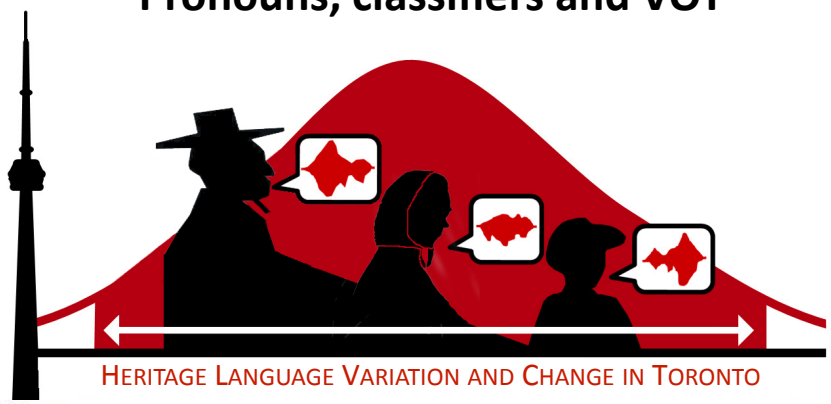
Looking for contact-induced change in Heritage Cantonese: Pronouns, classifiers and VOT



HERITAGE LANGUAGE VARIATION AND CHANGE IN TORONTO

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Social Sciences and Humanities Research Council of Canada | Conseil de recherches en sciences humaines du Canada

INTRODUCTION

Problem

Studies of contact-induced language variation vary widely

in terms of methods & contexts,

inhibiting generalizable findings

Solution

Consistent methods and context,

while varying pairs of languages in contact

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General framework

Contrasting languages

Consistent methodology

Collect

Collaborate

Compare

Quantify

Conclude

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Toronto Star 30 Dec. 2007

5

Conditions necessary to establish the existence of contact-induced change

Paraphrased from Thomason (2001:93-94):

1. Situate the proposed change with respect to its host linguistic system
2. Identify a presumed source of the change
3. Locate structural feature**s** shared by the source and recipient languages

   Need to find several structural features that have been influenced! (Nichols 2008:361)

4. Prove that the proposed interference features were not present in the pre-contact variety
5. Prove that the proposed interference features were present in the source variety prior to contact
6. Rule out (or situate) internal motivations
7. Sociolinguists: Replace "features" with "stochastic patterns of variables"

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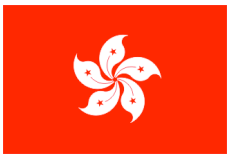
Expected cross-generational drift



1st 2nd 3rd

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Community demographics

Language	MT speakers (2006 Census)	Ethnic Origin (2006 Census)	Est. in TO	Came from
Italian	194,000	466,000	1908	Calabria
Cantonese	170,000	537,000	1951	Hong Kong
Polish	80,095	207,495	1911	Eastern Poland
Russian	66,000	58,505	1916	St. Petersburg, Moscow
Korean	49,000	55,000	1967	Seoul
Ukrainian	27,000	122,000	1913	Lviv
Hungarian	20,190	53,210	1880	Budapest
Faetar	<100?	<500?	1950	Faeto, Celle di St. Vito

Mother tongue: http://www40.statcan.ca/l01/cst01/demo12c-eng.htm

Ethnic origin: http://www40.statcan.ca/l01/cst01/demo27g-eng.htm

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METHODOLOGY

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Participant criteria: Language

(Self-defined) fluent speaker of…

- Cantonese
- Faetar
- Korean
- Italian
- Russian
- Ukrainian
- Polish
- Hungarian

Everyone agreed that they could participate in a recorded conversation for about an hour, in the heritage language.

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Participant criteria: Generation

Speaker of…	Generation
Cantonese	**1st:** born in Hong Kong; moved to GTA after age 18; in GTA 20+ years
	2nd: born in GTA (or came from homeland before age 6); parents qualify as 1st generation
	3rd: born in GTA; parents qualify as 2nd generation
Italian	**1st:** born in Calabria…
Russian	**1st:** born in Moscow or St. Petersburg…
Korean, Ukrainian, …	

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Participant criteria: Age group

Languages	Generation	Age
Cantonese	**1st: born in homeland;** moved to GTA after age 18; in GTA 20+ years	60+
		39-59
	2nd: born in GTA (or came from homeland < age 6); parents qualify as 1st generation	60+
		40-59
		21-39
		<21
	3rd: born in GTA; parents qualify as 2nd generation	60+
		40-59
		21-39
		<21

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Participant criteria: Sex

Languages	Generation	Age	Sex
Cantonese	1st: born in homeland; moved to GTA after age 18	60+	2 females
			2 males
		39-59	2 females
			2 males
Italian	" "		
Russian	" "		
Korean	" "		
Ukrainian	" "		
Faetar	" "		
Polish			
Hungarian	→ 320 speakers		

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Data collection methods

1. Sociolinguistic interview (= conversation)
2. Ethnic Orientation Questionnaire
3. Picture Description Task

All participants were recruited, interviewed, recorded and transcribed by native speakers in the heritage language.
Analysis by fluent (if not native) linguists, with native-speaker oversight.

