Cross-dialectal variation in English verb complementation: A multivariate corpus analysis

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1. Introduction

Research Background

- *To*-infinitive vs. gerundial *–ing* verb complementation

  - I remembered to meet her [*to*-infinitive clause signaling a potential future event]
  - I remembered meeting her [gerundial *–ing* clause denoting an actualized past event] (Cuyckens et al. 2014)

- Finite (*that*- or *zero*-clause) and non-finite (*to*-infinitive or gerundial *–ing* clause) verb complementation

  ➢ language user's online preference (De Smet 2013: 27–9)

Research Background

- I remember that my great-grandfather died just one year before our journey to Hong Kong. [*remember* + *that*-clause]
- But I remember seeing this guy with long hair anyway running up and down Austin Stack Park. [*remember* + gerundial *–ing* clause]

- Non-variationist diachronic perspective (e.g. Fischer 1995; Fanego 1996; Los 2005; Rohdenburg 2006)

2. Research Objectives

Research Scope

- Synchronic cross-dialectal approach to verb complementation
- Corpus analysis with matrix verbs *remember*, *regret* and *deny*
- Effect of dialect and language-internal predictors on complement choice

3. Data Extraction & Sorting

International Corpus of English (ICE)

- c. 1 million words per variety (Canada, Great Britain, Hong Kong, India, Ireland, Jamaica, New Zealand, the Philippines, and Singapore)
- Common design for all sub-corpora
- Genre- and mode-balanced
- Data extraction: all instances of lemmas *remember*, *regret*, and *deny* followed by a subordinate clause

Relevant Observations

- I remember that my great-grandfather died just one year before our journey to Hong Kong. [*remember* + *that*-clause]
- But I remember seeing this guy with long hair anyway running up and down Austin Stack Park. [*remember* + gerundial –*ing* clause]

- We regret the equipment was not functioning properly at the time of the procedure. [*regret* + *zero*-clause]
- However, we regret to hear that you are no longer interested to represent us further in this case . . . [*regret* + *to*-infinitive clause]

- Mr. Singh denied that there is any rift in the Janata Dal on the question of the party president's election. [*deny* + *that*-clause]
- They all deny attempting to murder Harry Mundy or wounding him . . . [*deny* + gerundial –*ing* clause]

Data Overview

Matrix verb	Total query hits	Relevant instances
Remember	1,263	498 (39.4%)
Regret	62	53 (85.5%)
Deny	181	117 (64.6%)
Total	**1,506**	**668 (44.4%)**

4. Parameters of Analysis

Model Predictors

i. Dialect

ii. Meaning of complement clause (CC) verb

iii. Animacy

iv. Voice of CC verb

v. Intervening material in words

Meaning of CC Verb

- Situation type expressed at VP level of CC (Vendler 1967; Depraetere & Langford 2012: 139–43)

  - . . . Capital Markets emphatically denied the company had sold or was looking to sell its stake. [finite CC 'action' verb]
  - I remembered that Narayan was clumsy in everything [finite CC 'state' verb]

  - I remember Fisher talking to us about him. [non-finite CC 'action' verb]
  - . . . he denied not having a PhD. [non-finite CC 'state' verb]

Animacy

- Subject of the superordinate clause (controlled non-finite clauses) or subordinate clause (finite clauses and non-finite clauses with an expressed subject) (Zaenen et al. 2004: 120–2; Rosenbach 2006: 105)

  - And you remember she's completing a paper that was talking about education . . . [subordinate animate subject of a finite CC]
  - . . . Ryan denied that it was his. [subordinate inanimate subject of a finite CC]

  - . . . Serafin Cuevas denies having said any of these. [superordinate animate subject of a controlled non-finite CC]
  - And I remember the smoke coming up. [subordinate inanimate subject of a non-controlled non-finite CC]

Voice of CC Verb

- Cognitive complexity principle: "In the case of more or less explicit grammatical options the more explicit one(s) will tend to be favored in cognitively more complex environments" (Rohdenburg 1996: 151)

- Passive-voice constructions
  - more cognitively complex than active-voice (e.g. Atkinson et al. 1988: 105–6; Givón 1990: 957–8)
  - likely to favor finite complementation (Rohdenburg 1996: 166–8)

  - Well, as long as she remembers that I'm the guy that likes to play music, she's there. [finite CC verb in active voice]
  - We remember having been cared for when we were young, . . . [non-finite CC verb in passive voice]

Intervening Material in Words

- Number of lexical items between matrix verb and non-finite CC verb or finite complementizer
- Distance principle: the more elements between two constituents, the more likely the grammatically explicit variant (e.g. Kilby 1984: 175–6; Rohdenburg 1996: 159–60)
  - I can remember as a school girl in the nineteen fifties being advised to listen to the radio . . . [8 words separating the matrix verb and non-finite CC verb]
  - Rita also regrets at this moment she only applies the job . . . [3 words separating the matrix verb and finite complementizer]

5. Corpus Results

Frequency Distributions

Matrix verb	Finite	Non-finite	Total
Remember	234 (47%)	264 (53%)	498 (100%)
Regret	24 (45.3%)	29 (54.7%)	53 (100%)
Deny	95 (81.2%)	22 (18.8%)	117 (100%)
Total	**353 (52.8%)**	**315 (47.2%)**	**668 (100%)**

- Success: finite, failure: non-finite
- Default categorical values: dialect = 'Canada', meaning of CC verb = 'action', animacy = 'animate', voice of CC verb = 'active'
- Model statistics: $x^2 = 206.77$, $df = 12$, $p < 0.001$

