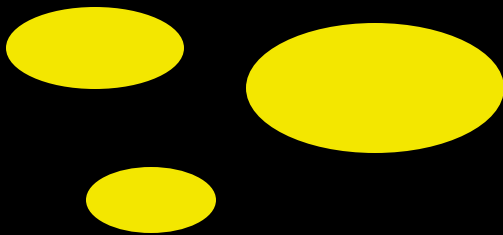


INFLECTIONAL  
ISLANDS

Sally Rice & John Newman

*University of Alberta*

*CANADA*



defective verb paradigms

inflectional islands

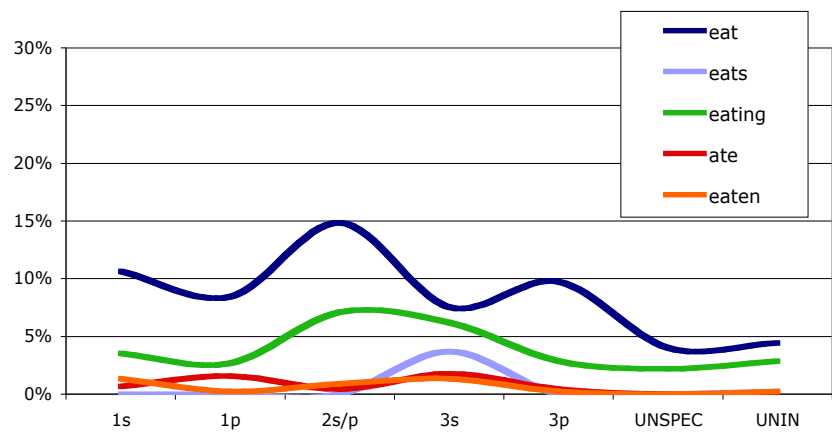
the conceit of the lemma



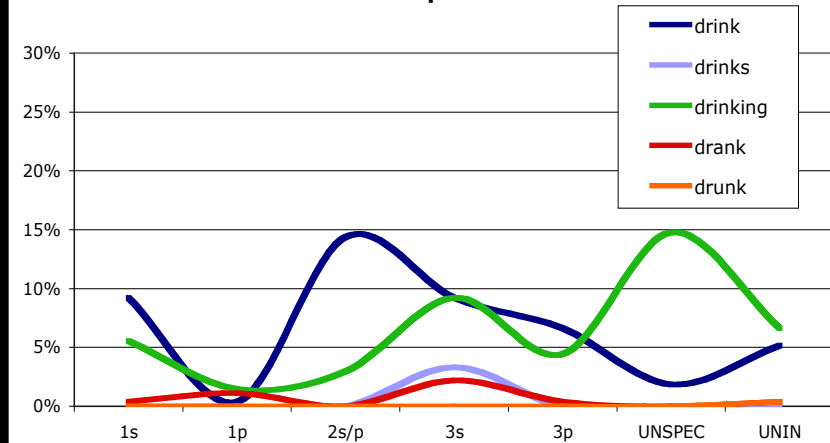
words-in-context (WICs)

