



Negation and the Cognitive Complexity Principle in the English clausal complementation system

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Aim

- Complexity Principle Embedded Negation Constraint
- Complementation
- REGRET
- World Englishes (WEs)



Complementation and World Englishes (WEs)

- Many diachronic studies: Great Complement Shift
 - Massive restructuring
 - Spread of infinitive clauses at the expense of finite clauses
 - Expansion of the AcI type of infinitive clauses to verbs of knowing, thinking and declaring (And pus seib Crist, 'bat he seib hise apostlis to be hise frendis...')
 - Rise and development of for NP to-infinitives (it was easy for him to go)
 - the gerund's development of verbal features during Late ME (weakening the body by too much abstinence)
 - the gerund's establishment as a second type of non-finite complements alongside infinitives

(Warner 1982; Fischer 1988; Rohdenburg 1995, 2006; Fanego 1996, 2004, 2007; Rudanko 1999, 2000; Vosberg 2003; De Smet 2013; Rickman & Rudanko 2018)



Complementation and World Englishes (WEs)

- - "a classic example [of innovation in varieties in phase 3, nativization] is the complementation patterns which verbs and also adjectives typically enter" (Schneider 2007: 86)
 - "core area of lexicogrammar showing clear traces of regional differentiation is verb complementation" (Mukherjee & Hoffmann 2006: 148)
 - understudied
 - Ditransitive verbs
 - Competition between gerunds and infinitives

(Olavarria de Ersson and Shaw 2003; Mukherjee and Hoffmann 2006; Mukherjee and Schilk 2008; Mukherjee and Gries 2009; Bernaisch 2013; Nam et al. 2013; Schilk et al. 2012, 2013; Deshors 2015; Gries and Bernaisch 2016; Deshors and Gries 2016)



Complementation and World Englishes (WEs)

- Language contact and Second Language Acquisition (SLA) processes
 - Isomorphism or transparency

one-to-one mapping of form and meaning

Steger & Schneider (2012) study **complementation** and argue that **WEs** should show a **preference for finite patterns** over non-finite structures, that is, a preference for more explicit forms

(Slobin 1980; Williams 1987; Schneider 2012, 2013; Steger & Schneider 2012; Green 2017)



REGRET

- Retrospective verb
- (iii) RETROSPECTIVE VERBS. For three verbs forget, remember, and regret, the 'potentiality'/'performance' distinction becomes extended into the past so that there is a temporal (as well as in part modal) difference between the two constructions. The infinitive construction indicates that the action or event takes place after (and as a result of) the mental process denoted by the verb has begun, while the reverse is true for the participle construction, which refers to a preceding event or occasion coming to mind at the time indicated by the main verb:

I regret to tell you that John stole it. ['I regret that I am about to tell you that John stole it']

I regret telling you that John stole it. ['I regret that I told you that John stole it' or '. . . that I am now telling you . . .']

In sum... Anterior or Participle or retrospective gerund Posterior or → Infinitive prospective

(Quirk et al 1985: 1993)



REGRET

```
[56] i a. She <u>tried</u>, to open the window.
                                    b. She <u>tried</u><sub>2</sub> opening the window.
                                    b. They fear, going out at night.
   ii a. They fear, to go out at night.
   iii a. He scorns to co
                           Scope of variation
   iv a. I regret, to info
specifically on his part. I
                                            gerund
                                                                to-infinitive
                            Anterior and
present state or past situ
                            simultaneous
                                            that/zero
                                                                that/zero
with 1st person simple p
                            meanings
```

- that/zero-CCs \rightarrow anterior, posterior and simultaneous meanings (Independent Time Reference (ITR); Noonan 2007: 103)
- infinitive → performative function with verbs of speaking → bound to be simultaneity (Vosberg 2003: 2015)
 formulaic



Complexity Principle

in the case of more or less explicit constructiona one(s) will tenc Scope of variation (Rohdenburg 1996: 15 (Rohdenburg 1996: 15 gerund Anterior and

simultaneous

meanings

explicitly marked for:

- tense and agreement
- modality
- complementizer

(Givón 1985: 200; Steger & Schneider 2012: 165)

Embedded meanings

Negated complements tend to be realized by maximally explicit clausal **structures** (Rohdenburg 2018: 138)

that/zero 🤄

SITUCIUTES (Rohdenburg 2018: 138)



Negation

- Widely studied → negative scope with quantifiers, neg-raising, and double or multiple negation (Tottie 1991:1)
 - NOT the variation between *not*-negation and *no*-negation
 - NOT in complementation
- "some forms of no-negation exhibit a similar influence on the choice of clausal variants to that of not-negation" (Rohdenburg 2015: 103)
 - Considers *not*-neg and *never*
- "would have preferred to include a series of detailed analyses of at least some major types of no-negation" (Rohdenburg 2015: 103)