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Sociolinguistic Interview

Adapted from Labov 1984

- "Guided conversation"
- Designed to elicit relaxed, conversational speech
- Variety of topics to find speaker's interests
- Minimize the effects of a person (stranger) with a tape recorder and microphone asking questions

Why did your family move here?
Because of work?
Because of community roots?
To be close to other Italians? Close to relatives?
Do you know where your family came from?
When did they come here? Why did they come?
Do you remember hearing stories about how your family came to Toronto? …
Was it hard for them to get set up here?

Ethnic Orientation Questionnaire

A. Ethnic identification
1. Do you think of yourself as Italian, Canadian or Italian-Canadian?
2. Are most of your friends Italian?
3. Are people in your neighbourhood Italian?...

B. Language
1. Do you speak Italian? How well? How often?
2. Where did you learn Italian? At home? In school?
3. Do you prefer to speak Italian or English?
4. Do you prefer to read and write in Italian or English? …

C. Language choice
1. What language does your family speak when you get together?
2. What language do you speak with your friends?

D. Cultural heritage

E. Parents

F. Partner

G. Italian culture

H. Discrimination

I. Italian culture

J. Discrimination

Adapted from Keefe & Padilla 1987, Walker & Hoffman 2008

PRO-DROP

Variable 1: Pro-drop
(Variable Subject Pronoun Presence)

Italian - Canonical prodrop language

Ø Avevo 14 anni e mia moglie ce ne aveva 13.
Ø (I) was 14 and my wife was only 13 [I1M75A]

Io ho
I said

Russian - Partial prodrop language

Ø Начала немножко такой research делать.
Ø (I) gradually started to do some research on this [R3F25A]

Я оче
I read

Cantonese - Discourse prodrop language

ngo-5	mou-5	mat-1	yan-3	jeung-4
I	not	have	any	memory

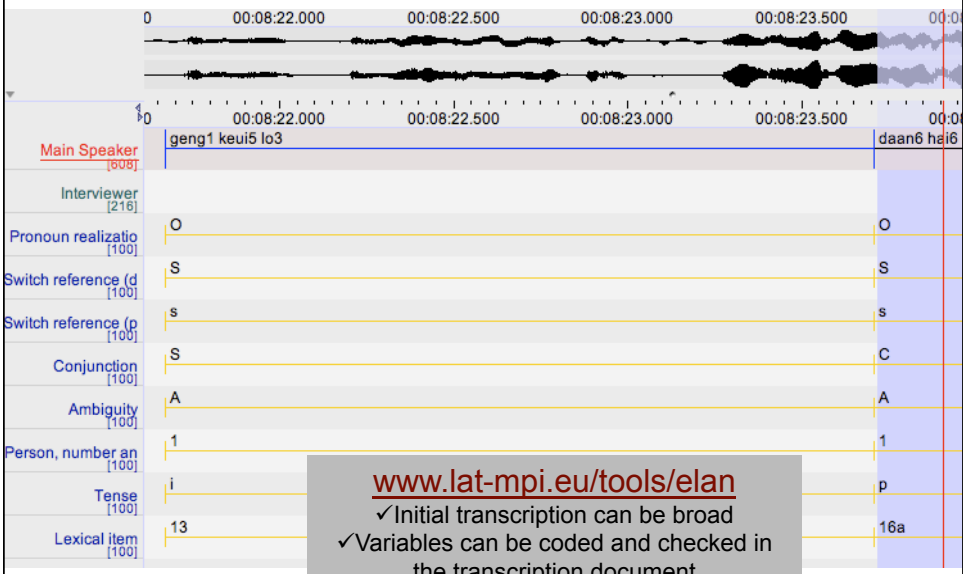
I do not have any memories. [C2F21B]

yan-1 wai-6	Ø	mou-5	ga-1	yan-4	hai-5	dou-6
because	Ø (I)	not	have	relative	be	here

Because I do not have any relatives here. [C1F50A]

Nagy et al. 2010

Time-aligned Transcription with ELAN



www.lat-mpi.eu/tools/elan

✓Initial transcription can be broad
✓Variables can be coded and checked in the transcription document
✓More context is available during analysis

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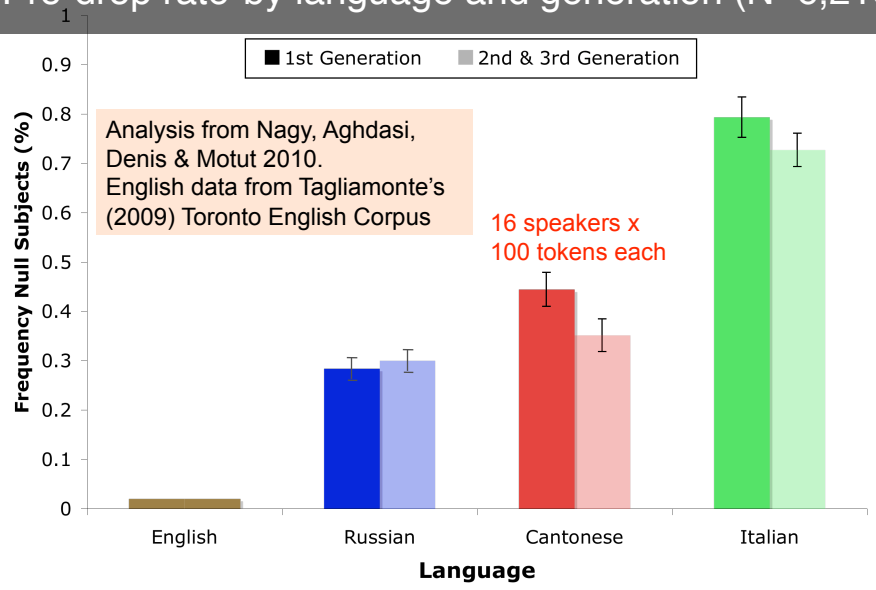
Pro-drop rate by language and generation (N=6,216)