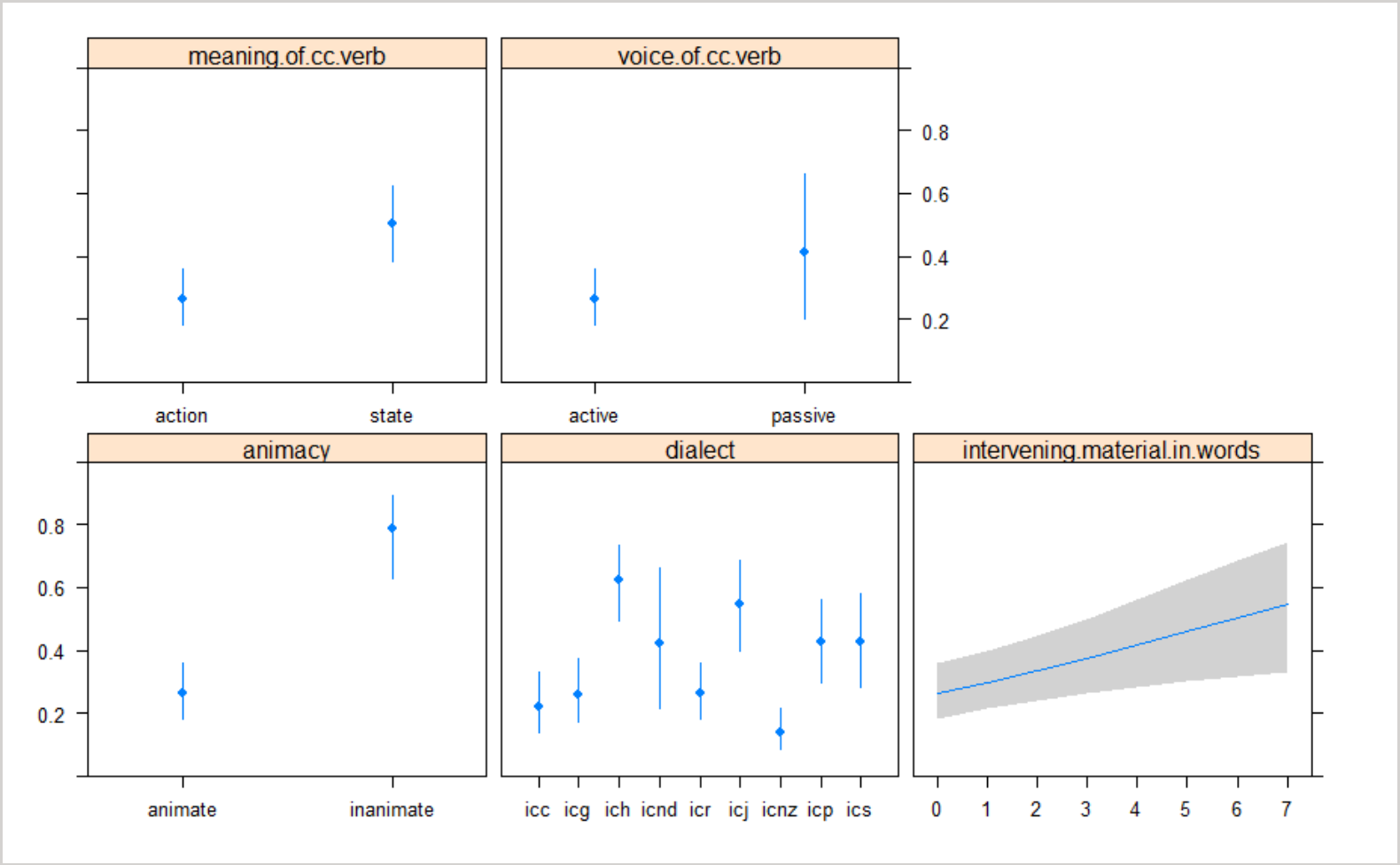
Language-External Predictor

Dialect	Wald statistic	*P*-value
Strong association with finite complementation		
Hong Kong	4.62	< 0.001
Jamaica	3.56	< 0.001
The Philippines	2.45	= 0.014
Singapore	2.33	= 0.019
Weak association with finite complementation		
India	1.68	= 0.092
Ireland	0.65	= 0.516
Great Britain	0.55	= 0.581
Weak association with non-finite complementation		
New Zealand	-1.58	= 0.115

Language-Internal Predictors

Meaning of CC verb	Wald statistic	*P*-value
Strong association with finite complementation		
Stative	5.25	< 0.001
Animacy	**Wald statistic**	***P*-value**
Strong association with finite complementation		
Inanimate	6.72	< 0.001
Voice of CC verb	**Wald statistic**	***P*-value**
Weak association with finite complementation		
Passive	1.43	= 0.153
Intervening material in words	**Wald statistic**	***P*-value**
Strong association with finite complementation		
One-unit increase	2.68	= 0.007

Predictor Overview



6. Conclusion

Summary

- Dialect: all varieties (except New Zealand) correlate with finite complementation to varying degrees
- Meaning of CC verb: non-dynamicity favors finite pattern
- Animacy: strongest predictor of response outcome
- Voice of CC verb: passive is only weakly associated with finite complementation (against presumed correlation with explicit variant)
- Intervening material in words: the larger the syntactic distance, the more likely the finite pattern (consistent with 'distance principle')

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