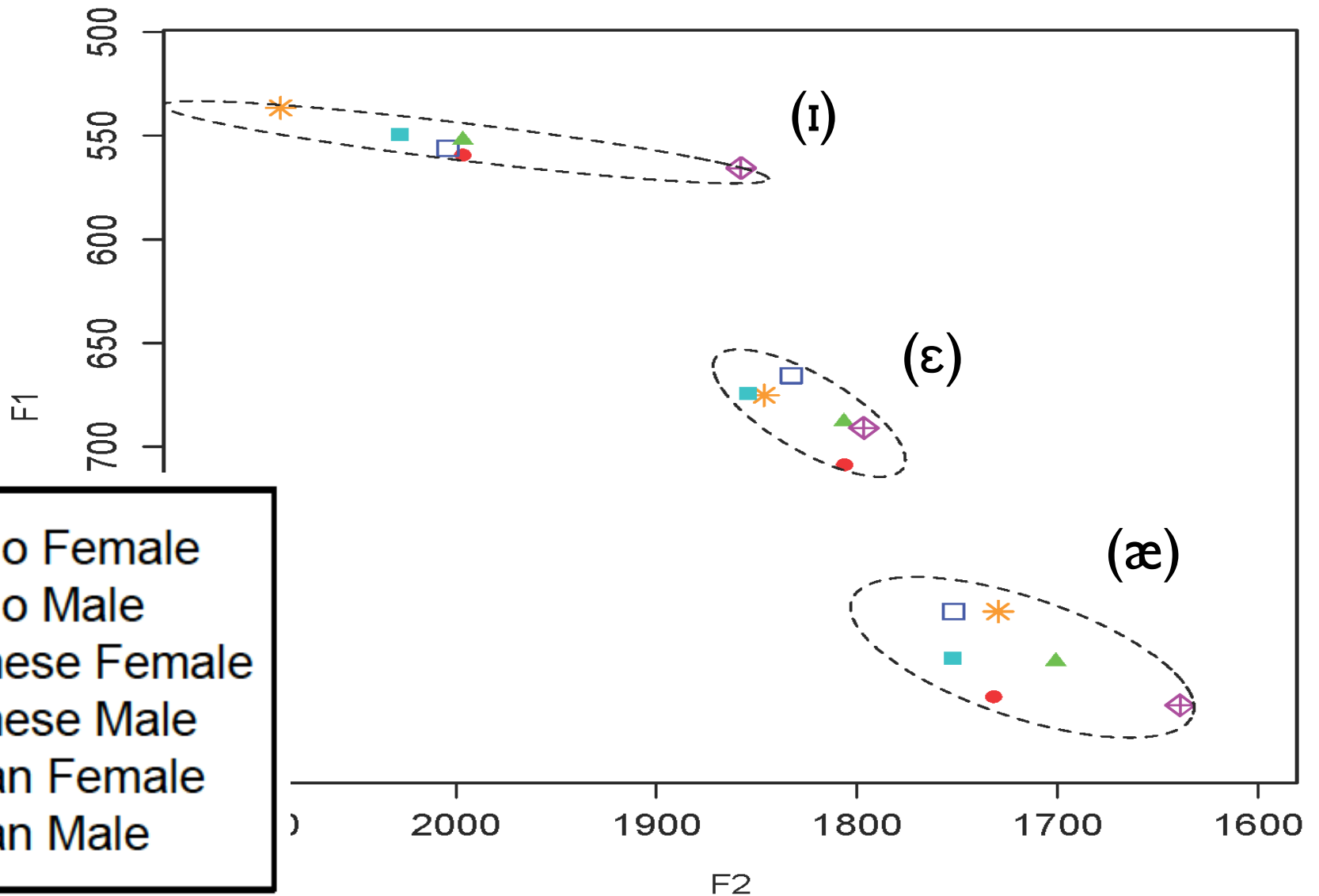


Canadian Vowel Shift (Hoffman & Walker 2010)

		(ɛ)	(æ)
Total N:		2,270	1,404
Input:		.205	.201
Ethnicity and EO Status			
British/Irish		.68	.51
Italian	Low EO	.54	.60
	High EO	.63	.82
Chinese	Low EO	.32	.29
	High EO	.30	.17
<i>Range:</i>		38	65
Speaker Sex			
Women		.56	.60
Men		.44	.42
<i>Range:</i>		8	18

Canadian Vowel Shift

65,535 tokens!