Analysis from Nagy, Aghdasi, Denis & Motut 2010.
English data from Tagliamonte's (2009) Toronto English Corpus

16 speakers x 100 tokens each

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Linguistic Factors

- **Subject Continuity**

Same referent as previous subject

- "**It** had the old red and gold F-W-Woolworth's sign right on the corner, **Ø [it]** had those little creaky wood, hardwood floors." (EXM37A)

Different referent from previous subject (switch reference)

- "**Ø [we]** used to bring a lunch with us, sandwiches and stuff. **Ø [I]** remember we used to go with Darryl, and Gary, and Jack-G. and all of us." (EXM47A)

- **Conjunction**

Main

- "**I** went and Ø knocked on the door." (EXM44A)
- "By the time **Ø** got to England it was getting close to summer." (EXF49A)

Conjoined

- " He's in the army and **he** goes to England three-or-four times a year." (EXM44A)
- "I went and **Ø** knocked on the door." (EXM44A)

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Linguistic factor effects - Cantonese

Factors		Input = .199	N = 1,581
		FW Ø	n
Subject Continuity	Same	.64	966
	Switch	.36	615
Range		*28*	
Grammatical Person/Number	1st	.64	1017
	3rd	.58	434
	2nd	.29	130
Range		*26*	
Conjunction	Main clause	.60	1500
	Conjoined	.40	81
Range		*20*	
Factor groups not selected as significant: sex; generation; generation × subject continuity; generation × grammatical person/number; generation × conjunction			
Individual (random)		s.d. = 0.627	

Linguistic factor effects Toronto English pro-drop (N=400)

Mixed Effects Model / Regression from Nagy et al. (2010)

1 Significant factor group (an interaction)	Factor weight	n
same reference, conjoined clause	.86	120
same reference, main clause	.53	130
switch reference, conjoined	.34	123
switch reference, main clause	.21	27
range	*65*	

Non-significant factor groups
tense
ambiguity (in morph. marking)
person & number

Bigger factor weight = more null subjects in that context

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Cross-linguistic Comparison: Linguistic factors

	English	Italian	Cantonese	Russian
Generation	N/A	n.s.	n.s.	n.s.
Subject Continuity	Same +	Same +	Same +	Same +
Conjunction	Conj. +	n.s.	Conjoined -	Conjoined +
Subject Continuity × Conjunction	Conj. Same + Conj. Diff. -	n.s.	n.s.	n.s.
Other Sig. Factors	None	Grammatical number, Preverbal DO, Tense	Grammatical person	Grammatical person
Generation × Linguistic Factors	N/A	n.s.	n.s.	(Negation)

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Expected

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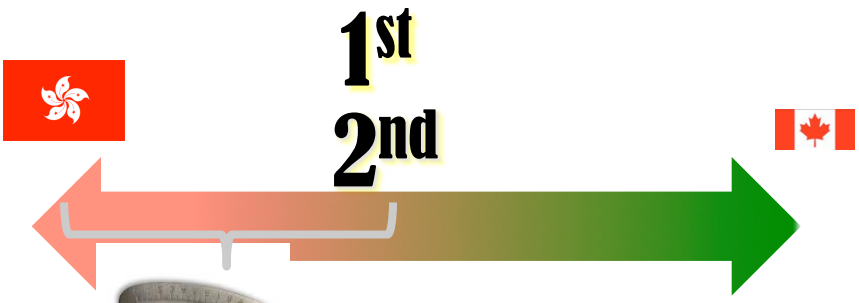
Explanation 1



Even Generation 1 has already undergone a lot of influence from English contact.

Comparison to Homeland Russian supports this.

What about Hong Kong Cantonese?

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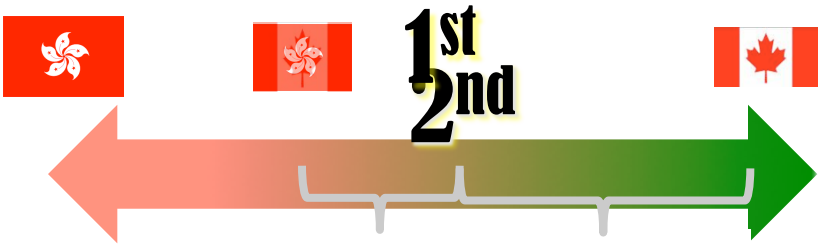
Explanation 2



Ambient English has been influenced by the HLs and moved away from the "Old-line" norm.