1	II	III
Free	Bound	
Nonat	Affixal	
<i>Not</i> -negation	<i>No</i> -negation	
not, -n't	never	a-
	neither	dis-
	nobody	in-
	no	non-
	none	un-
	nor	
	nothing	-less
	nowhere	-out

(Tottie 1991: 8)

Research questions

- 1. Is there a preference for *that*/zero-CCs over –*ing* CCs when there is negation in the CC? (Complexity Principle)
- 2. Is there a preference for *that* over zero-CCs when there is negation in the CC? (Complexity Principle)
 - 1a-2a. Is this preference stronger in L2 varieties? (Isomorphism and transparency)
- 3. Do *not*-negation and *no*-negation have the same effect with both complementation patterns (*that*/zero-CCs and –*ing* CCs)?
- 4. Do *not*-negation and *no*-negation have the same effect with both complementation patterns (*that* and zero-CCs)?



Methodology

- Corpus of Global Web-Based English (GloWbE)
 - L1 varieties (British (GB) and American English
 (US)) → stage 5 (similar distribution)
 - Asian varieties (India (IN), Sri Lanka (LK),
 Pakistan (PK), Bangladesh (BD), Singapore (SG),
 Malaysia (MY), Philippines (PH), Hong Kong
 (HK))
 - African varieties (South Africa (ZA), Nigeria (NG), Ghana (GH), Kenya (KE), Tanzania (TZ))
 - Caribbean variety (Jamaica (JM))

	# examples			
L1		GB	612	1176
Ll	LI	US	564	11/0
L2	Asia	IN	343	1699
		LK	156	
		PK	213	
		BD	106	
		SG	303	
		MY	232	
		PH	196	
		HK	150	
	Africa	ZA	158	
		NG	349	1030
		GH	216	
		KE	171	
		TZ	136	
	Caribbean	JM	JM 132	
	TOTAL	3473		

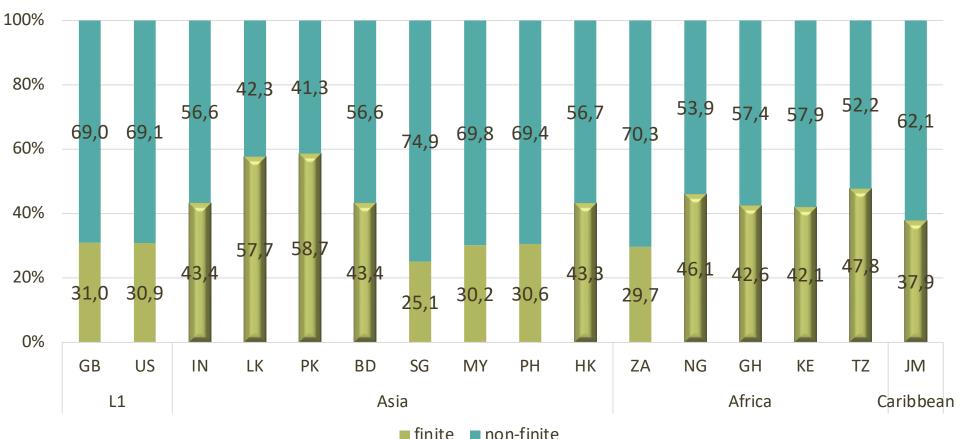


Methodology

- 0. complementation type & temporal relation
- 1. positive CC VS. negative CC
- 2. negative marker
- 3. type of negation

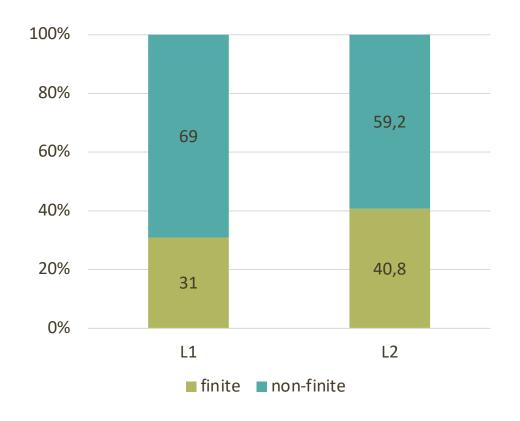
<i>Not</i> -negation	<i>No</i> -negation
	never
	neither
	nobody
	no
not, -n't	none
	nor
	nothing
	nowhere

Overview of the data / CC pattern



Steger & Schneider (2012) study complementation and argue that in WEs should show a preference for finite patterns over nonfinite structures, that is, a preference for more explicit forms