- Anglo Female
- Anglo Male
- ▲ Chinese Female
- * Chinese Male
- ◆ Italian Female
- Italian Male

Canadian Vowel Shift

	(ɪ)	(ɛ)	(æ)
Anglo Female	41.033	7.398	17.012
Italian Male	40.372	8.217	29.622
Chinese Male	0.661	-0.820	-12.610
Chinese Female	-0.661	0.820	-12.610
Italian Female	-40.372	-8.217	-29.622
Anglo Male	-41.033	-7.398	-17.012

Logodds of F2; mixed-effects model with speaker as random effect

Canadian Raising

- Centralization of onset of /ay/ and /aw/ before voiceless consonants

“you look **alright**”



“I asked her **out**”



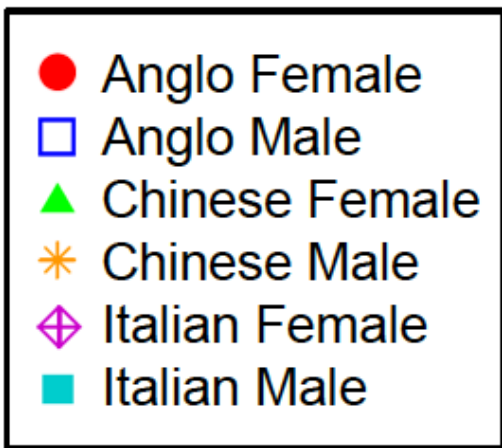
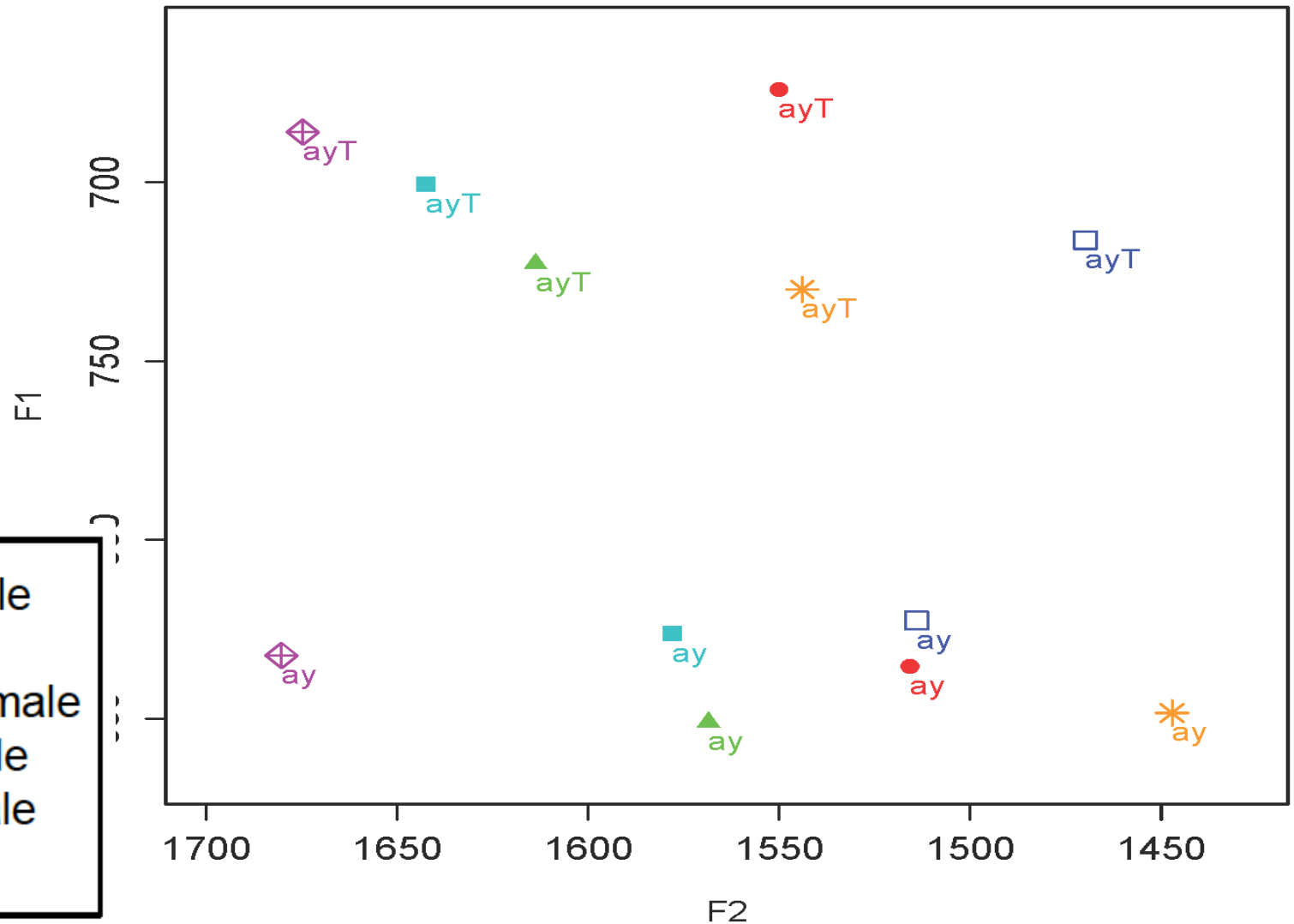
- Fronting of (aw)