defective verb paradigms

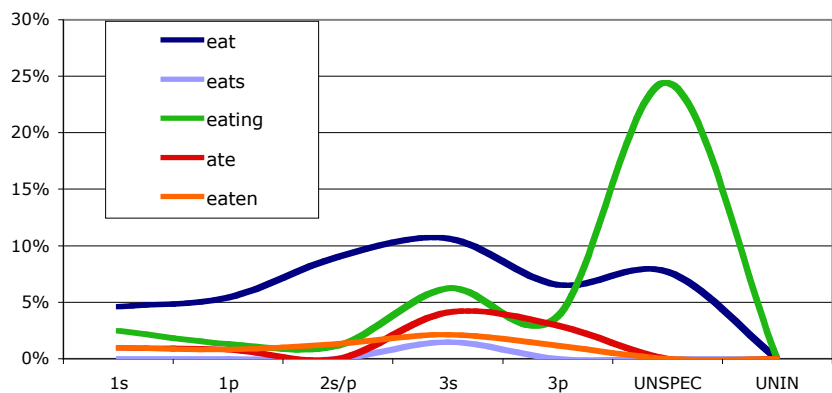
**EAT - Spoken BNC**



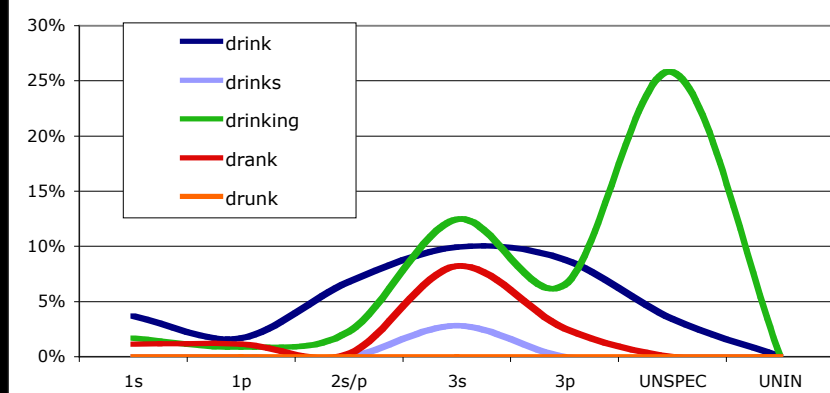
**DRINK - Spoken BNC**



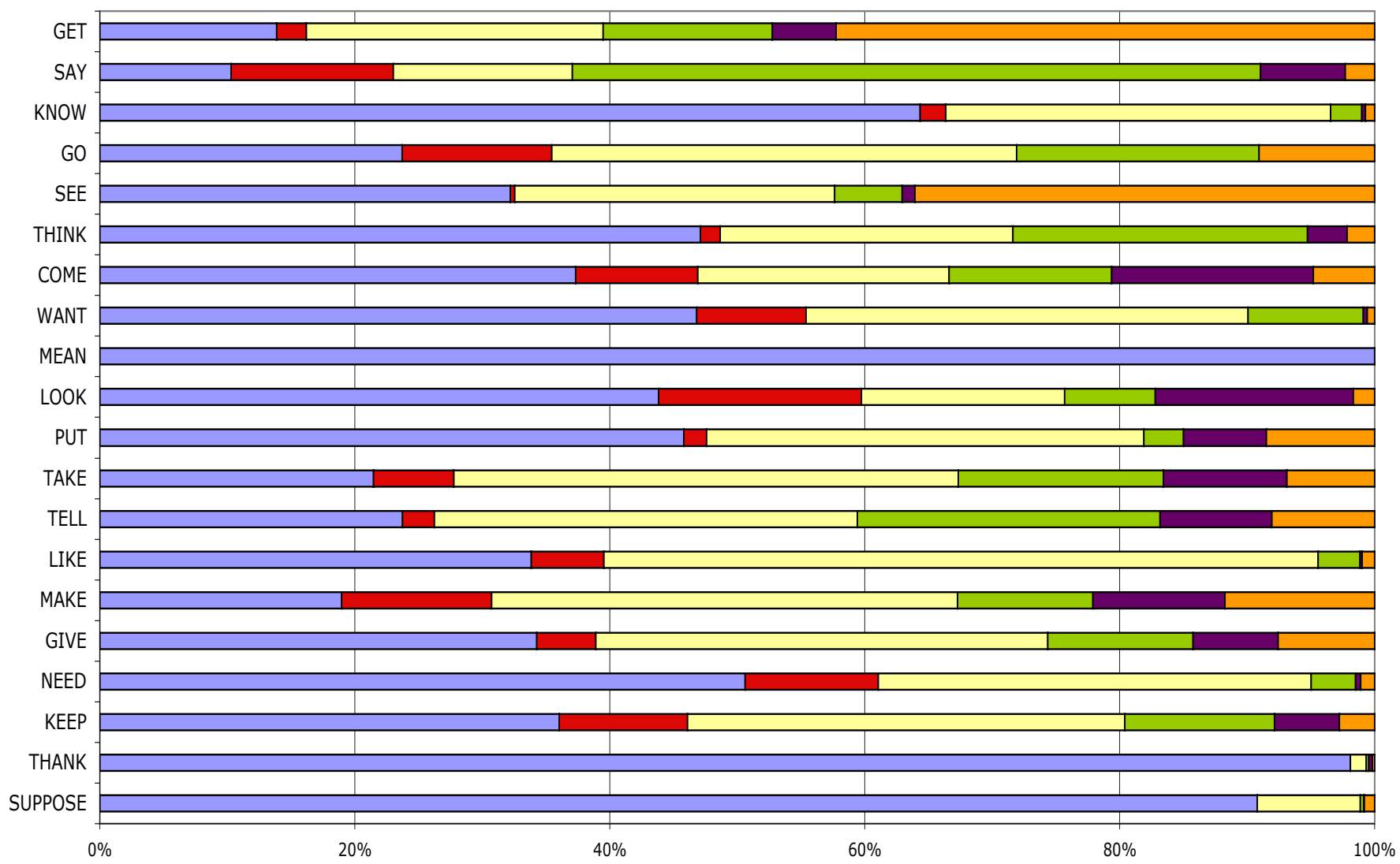
**EAT - Written BNC**



**DRINK - Written BNC**



■ VVB-verb   
 ■ VVZ-verbs   
 ■ VVI-(to) verb   
 ■ VVD-verbed   
 ■ VVG-(be) verbing   
 ■ VVN-(have) verbed



# STRUCTURE OF THE TALK

- I. describe what we mean by “inflectional islands”
- II. survey examples from published literature and our own queries of the BNC
- III. suggest implications for linguistic theory, lexicography, typology, and psycholinguistic research

# STRUCTURE OF THE TALK

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# THE VERB ISLAND HYPOTHESIS

Tomasello 1992, 2004

**V** <<< **inflection**

- children tend to use uninflected verb roots before inflected forms
- verb inflections are mastered on a verb-by-verb basis
- generalization is gradual
- initially, particular verbs “strand” inflections

# THE INFLECTIONAL ISLAND HYPOTHESIS

Rice & Newman 2005

**V** >>> **inflection**

- adults use particular inflected forms of individual verbs on a register-specific basis