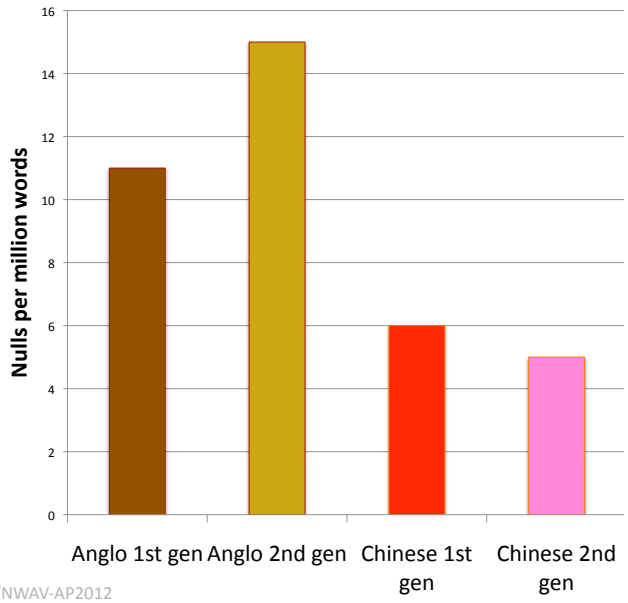
Isobel Marr's (2011) thesis investigated this.

English pro-drop sample (Marr 2011)

	Ethnic origin				
	Anglo		Chinese		Italian
Sex	F	M	F	M	
Generation					
First/Older	5	5	5	5	
Second/Younger	5	3	9	10	
Total	10	8	16	15	
Total by Ethnic Origin	18		31		
Grand total	70				

- 2,415 tokens
- Examined all clauses with null subjects and their adjacent clauses clauses (one before and one after each), which may or may not have null subjects, following Harvie (1998).
- Generates an artificially high rate of null subject usage (~33%)
- Exclusions: imperatives, interrogatives, subordinate & relative clauses, quotations, repetitions, self-corrections, frozen expressions like *Dunno*.

English null subject rate (Marr 2011)



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Comparison of English across languages & generations → convergence

(Factor weights from 4 separate GV analyses, Marr 2011:52)

Factor	Chinese		Anglo	
	1st	2nd	1st	2nd
Subject continuity (still "universal")	same > diff.	same > diff.	same > diff.	same > diff.
Conjunction	conj. > main	conj. > main	conj. > main	conj. > main
Verb category	state> act	act > state	act > state	act > state
Tense	n.s.	n.s.	n.s.	n.s.
Input value	*.37*	*.33*	*.31*	*.33*
N	*151*	*432*	*527*	*446*

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Explanation 3

What about the lack of correlation with EOQ scores?

- Perhaps speakers don't use *this* variable to index gender or ethnic orientation.
- We might find effects with other variables.

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CLASSIFIERS

from:
Naomi Nagy, Josephine Tong & Tiffany Chung
Workshop on Cantonese Linguistics
Ohio State University 2012

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Classifier

[$_{NP}$ sap6 ji6 lin4 [$_{N}$ zung6 jau5]]
twelve CLAS high school

Twelve years of high school (C1M46A)

Missing Classifier

Without Classifier

Gei2 do1 Ø gai1 tung4 tou3
How many chicken and rabbit

With classifier

Gei2 do1 zak3 gai1 tung4 tou3
How many CLAS chicken and rabbit

How many chickens and rabbits? (C1F50B)

"Optional" Classifiers

Without Classifier

yam5	dak1	taai3	do1	Ø	cha6
drink	partitive	too	much		tea

Sometimes I drink too much tea. (C2F27A)

With classifier

yam5	dak1	taai3	do1	bui2	cha6
drink	partitive	too	many	CLAS	tea

Sometimes I drink too many cups of tea.

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Data and Analysis

- Dependent variable: presence or absence of classifier preceding a noun
- Independent linguistic variables:
  - Noun type
  - Countability of noun
- 12 speakers x 25 tokens

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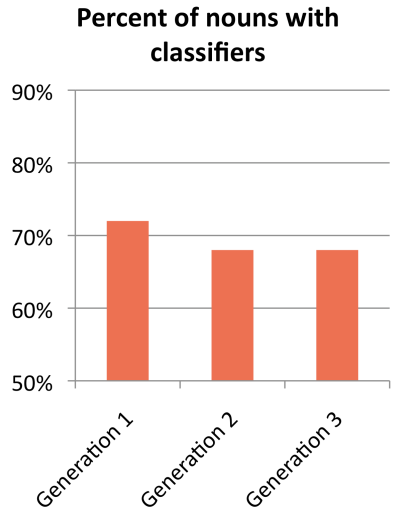
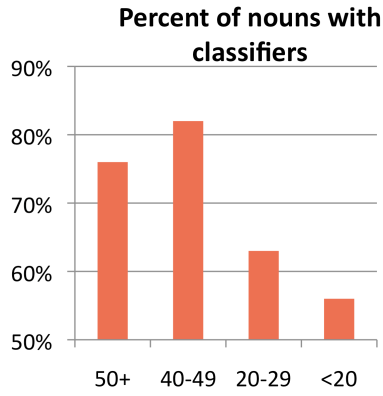
Rate of CLAS presence (N = 369 NP tokens)