Overview of the data / Cc pattern



☐ Always preference for non-finite

I did not **regret** *investing* my time in reading it. (GloWbE-BD)

☐ More finite in L2s

 $(x^2 (df=1) 34.49, <.0001)$

Steger & Schneider (2012) study complementation and argue that in WEs should show a preference for finite patterns over non-finite structures, that is, a preference for more explicit forms

Overview of the data / Cc pattern

		Regret	
		That	-ing
CEECS	RawF	0	0
	RelF	0%	0%
	NormF	0	0
CEMET	RawF	0	0
	RelF	0%	0%
	NormF	0	0
CLMET (1710-1920)	RawF	126	38
	RelF	76.8%	23.2%
	NormF	0.839	0.253
COBUILD (1990s)	RawF	108	147
	RelF	42.4%	57.6%
	NormF	0.192	0.262

Why this difference b/w L1 and L2?

1. Language contact and SLA processes

Steger & Schneider (2012) study **complementation** and argue that in **WEs** should show a **preference for finite patterns** over non-finite structures, that is, a preference for more explicit forms

Substrate languages (Romasanta forthcoming)

2. Historical trait

"The study of syntactic variation in non-standard varieties offers at the same time a look at the past and the future" (Kortmann 2006)

Gerund with v. regret \rightarrow 18th C. (Visser 1963-73 : 1867) British colonies \rightarrow 16th C. - 18th C.

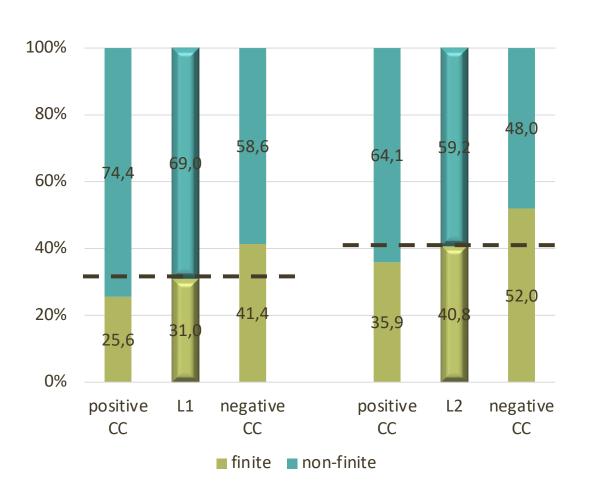
Results

- 1. Is there a preference for that/zero-CCs over —ing CCs when there is negation in the CC? (Complexity Principle)
- 2. Is there a preference for that- over zero-CCs when there is negation in the CC? (Complexity Principle)

1a-2a. Is this preference stronger in L2 varieties? (Isomorphism and transparency)



1. Choice between non-finite -ing and finite that/zero CCs



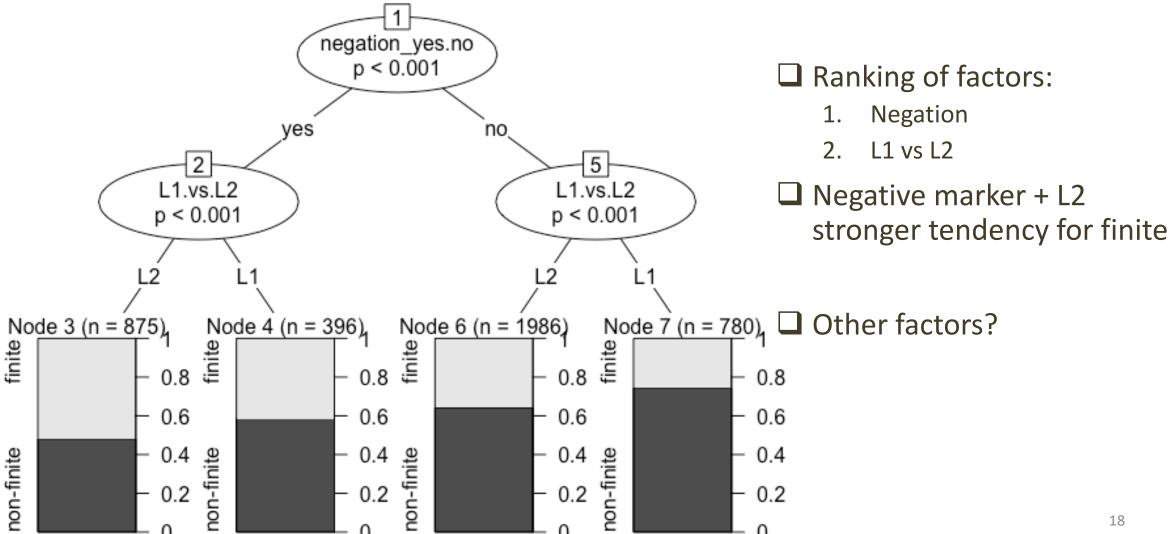
- ☐ L2s always stronger use of finite CC
- Negative CCs → stronger use of finite patterns