- verb inflections adhere to verbs on a verb-by-verb basis
- particularization is gradual
- eventually, inflections “strand” particular verbs



# An English Verb Paradigm: SUBJ x TAM

## GO

	INF	PRES	PAST	PROG	PERF
1.SG	I need to <b>go</b>	I <b>go</b>	I <b>went</b>	I am/was <b>going</b>	I have/had <b>gone</b>
2	you need to <b>go</b>	you <b>go</b>	you <b>went</b>	you are/were <b>going</b>	you have/had <b>gone</b>
3.SG	s/he/it need to <b>go</b>	s/he/it <b>goes</b>	s/he/it <b>went</b>	s/he/it is/was <b>going</b>	s/he/it has/had <b>gone</b>
1.PL	we need to <b>go</b>	we <b>go</b>	we <b>went</b>	we are/were <b>going</b>	we have/had <b>gone</b>
3.PL	they need to <b>go</b>	they <b>go</b>	they <b>went</b>	they are/were <b>going</b>	they have/had <b>gone</b>



# Frequency Distribution in BNC<sub>all</sub>

**GO**

	INF	PRES	PAST	PROG	PERF
1.SG					
2					
3.SG					
1.PL					
3.PL					



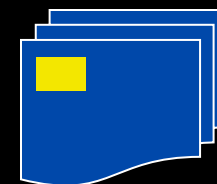
# Frequency Distribution in BNC<sub>all</sub>

**GO**

	INF	PRES	PAST	PROG	PERF
1.SG	6 %	3 %	2 %	4 %	0 %
2	2 %	10 %	0 %	3 %	0 %
3.SG	13 %	4 %	10 %	15 %	2 %
1.PL	6 %	0 %	1 %	2 %	0 %
3.PL	2 %	6 %	1 %	2 %	3 %