(non-significant effects)

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Noun Type: Non-bare nouns

Possessive + noun	ngo3	tiu4	yu2
	我	條	魚
	my	CLAS	fish
	my fish		
Number + noun	yat1	tiu4	yu2
	一	條	魚
	one	CLAS	fish
	one fish		
Demonstrative + noun	ni1	tiu4	yu2
	呢	條	魚
	this	CLAS	fish
	this fish		

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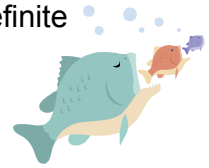
Noun Type: Bare nouns

Indefinite	ngo3	geen6 dou2	tiu4	yu2
	I	saw	CLAS	fish
	我	見到	條	魚
	I saw a fish.			
Definite 	tiu4	yu2	ho2	daai6
	CLAS	fish	very	big
	條	魚	好	大
	The fish was very big.			
Non-specific (generic)	tiu4	yu2	ho2	waat6
	CLAS	fish	very	slimy
	條	魚	好	滑
	Fish are slimy.			

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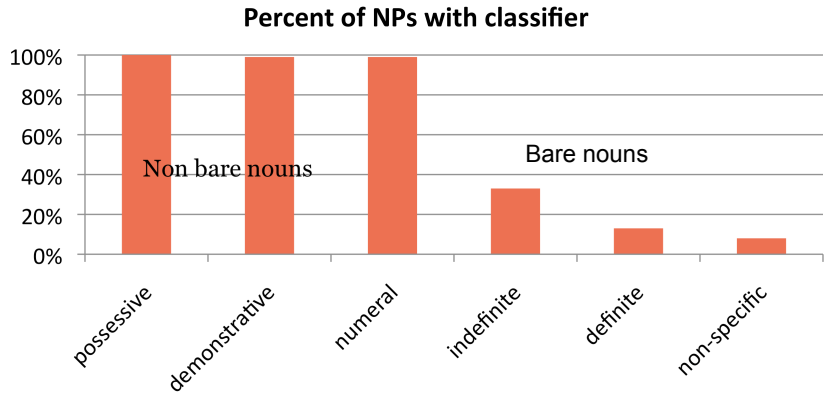
Noun type effect



Significant effect: non-bare vs. bare

369 NP tokens

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Countable vs. Non-countable nouns

Countable

di1	deng3	hai2	dei3 haa2
CLAS	chair	on	floor
D	凳	係	地下

The chairs are on the floor.

Non-countable

di1	tsa3	hai2	dei3 haa2
CLAS	tea	on	floor
D	茶	係	地下

The tea is on the floor.

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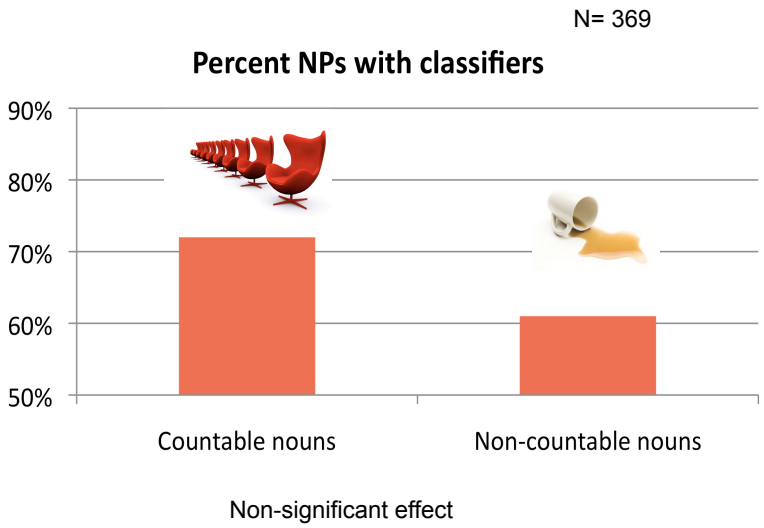
Countability Effect



Non-significant effect

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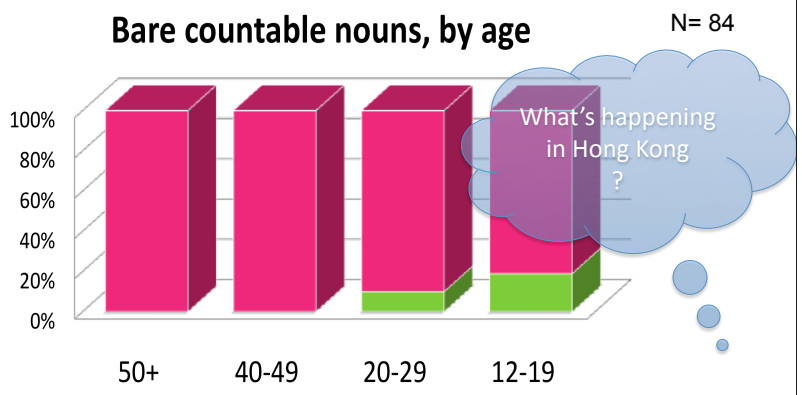
An emergent pattern: Use of classifiers to mark bare countable contexts