I **regret** that my conduct in this matter did not meet the standards to which I have always held myself (GloWbE-US)

☐ Same increase in L1 and L2s (10%)

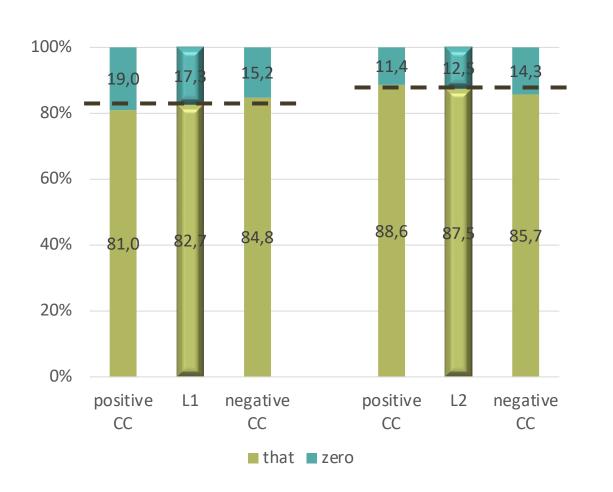


1. Choice between non-finite -ing and finite that/zero CCs





2. Choice between finite patterns that and zero CCs



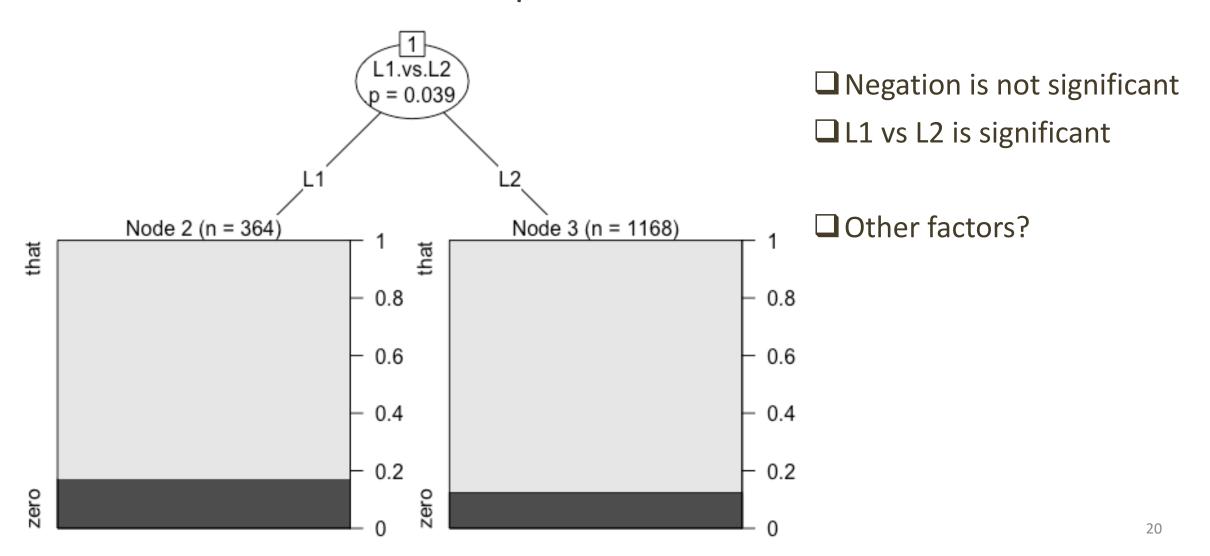
- ☐ Always **preference** for **that-CCs**
- □ L1 → slightly stronger use of that

I **regret** that I haven't kept a running record of this outside of their charts. (GloWbE-GB)

- □ L2 → slightly stronger use of zero-CCs
- ... I **regret** \emptyset I can not agree with you. (GloWbE-LK)