# Frequency Distribution in BNC<sub>all</sub>

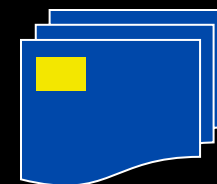


## GO

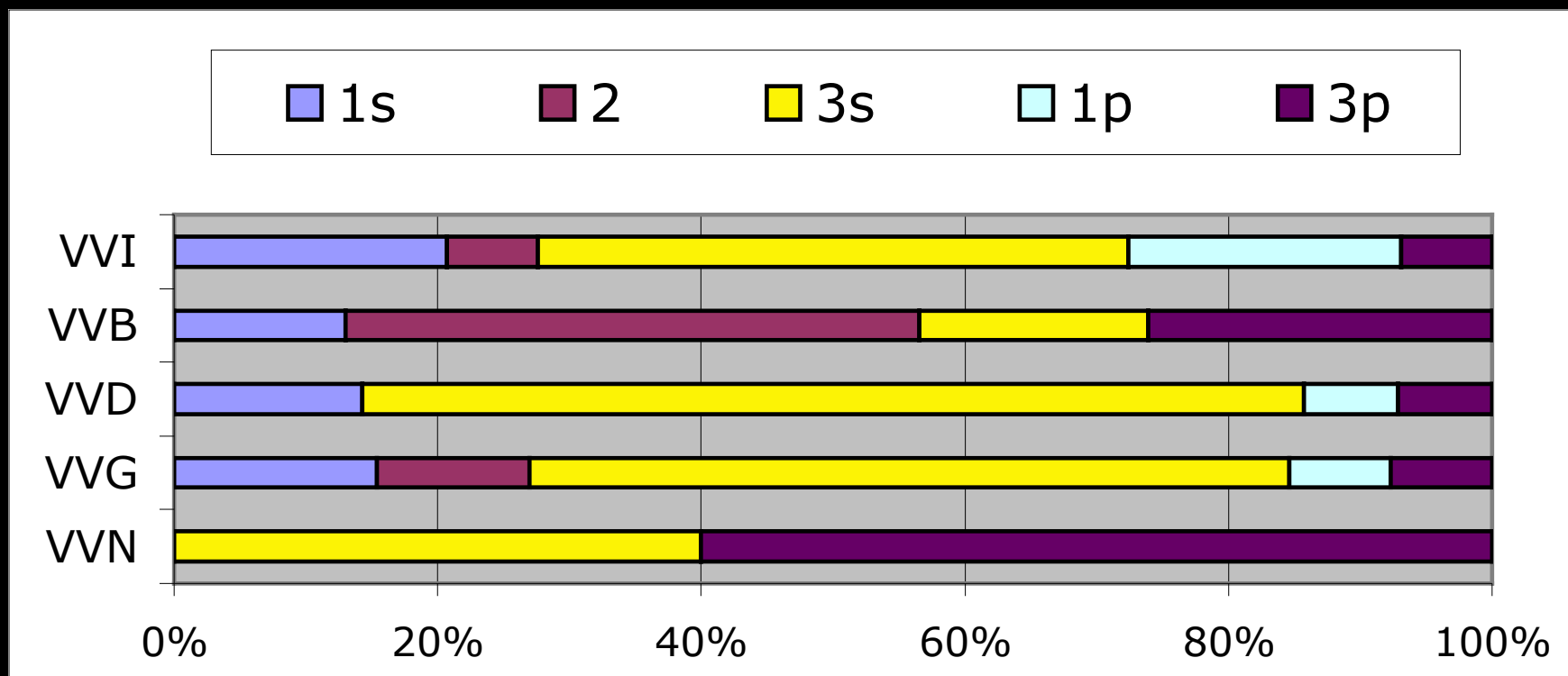
	INF	PRES	PAST	PROG	PERF
1.SG	6 %	3 %	2 %	4 %	0 %
2	2 %	<b>10 %</b>	0 %	3 %	0 %
3.SG	<b>13 %</b>	4 %	<b>10 %</b>	<b>15 %</b>	2 %
1.PL	6 %	0 %	1 %	2 %	0 %
3.PL	2 %	6 %	1 %	2 %	3 %



# Frequency Distribution in BNC<sub>all</sub>



## GO

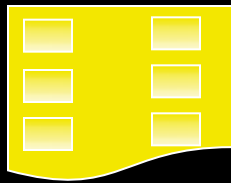


# lemmas



- argument structure(s)
- syntactic constructions
- lexical meaning

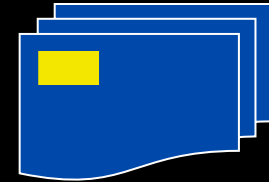
# inflected forms



“have a life of their own”

Thompson & Hopper 2001:44

# words in context (WICs)



- distribution patterns (usage)
- collocations & N-grams
- pragmatic associations
- incipient grammaticalization & idiomaticization