Significant effects, by one-tailed Fischer's Exact Test:
√ >40 vs. <40: p = .024

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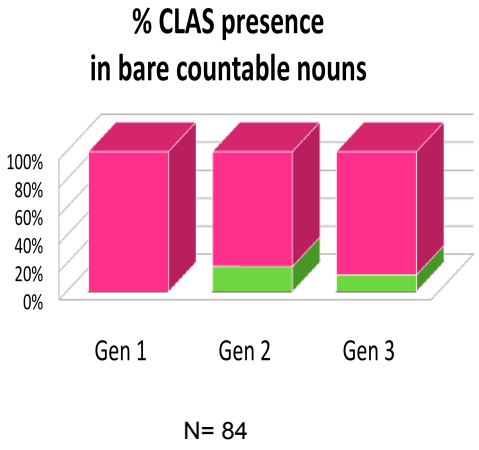
An emergent pattern: Use of classifiers to mark bare countable contexts

Significant effects, by one-tailed Fischer's Exact Test:
√ 1st vs. 2nd generation
p = .026
√ 1st vs. 2nd & 3rd gens.
p = .029
(2nd vs. 3rd gen.
p = .40)



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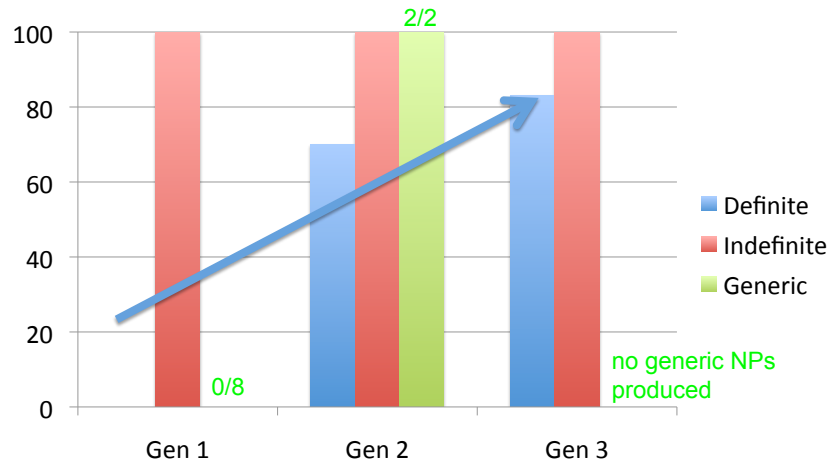
An emergent pattern:
Use of classifiers to mark DEFINITE countable contexts



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VOICE ONSET TIME (VOT)

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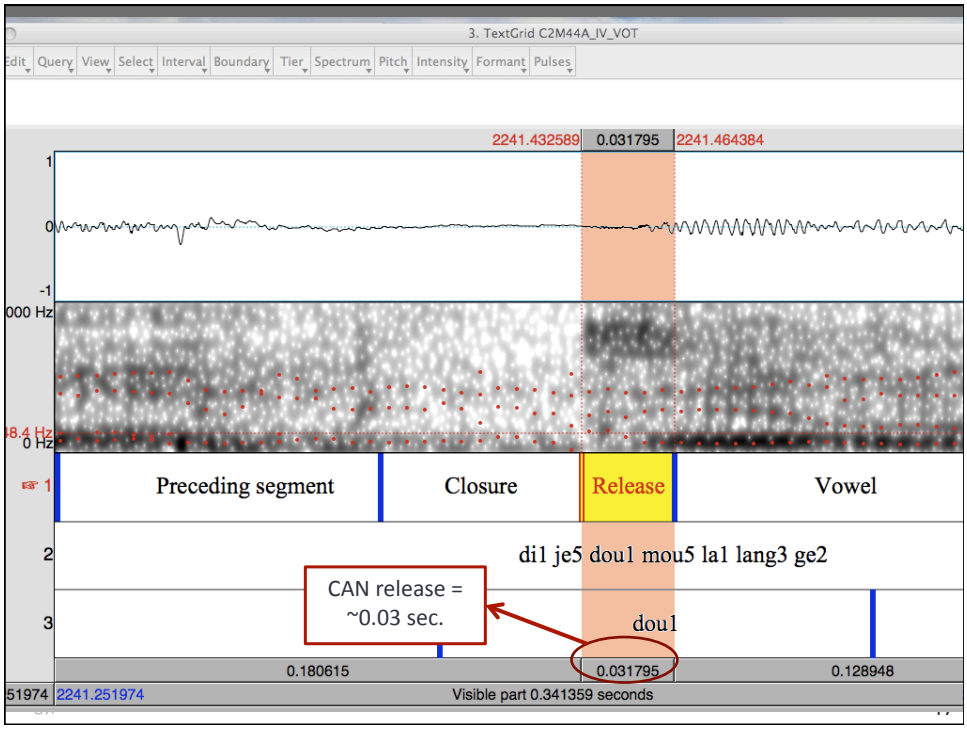
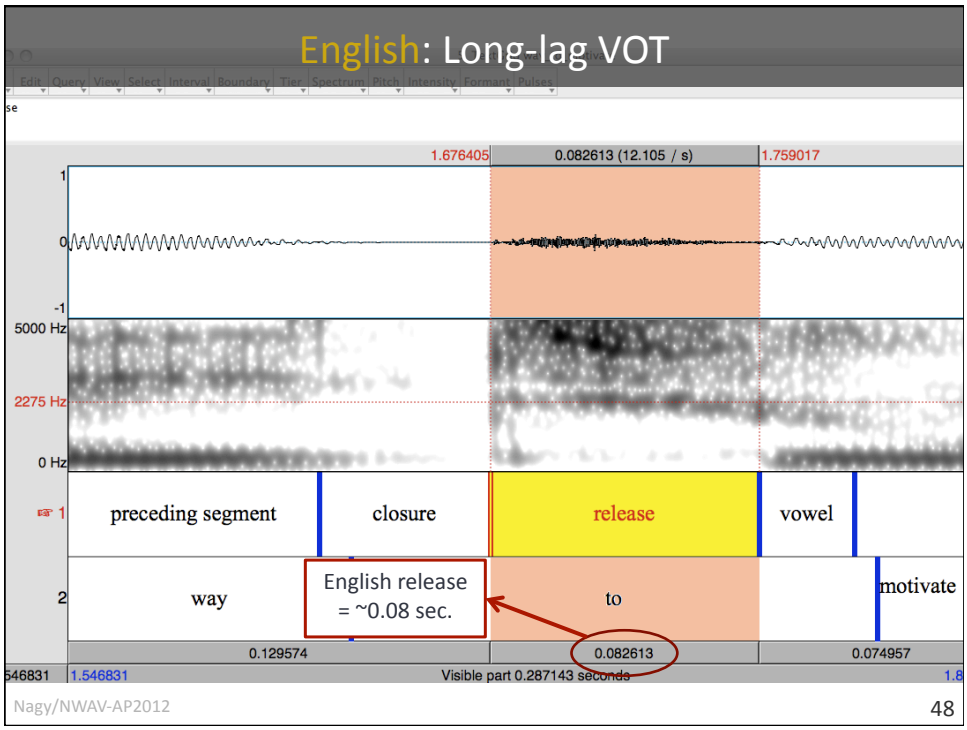