“helicopters **out**”



22,470 tokens!

Canadian Raising: (ay)



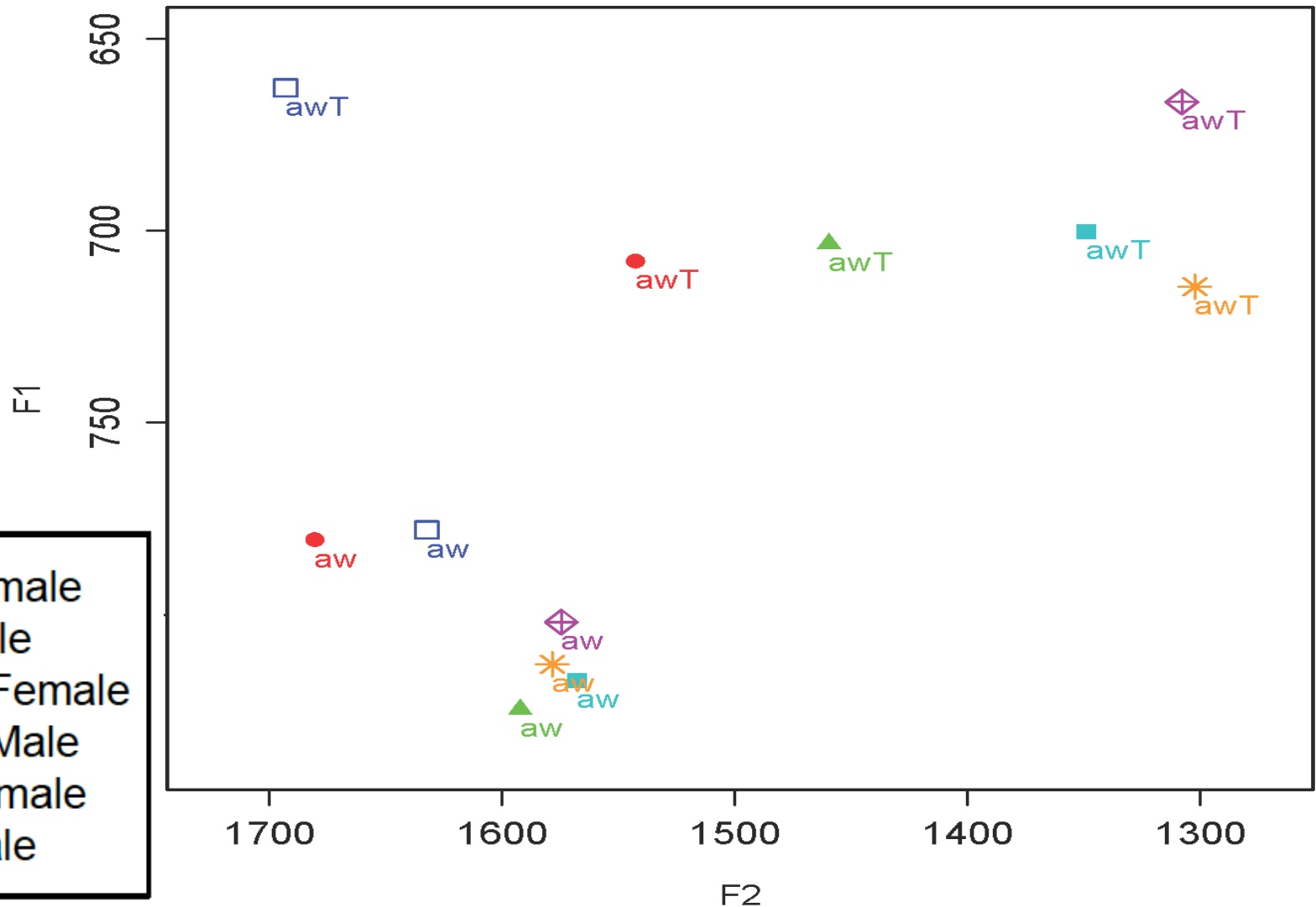
Canadian Raising: FI of (ay)

