We're done our project or We're done with our project

Investigating [be done X] and [be done with X] in Canadian English

Jennifer Hinnell & Kristina Geeraert

University of Alberta

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OUTLINE

- Introduction
- Methodology
- Findings
 - Distinctive Collexeme Analysis
 - Naïve Discriminative Learner
- Discussions & Conclusions

THE CONSTRUCTIONS

[bdwX]

- Once you are done with the book, trade it.
- ...boring to watch like the Dodgers. I'm done with that crap franchise.

[bdX]

- I'm done my finals on Dec 9th, and then head home.
- Martin is done his bass tracks and we're ready to start vocals.
- By the time I am done dinner, I don't want my side snack.

THE CONSTRUCTIONS

[bdwX]



Done with my beer

[bdX]



Done my beer

METHODOLOGY

• Data

- 750 instances of each construction
- From blogs on the .ca (Canadian) web domain using Webcorp

Coding

- A variety of semantic and syntactic variables
- Analyses
 - Distinctive Collexeme Analysis
 - Naïve Discriminative Learner

DCA (DISTINCTIVE COLLEXEME ANALYSIS)

(GRIES & STEFANOWITSCH 2004)

- Context holds important clues to a word/phrase/ construction's semantic and syntactic properties
- Constructional compositionality (Sweetser & Dancygier 2005)
 - [bdX] conveys meaning that is not captured in the semantics introduced by any one element in the expression (Hinnell 2012)

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DCA

• "identifies lexemes that exhibit a strong preference for one member of the pair as opposed to the other, and thus makes it possible to identify subtle distributional differences between the members of such a pair"

(Gries & Stefanowitsch 2004: 97)

- Intersect of common nouns: 438 [bdX], 339 [bdwX]
- Fischer-exact test, returns collostructional strength

PREFERENCES IN [bdwX]

words	obs. [bdX]	obs. [bdwX]	exp. [bdX]	exp. [bdwX]	coll.stre	ngth
this	10	28	21.42	16.58	3.93	***
show	2	9	6.2	4.8	1.95	*
thing	1	7	4.51	3.49	1.84	*
process	1	6	3.95	3.05	1.53	*
that	43	49	51.86	40.14	1.51	*
one	8	13	11.84	9.16	1.16	
design	1	4	2.82	2.18	0.93	
knitting	1	4	2.82	2.18	0.93	
season	1	4	2.82	2.18	0.93	
snow	1	4	2.82	2.18	0.93	

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PREFERENCES IN [bdX]

words	obs. [bdX]	obs. [bdwX]	exp. [bdX]	exp. [bdwX]	coll.stre	ngth
work	24	6	16.91	13.09	2.27	**
degree	13	2	8.46	6.54	1.88	*
term	10	1	6.2	4.8	1.78	*
homework	12	2	7.89	6.11	1.68	*
set	7	1	4.51	3.49	1.14	
shopping	20	8	15.78	12.22	1.14	
post	11	3	7.89	6.11	1.12	
exam	14	5	10.71	8.29	1.03	
year	10	3	7.33	5.67	0.96	
semester	6	1	3.95	3.05	0.94	

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NDL (NAÏVE DISCRIMINATIVE LEARNER)

(BAAYEN, 2011; ARPPE, MILIN, & BAAYEN, 2011)

- Based on classical conditioning
 - present cue w/outcome; associate outcome w/cue
- But we do not learn cues in isolation
 - learner must determine which cues are important
- NDL imitates learning by modelling different combinations of grammar
 - model assigns a weight to each variable
 - increases in weights when used in a certain context
 - greater increases when the variable is distinctive
 - positive weight when variable is associated w/outcome
 - weight adjustment until reach equilibrium "adult" state