3. TextGrid C2M44A_IV_VOT
2241.432589
0.031795
2241.464384
Preceding segment
Closure
Release
Vowel
di1 je5 dou1 mou5 la1 lang3 ge2
CAN release = ~0.03 sec.
dou1
0.180615
0.031795
0.128948
2241.251974
Visible part 0.341359 seconds


English: Long-lag VOT
1.676405
0.082613 (12.105 / s)
1.759017
preceding segment
closure
release
vowel
way
English release = ~0.08 sec.
to
motivate
0.129574
0.082613
0.074957
1.546831
Visible part 0.287143 seconds
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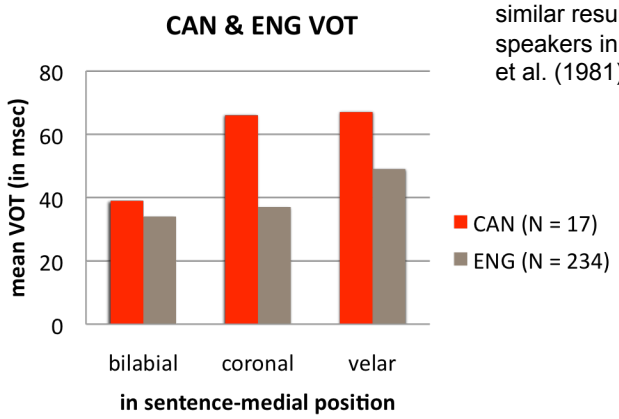
An older cross-linguistic comparison

Lisker & Abramson 1964

NB: Based on 1 speaker, but very similar results for 8 speakers in Clumeck et al. (1981)



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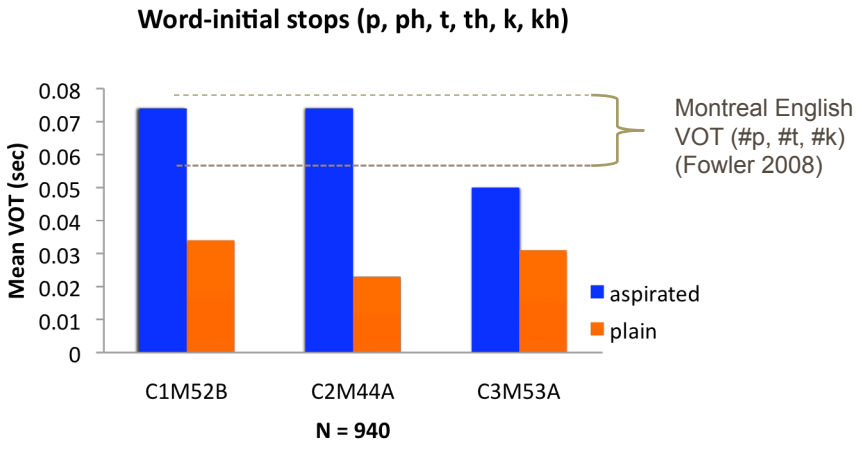
Cross-generational variation in VOT