VVB - present, imperative

**go**



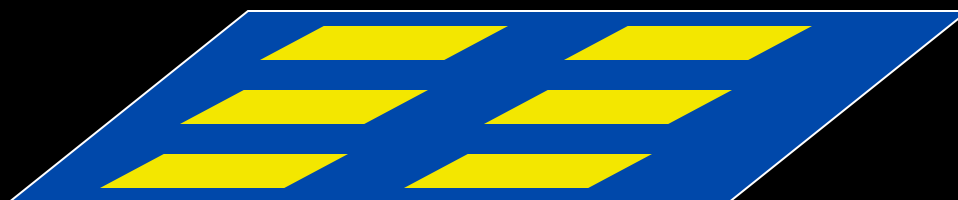
VVZ - 3SG.present

**goes**



VVI - infinitive

**go**



VVD - past

**went**



VVG - progressive

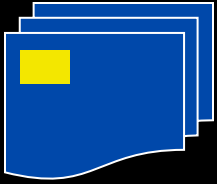
**going**



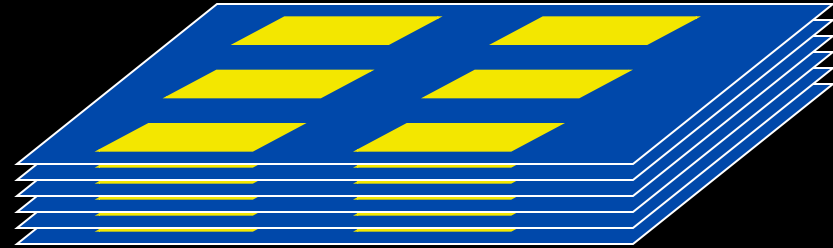
VVN - perfect

**gone**

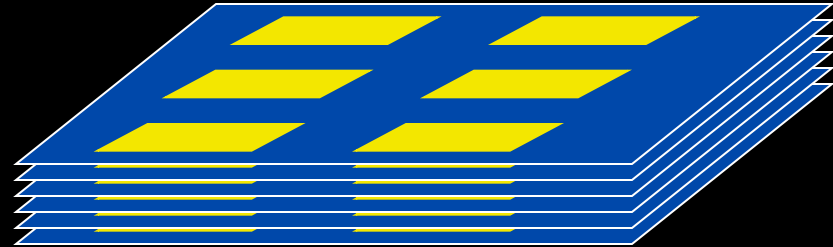




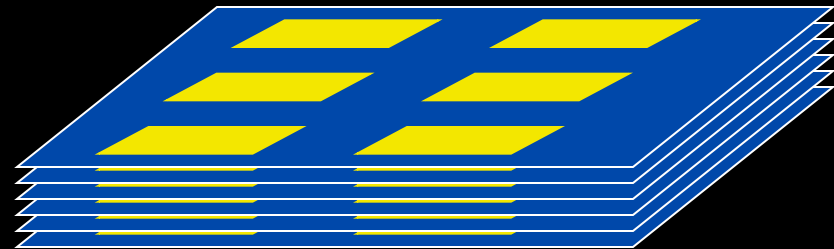
conversation



fiction



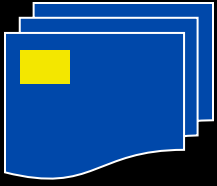
news



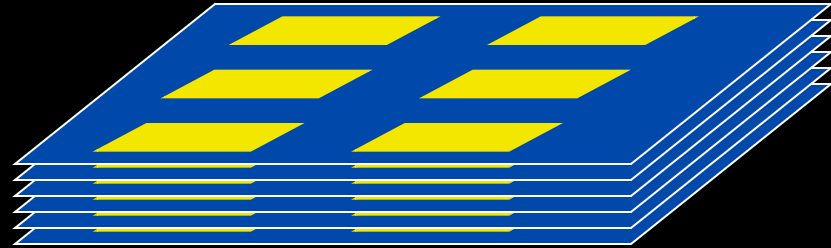
academic  
writing







conversation



# Another English Verb Paradigm

## THINK

	INF	PRES	PAST	PROG	PERF
1.SG	I need to <b>think</b>	I <b>think</b>	I <b>thought</b>	I am/was <b>thinking</b>	I have/had <b>thought</b>
2	you need to <b>think</b>	you <b>think</b>	you <b>thought</b>	you are/were <b>thinking</b>	you have/had <b>thought</b>
3.SG	s/he/it needs to <b>think</b>	s/he/it <b>thinks</b>	s/he/it <b>thought</b>	s/he/it is/was <b>thinking</b>	s/he/it has/had <b>thought</b>
1.PL	we need to <b>think</b>	we <b>think</b>	we <b>thought</b>	we are/were <b>thinking</b>	we have/had <b>thought</b>
3.PL	they need to <b>think</b>	they <b>think</b>	they <b>thought</b>	they are/were <b>thinking</b>	they have/had <b>thought</b>