	(ay)	(ayT)
Anglo Female	14.686	-14.686
Anglo Male	-11.260	11.260
Chinese Female	7.287	-7.287
Chinese Male	-11.822	11.822
Italian Female	4.415	-4.415
Italian Male	-3.306	3.306

Logodds of FI; mixed-effects model with speaker as random effect

Canadian Raising: (aw) (aw)-fronting

3,097 tokens!



Canadian Raising: FI of (aw)

	(aw)	(awT)
Anglo Female	-18.701	18.701
Anglo Male	2.587	-2.587
Chinese Female	5.667	-5.667
Chinese Male	-5.800	5.800
Italian Female	12.763	-12.763
Italian Male	3.484	-3.484

Logodds of FI; mixed-effects model with speaker as random effect

(aw)-fronting: F2 of (aw)

Anglo Female	88.205
Anglo Male	139.381
Chinese Female	2.520
Chinese Male	-82.957
Italian Female	-82.142
Italian Male	-65.007

Logodds of F2; mixed-effects model with speaker as random effect



Grammatical Variable

Variable Agreement in Plural Existentials

Variable Agreement in Plural Existentials

- *Plural Agreement*

We had to hang our food because there **were** bears.

(Speaker 004)

- *Singular Agreement*

It helps being in the city where there **is** other kids around.

(Speaker 070)