Julianna So 2011

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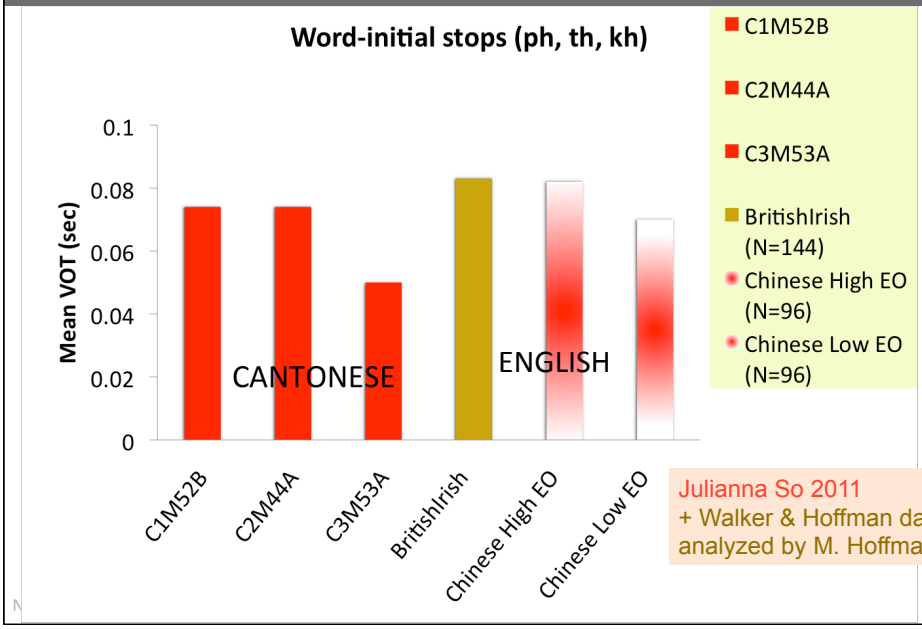
Current cross-linguistic variation in VOT



Julianna So 2011
+ Walker & Hoffman data analyzed by M. Hoffman

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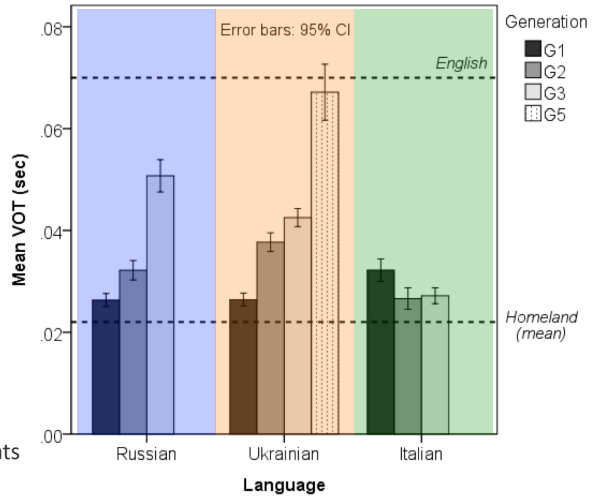
Other HL patterns of cross-linguistic variation



- 18 speakers * 75 tokens
- N = 1,250 tokens
  - 25 tokens * 3 consonants [p, t, k]
  - Word-initial stressed syllables with /a/ or /o/

Hrycyna et al. 2011

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Discussion

- **Ø-subjects**
  - NO generational differences for rate or linguistic conditioning that can be attributed to contact with English (in any Heritage Language).
  - By 2nd generation, English in all communities = Anglo English.
  - Surprisingly, Heritage Cantonese speakers have a lower rate of null subjects in English than native English speakers.
  - No effect of EOQ scores.
  - Homeland patterns?
- **Classifiers**
  - Change in progress, related to English?
  - Homeland and EOQ analyses needed
- **VOT**
  - Clear cross-generational drift from homeland to English norms for Russian & Ukrainian, but not Cantonese or Italian
  - Drifting languages show EOQ effects (& changes in progress).
  - EOQ effect in English; not enough data for CAN

감사합니다 Дякую Grazie molto Спасибо 多謝 gratsiə namuor:ə

The HLVC RAs:
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Ulyana Bila
Rosanna Calla
Minji Cha
Karen Chan
Kate Chtcherbakov
Sheila Chung
Marco Covi
Derek Denis
Tonia Djogovic
Joyce Fok
Dongkeun Han
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& Collaborators
Yoonjung Kang
Alexei Kochetov
James Walker
& Meghan Hollett for her Russian data
& Michol Hoffman, James Walker & Sali Tagliamonte for use of English data
& SSHRC and ROP for

http://projects.chass.utoronto.ca/ngn/HLVC

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Yes! I would like to help you with the following language(s):

Cantonese	☐	Korean	☐
Faetar	☐	Russian	☐
Greek	☐	Ukrainian	☐
Italian	☐	Punjabi	☐
Portuguese	☐	Polish	☐

I can help you with:

- Speaking/understanding ☐
- Recruiting informants ☐
- Conducting interviews ☐
- Transcribing interviews ☐
- Quantitative sociolinguistics ☐

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% Multilingual variationist studies
(North American sample)
vs.
% multilingual people in the world

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