# Frequency Distribution in BNC<sub>cc</sub>

**THINK**

	INF	PRES	PAST	PROG	PERF
1.SG	80 %	93 %	82 %	65 %	75 %
2	10 %	2 %	2 %	8 %	11 %
3.SG	7 %	0 %	5 %	9 %	10 %
1.PL	2 %	2 %	7 %	12 %	0 %
3.PL	1 %	3 %	4 %	6 %	4 %

# Frequency Distribution in BNC<sub>cc</sub>

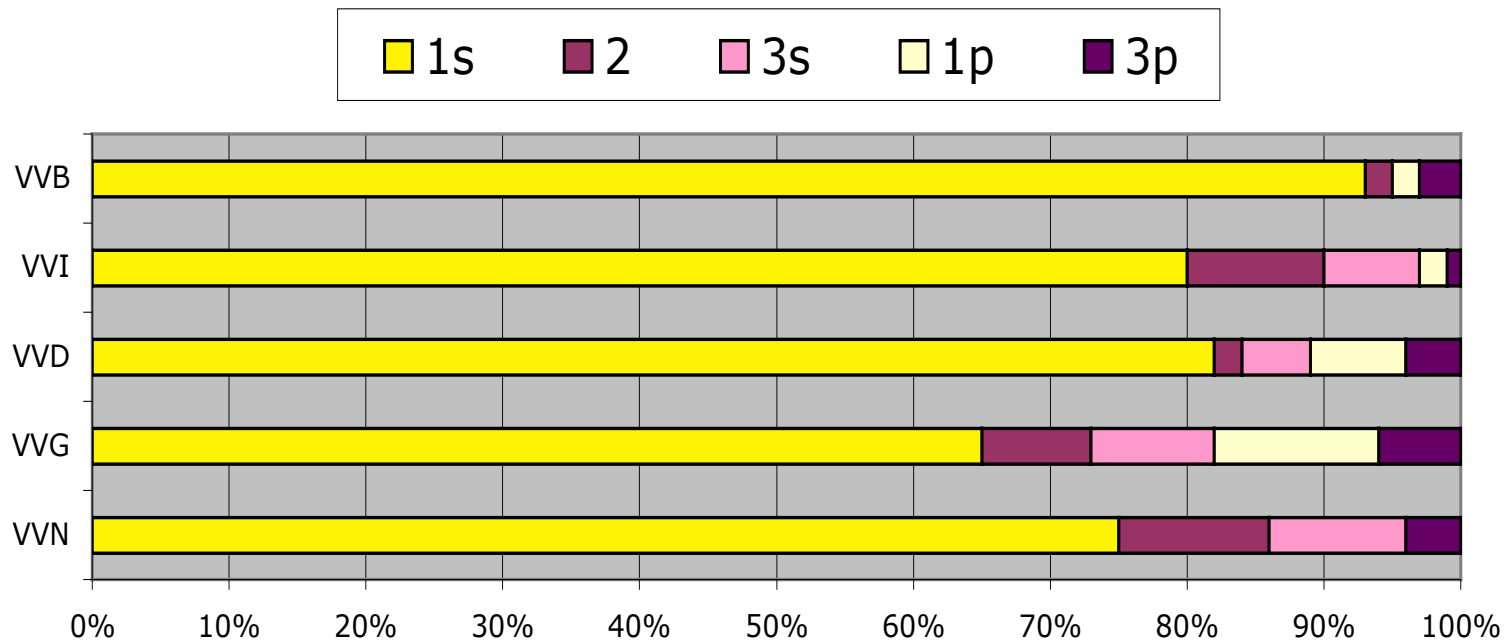
**THINK**

	INF	PRES	PAST	PROG	PERF
1.SG	<b>80 %</b>	<b>93 %</b>	<b>82 %</b>	<b>65 %</b>	<b>75 %</b>
2	<b>10 %</b>	<b>2 %</b>	<b>2 %</b>	<b>8 %</b>	<b>11 %</b>
3.SG	<b>7 %</b>	<b>0 %</b>	<b>5 %</b>	<b>9 %</b>	<b>10 %</b>
1.PL	<b>2 %</b>	<b>2 %</b>	<b>7 %</b>	<b>12 %</b>	<b>0 %</b>
3.PL	<b>1 %</b>	<b>3 %</b>	<b>4 %</b>	<b>6 %</b>	<b>4 %</b>