2. Choice between finite patterns that and zero CCs

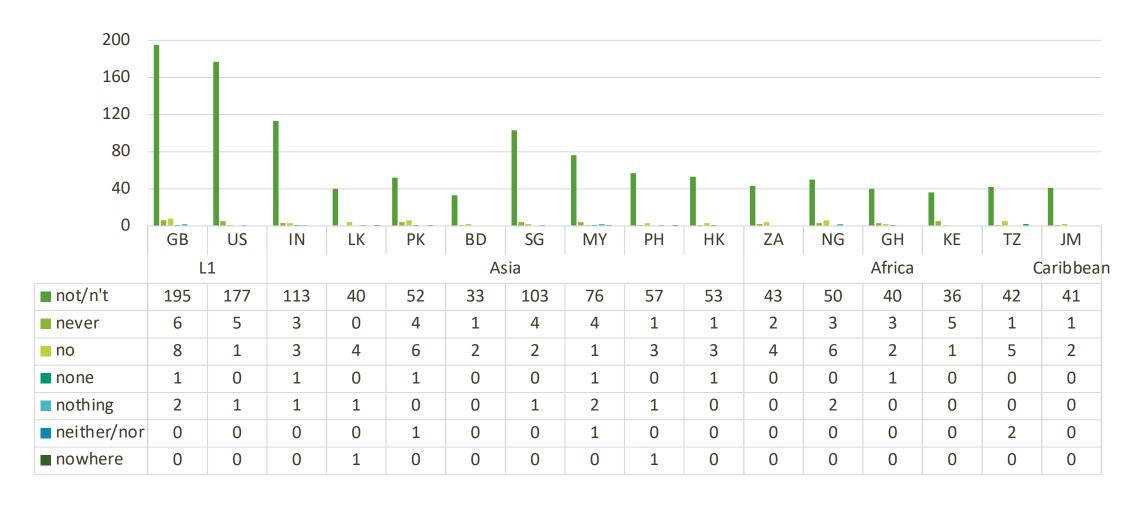


Results

- 3. Do *not*-negation and *no*-negation have the same effects with both complementation patterns (*that*/zero-CCs and *-ing* CCs)?
- 4. Do *not*-negation and *no*-negation have the same effects with both complementation patterns (*that* and zero-CCs)?



Overview of the data / Negative markers



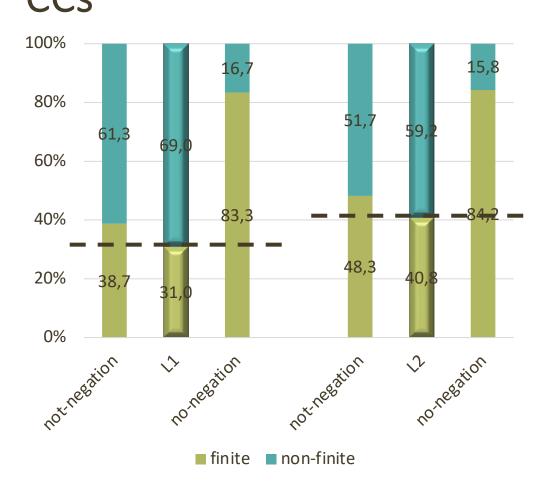


Overview of the data / Negative markers





3. Choice between non-finite *-ing* and finite *that*/zero CCs

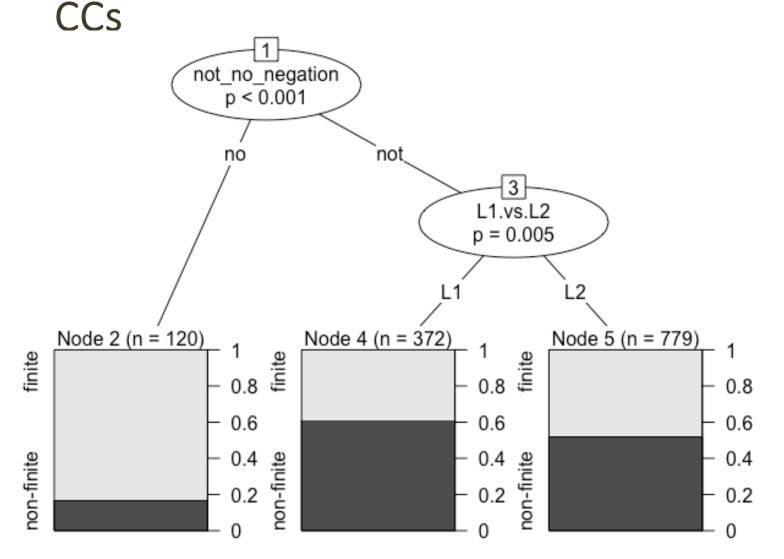


- "some forms of no-negation exhibit a similar influence on the choice of clausal variants to that of not-negation" (Rohdenburg 2015: 103)
- Not-negation → preference for non-finite
- Slight increase in the use of finite
 I do regret not breaking it off sooner (GloWbE-US)
- No-negation → stronger preference for finite