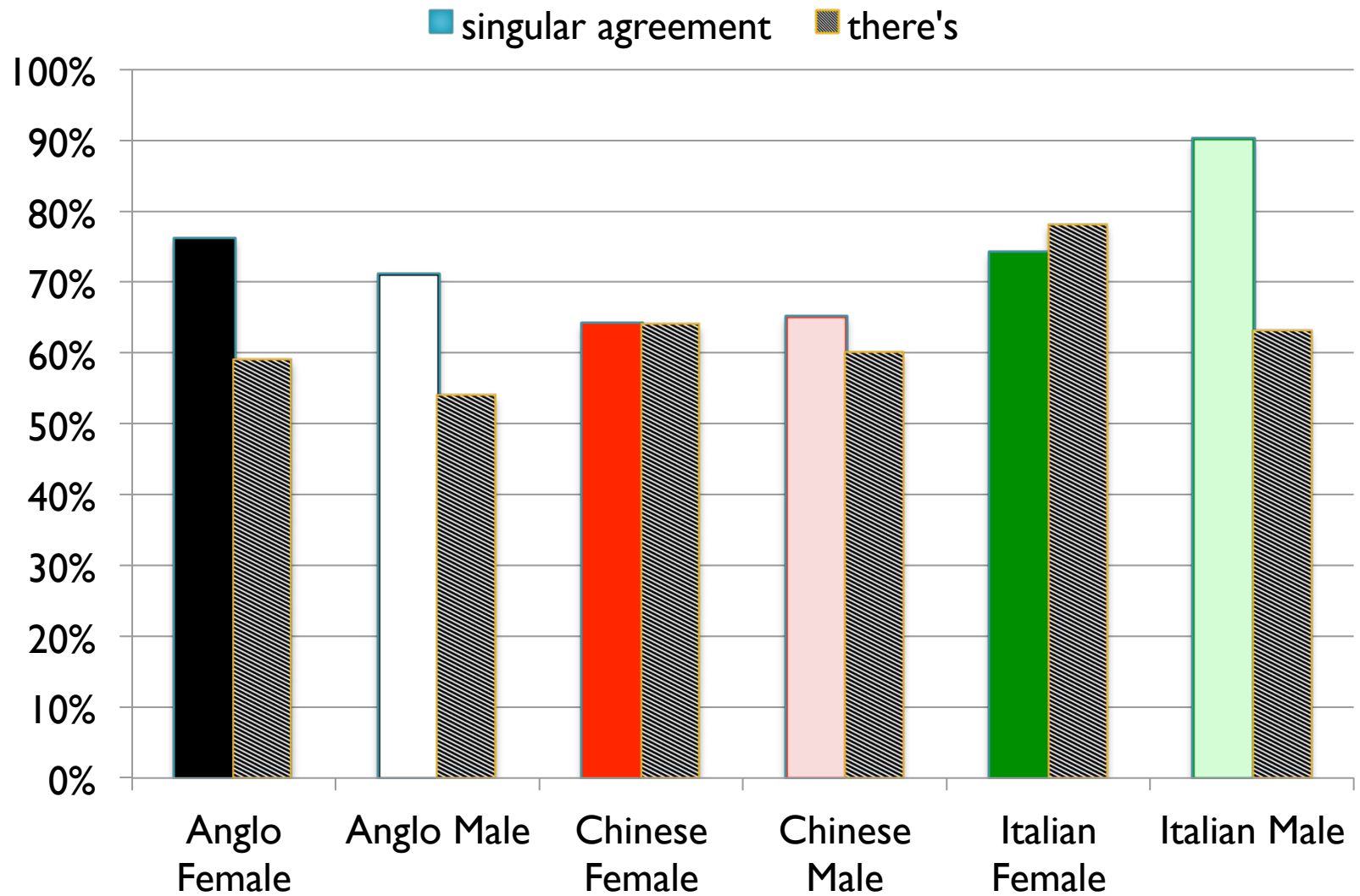
- *Singular Agreement: there's*

There's black bears, I believe there's brown bears.

(Speaker 006)

1580 tokens ...

Plural Existentials



Plural Existentials

	singular agreement	there's
Anglo Female	0.29	-0.082
Anglo Male	-0.29	0.082
Chinese Female	0.123	-0.102
Chinese Male	-0.123	0.102
Italian Female	0.184	0.184
Italian Male	-0.184	-0.184



Summary

- **Phonetic variation**
 - **Stable variables**
 - (TD): sex differences mainly within Anglos
 - (ING): sex differences mainly within Italians
 - **Changes in progress**
 - CVS: sex differences across all three components, but most pronounced for (I)
 - CR: sex differences across Anglos, Italians
 - (aw)-fronting: sex differences across Anglos, Chinese



Summary

- Grammatical variation
 - singular agreement: sex differences in Anglos
 - *there's*: sex differences in Italians



Conclusion

- Complicated interaction between sex (/gender?) and ethnicity
 - Features that are significant for ethnic differences are not significant for sex differences within every ethnic group
- Constructing/expressing one part of identity may override another
 - The same feature can be used for different purposes
 - ‘indexical field’ (Eckert 2008)
 - Features have potential social meaning/interpretation
 - Makes it difficult to talk about e.g. ethnolects, genderlects



Thank you!

多謝!