NDL MODEL

- Variables included in the model:
 - Collocate Sem Field semantic category of object (e.g. lesson)
 - Collocate Property type of object/noun (e.g. activity)
 - Clause Type type of clause
 - Subject subject of the sentence
 - Determiner determiner in object NP
- Measures of goodness of fit:
 - Accuracy: 0.713
 - C: 0.783
 - AIC: 1927.646
 - (pseudo) R²: 0.255

5 MOST DISTINCTIVE SENTENCES FOR [bdwX]

Activation Weight	Collocate Sem Field	Collocate Property	Subject	Determiner	Clause Type		
1and she	1and she believed he was done with the other woman						
1.00	relationship	person	s/he	def	rel		
2. are you don	ne with that Flor	rida thing					
0.99	general	abstract	you	dem	other		
3. I thought w	3. I thought we were done with this guy.						
0.98	relationship	person	we	dem	rel		
4is when	4 is when you're done with that lover but your friends aren't.						
0.93	relationship	person	you	dem	sub		
5. Thought you were "done" with the property bust? Think again							
0.93	general	abstract	you	def	rel		

5 MOST DISTINCTIVE SENTENCES FOR [bdX]

Activation Weight	Collocate Sem Field	Collocate Property	Subject	Determiner	Clause Type		
1. Once the ed	1. Once the editor-in-chief is done his/her term						
0.82	program	duration	NP	poss	sub		
2. And when	Felix is done his	term as governo	or				
0.82	program	duration	NP	poss	sub		
3. Well, now	3. Well, now that Erin is done her school term she is on the way to visit						
0.82	program	duration	NP	poss	sub		
4. Provided th	4. Provided they wait until Raj is done his hip hop aerobics class						
0.78	lesson	activity	NP	poss	sub		
5. One day after Ian was done his classes we went up behind the university							
0.78	lesson	activity	NP	poss	sub		

VARIABLE DISTRIBUTION

	[bdwX]	[bdX]
Subject	s/he, you, we	NP
Person	3 rd , 2 nd , 1 st	3 rd
Number	sg, pl	sg
Determiner	def, dem	poss
Tense	past, pres	pres
General Semantic Field	personal, work, leisure	work, education
Collocate Semantic Field	relationship, general	program, lesson
Collocate Property	person, abstract	duration, activity
Clause Type	rel, other, sub	sub

CONCLUSIONS & FUTURE RESEARCH

Conclusions

- Results consistent with previous studies (Yerastov 2010; Hinnell 2012)
- Abstract nouns [bdwX], work/education with [bdX]
- [bdwX] more general construction, [bdX] more specific

Further Analyses

- Global Web-Based English Corpus
- Covarying Collexeme Analysis (Stefanowitsch & Gries 2005): two slots vary simultaneously
- Experimental studies: force choice or eye-tracking

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REFERENCES

- Arppe, A., P. Milin, & R. H. Baayen (2011). Naive discriminative learning. version: 0.1.1.
- Baayen, R. H. (2011). Corpus linguistics and naive discriminative learning. *Brazilian Journal of Applied Linguistics* 11, 295-328.
- Gries, Stefan Th. 2007. Coll.analysis 3.2a. A program for R for Windows.
- Gries, S. Th. & A. Stefanowitsch. (2004). Extending collostructional analysis: A corpus-based perspective on 'alternations'. *International Journal of Corpus Linguistics* 9.1: 97-129.
- Hinnell, J. (2012). A construction analysis of [be done X] in Canadian English. Unpublished Master's Thesis, Simon Fraser University, Vancouver, BC.
- Kilgarriff, Adam, & Grefenstette, Gregory. (2003). Web as corpus. *Computational Linguistics*, 29(3), 333-347.
- Sweetser, E. & B. Dancygier (2005) *Mental spaces in grammar: Conditional constructions.* Cambridge, UK: Cambridge University Press.
- WebCorp. (1999-2012). http://www.webcorp.org.uk.
- Yerastov, Y. (2010). 'I'm done dinner': When synchrony meets diachrony. Unpublished Dissertation, University of Calgary, Calgary, AB.