He **regretted** that the upper class saw *no* reason why people should complain about the idea (GloWbE-NG)



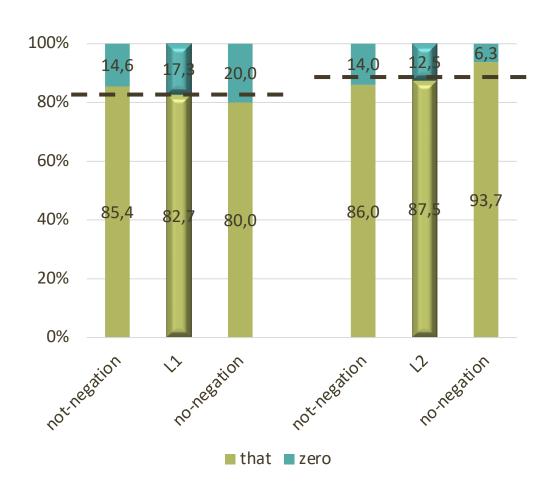
3. Choice between non-finite -ing and finite that/zero



- ☐ Ranking of factors:
 - 1. Negation
 - 2. L1 vs L2
- No-negation → diff. b/wL1 and L2 not sinificant
 - Preference for finite
- ☐ *Not*-negation
 - Preference for non-finite
 - L2 stronger preference for finite



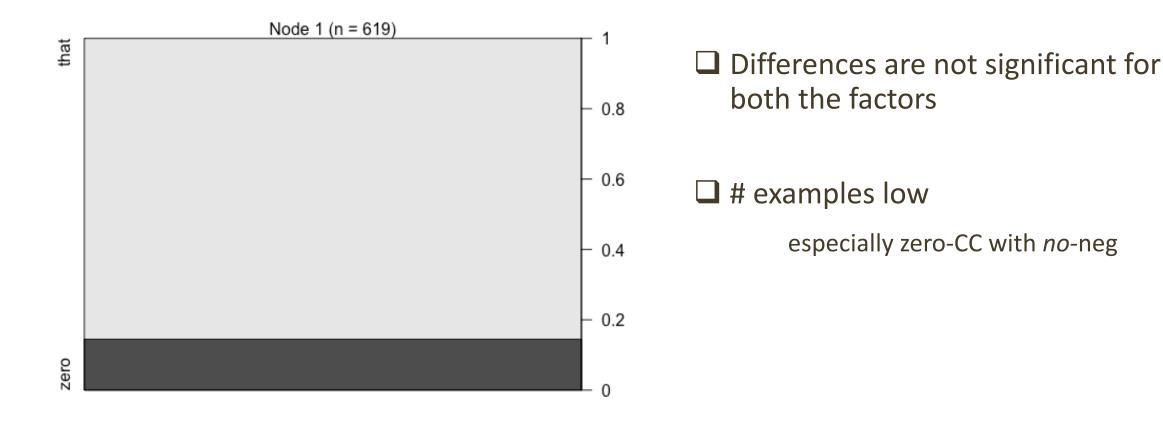
4. Choice between finite patterns that and zero CCs



- "some forms of no-negation exhibit a similar influence on the choice of clausal variants to that of not-negation" (Rohdenburg 2015: 103)
- ☐ *Not*-negation
 - L1: Slight increase in the use of finite
 - L2: Slight decrease in the use of finite
- ☐ No-negation
 - L1: Slight decrease in the use of finite
 - L2: Slight increase in the use of finite



4. Choice between finite patterns that and zero CCs



Conclusion (i)

- ✓ WEs → preference for finite CC (Steger & Schneider 2012)
- 1. Is there a preference for *that*/zero-CCs over –*ing* CCs when there is negation in the CC? (Complexity Principle)
- **✓** YES
- 1a. Is this preference stronger in L2 varieties? (Isomorphism and transparency)
- **✓** YES
- 2. Is there a preference for that- over zero-CCs when there is negation in the CC? (Complexity Principle)
- X NO, differences are not significant
 - 2a. Is this preference stronger in L2 varieties? (Isomorphism and transparency)

NA

Conclusion (ii)

- ✓ Not-negation → preferred type of negation
- 3. Do *not*-negation and *no*-negation have the same effects with both complementation patterns (*that*/zero-CCs and –*ing* CCs)?
- X NO
 - *no*-negation → stronger preference for finite
 - not-negation → stronger preference for non-finite, weaker in L2
- **4.** Do *not*-negation and *no*-negation have the same effects with both complementation patterns (*that* and zero-CCs)?
- **✓** YES

References



- Bernaisch, Tobias. 2013. "The verb-complementational profile of offer in Sri Lankan English." In Magnus Huber & Joybrato Mukherjee (eds.), Corpus Linguistics and Variation in English: Focus on Non-Native Englishes (Studies in Variation, Contacts and Change in English 13). Helsinki: VARIENG.
- De Smet, Hendrik. 2013. Spreading patterns: Diffusional change in the English system of complementation. New York: Oxford University Press.
- Deshors, Sandra C. 2015. "A constructionist approach to gerundial and infinitival verb complementation patterns in native and Hong Kong English varieties." English Text Construction, 8 (2): 207-235.
- Deshors, Sandra C. & Stefan Th. Gries. 2016. "Profiling verb complementation constructions across New Englishes: A two-step random forest analysis of ing vs. to complements". International Journal of Corpus Linguistics, 21 (2): 192-218.
- Fanego, Teresa. 1996a. "On the historical development of the English retrospective verbs". Neuphilologische Mitteilungen 97, 71-9.
- Fanego, Teresa. 2004a. "On reanalysis and actualization in syntactic change: The rise and development of English verbal gerunds". Diachronica 21, 5-55.
- Fanego, Teresa. 2007. "Drift and development of sentential complements in British and American English from 1700 to the present day". In Javier Pérez-Guerra, Dolores González-Álvarez, Jorge Luis Bueno-Alonso & Esperanza Rama-Martínez (eds.), "Of varying language and opposing creed": New insights into Late Modern English. Bern: Peter Lang, 161-235
- Fischer, Olga. 1988. "The rise of the for NP to V constructions: An explanation". In Graham Nixon and John Honey (eds.), An historic tongue: Studies in English linguistics in memory of Barbara Strang, 67-88. London: Routledge.
- Givón, Thomas. 1985. "Iconicity, isomorphism and non-arbitrary coding in syntax". Iconicity in syntax, ed. by John Haiman, 187-219. Amsterdam/Philadelphia: John Benjamins.
- Davies, Mark. 2013. Corpus of Global Web-Based English: 1.9 billion words from speakers in 20 countries. http://corpus.byu.edu/glowbe/. Accessed 8 Feb. 2018.
- Green, Clarence. 2017. Patterns and development in the English Clause System: A corpus-based grammatical overview. Singapore: Springer.
- Gries, Stefan Th. & Tobias J. Bernaisch. 2016. "Exploring epicentres empirically: Focus on South Asian Englishes". English World-Wide 37(1): 1-25.
- Heyvaert, L., and Cuyckens, H. (2010). Finite and gerundive complementation in Modern and Present-day English: Semantics, variation and change. In M. E. Winters, H. Tissari, and K. Allan (Eds.), Historical Cognitive Linguistics (p. 132-159). Berlin: Mouton de Gruyter.
- Horn, L.R. 1978. "Some Aspects of Negation". In J.H. Greenberg (ed.), Universals of Human Language, Vol. 4. Stanford: Stanford University Press, 127-210.
- Huddleston, Rodney, Geoffrey K. Pullum. 2002. The Cambridge Grammar of the English Language. Cambridge: Cambridge University Press.
- Kortmann, Bernd. 2006. Syntactic variation in English: A global perspective. In Bas Aarts and April McHahon (eds.), Hanbook of English Linguistics, 603-624. Oxford: Blackwell.
- Mukherjee, Joybrato & Marco Schilk. 2008. "Verb-complementation Profiles across Varieties of English". In Terttu Nevalainen, Irma Taavitsainen, Päivi Pahta & Minna Korhonen (eds.), The Dynamics of Linguistic Variation: Corpus evidence on English past and present. Amsterdam: John Benjamins, 163-181.
- Mukherjee, Joybrato & Sebastian Hoffman. 2006. "Describing verb-complementation profiles of New Englishes. A pilot study of Indian English". English World-Wide, 27 (2): 147–173.
- Mukherjee, Joybrato & Stephan Th. Gries. 2009. "Collostructional nativisation in New Englishes. Verb-construction associations in the International Corpus of English." English World-Wide, 30 (1): 27-51.
- Nam, Christopher, Sach Mukherjee, Marco Schilk & Joybrato Mukherjee. 2013. "Statistical analysis of varieties of English". Journal of the Royal Statistical Society 176: 777–793.
- Noonan, Michael. 2007. "Complementation". Language typology and syntactic description (2nd ed.), vol. II, Complex constructions, ed. by Timothy Shopen, 52–150. Cambridge: Cambridge University Press.
- Olavarria de Ersson, Eugenia & Phillip Shaw. 2003. "Verb complementation patterns in Indian standard English." English World-Wide, 24 (2): 137-161.
- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech & Jan Svartvik. 1985. A comprehensive grammar of the English language. London: Longman.
- Rickman, Paul & Juhani Rudanko. 2018. Corpus-based studies on non-finite complements in recent English. Houndmills, Hampshire: Palgrave Macmillan
- Rohdenburg, Günter. 1995. "On the replacement of finite complement clauses by infinitives in English". English Studies 4, 367-88.
- Rohdenburg, Günter. 1996. "Cognitive complexity and increased grammatical explicitness in English". Cognitive Linguistics, 7 (2): 149-82.
- Rohdenburg, Günter. 2006. "The role of functional constraints in the evolution of the English complementation system". In Christiane Dalton-Puffer, Nikolaus Ritt, Herbert Schendl & Dieter Kastovsky (eds.), Syntax, style and grammatical norms: English from 1500–2000. Frankfurt: Lang, 143–166.
- Rohdenburg, Günter. 2015. "The embedded negation constraint and the choice between more or less explicit clausal structures in English". Perspectives on complementation: Structure, variation and boundaries, ed. by Mikko Höglund, Paul Rickman, Juhani Rudanko & Jukka Havu. 101-127. Houndmills: Palgrave Macmillan.
- Rohdenburg, Günter. 2018. The use of optional complement markers in present-day English: The role of passivization and other complexity factors. In Mark Kaunisto, Mikko Höglund, Paul Rickman (eds.), Changing Structures: Studies in constructions and complementation, 129-147. Amsterdam/Philadelphia: John Benjamins.
- Romasanta, Raquel P. forthcoming. Variability in Verb Complementation: Determinants of Grammatical Variation in Indigenized L2 Varieties of English. In Hanna Parviainen, Mark Kaunisto and Päivi Pahta (eds.), Corpus Approaches into World Englishes and Language Contrasts. Studies in Variation. Contacts and Change in English eSeries.
- Rudanko, Juhani. 1999. Diachronic studies of english complementation patterns: eighteenth century evidence in tracing the development of verbs and adjectives selecting prepositions and complement clauses. Lanham: University Press of America
- Rudanko, Juhani. 2000. Corpora and complementation: tracing sentential complementation patterns of nouns, adjectives, and verbs over the last three centuries. Lanham: University Press of America.
- Schilk, Marco, Joybrato Mukherjee, Christopher Nam & Sach Mukherjee. 2013. "Complementation of ditransitive verbs in south Asian Englishes: A multifactorial analysis." Corpus Linguistics and Linguistic Theory, 9(2): 187-225.
- Schilk, Marco, Tobias Bernaisch & Joybrato Mukherjee. 2012. "Mapping unity and diversity in South Asian English lexicogrammar." In Marianne Hundt & Ulrike Gut (eds.), Mapping unity and diversity world-wide: corpus-based studies of New Englishes. Amsterdam, Netherlands: John Benjamins, 137-166
- Schneider, Edgar W. 2012. "Contact-induced change in English worldwide". In Terttu Nevalainen & Elizabeth Closs Traugott (eds.), The Oxford handbook of the history of English. Oxford: Oxford University Press, 572-581.
- Schneider, Edgar W. 2013. "English as a contact language: The 'New Englishes'". In Daniel Schreier & Marianne Hundt (eds.), English as a contact language. Cambridge University Press, 131-148.
- Slobin, Dan. 1980. "The repeated path between transparency and opacity in language". In Ursula Bellugi & M. Studdert-Kennedy (eds.), Signed and spoken language: Biological constraints on linguistic form. Weinheim: Verlag Chemie, 229-243.
- Steger, Maria & Edgar Schneider. 2012. "Complexity as a function of iconicity. The case of complement clause constructions in New Englishes". In Berd Kortmann & Benedikt Szmrecsanyi (eds.), Linguistic complexity: second language acquisition, indeginization, contact. Berlin: De Gruyter, 156-191.
- Tottie, Gunnel. 1991. Negation in English Speech and Writing: A Study in Variation. San Diego: Academic Press.
- Visser, Frederick Th. 1963-73. An Historical Syntax of the English Language, 4 vols. Leiden: E.J. Brill.
- Vosberg, Uwe. 2003. Cognitive complexity and the establishment of -ing constructions with retrospective verbs in Modern English. In Marina Dossena & Charles Jones (eds.), Insights into Late Modern English, 197-220. Berlin: Peter Lang.
- Warner, Anthony. 1982. Complementation in Middle English and the methodology of historical syntax. London: Croom Helm.
- Williams, Jessica. 1987. "Non-native varieties of English: A special case of language acquisition". English World-Wide, 8 (2): 161-199.



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