# Frequency Distribution in BNC<sub>cc</sub>

## THINK

**THINK**  
(Subject x TAM)



# Frequency Distribution in BNC<sub>cc</sub>

## THINK

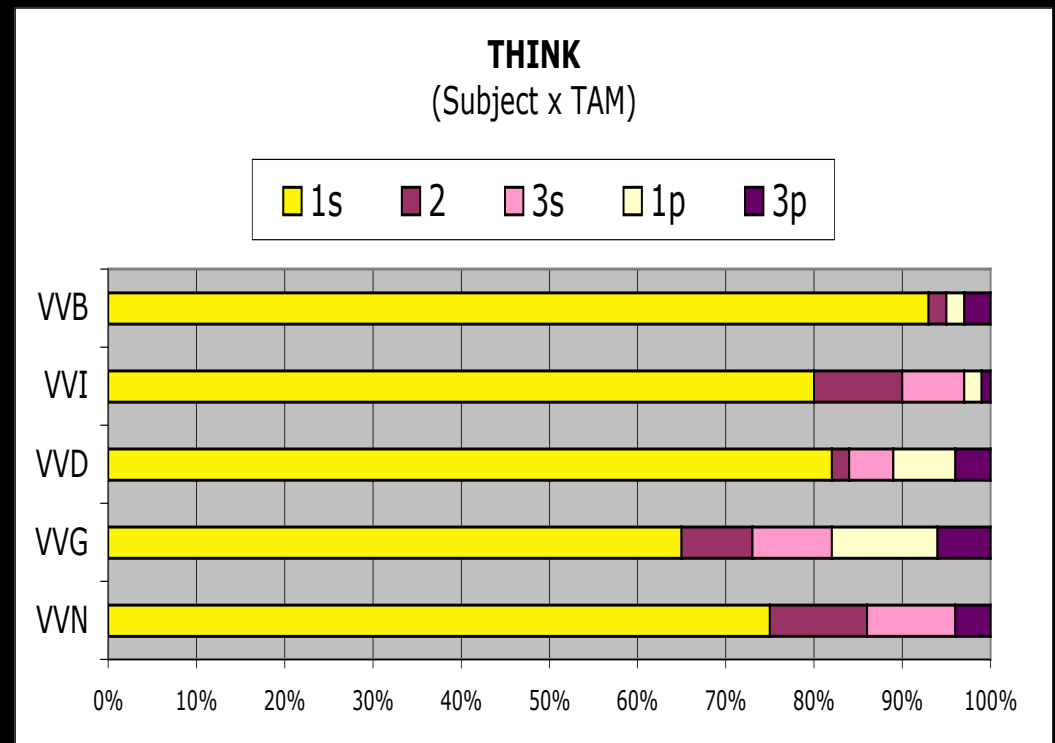
**I think... (93%)**

**I don't think... (70%)**

**I thought... (82%)**

**I was thinking... (28%)**

**I would have thought... (39%)**



# Hongyin Tao's (2001, 2003) Spoken Corpus (CSAE) Results

**REMEMBER**

**FORGET**

<i>that</i> complement	19%	4%
gerundive complement	6%	1%
infinitival complement	1%	14%
non-complement	74%	79%
1st subject	55%	61%
2nd subject	14%	4%
3rd subject	3%	6%
null subject	28%	29%

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# Hongyin Tao's (2001, 2003) Spoken Corpus (CSAE) Results

*I remember*

*I forget*

<i>that</i> complement	19%	4%
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1st subject	55%	61%
2nd subject	14%	4%
3rd subject	3%	6%
null subject	28%	29%

# Hongyin Tao's (2001, 2003) Spoken Corpus (CSAE) Results

In spoken English, REMEMBER and FORGET are de facto discourse particles or epistemic stance predications; moreover, “complement-taking is actually a marginal feature”

Tao 2003:75.

# THE INFLECTIONAL ISLAND HYPOTHESIS

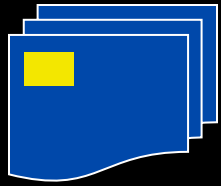
Rice & Newman 2005

**V** >>> **inflection**

- uneven distribution of inflection
- verbs (and verb classes) have “weighted” inflectional profiles
- weightings may be universal (experientially motivated)
- inflectional categories are lexically & pragmatically meaningful  
(and not just part of grammatical house-keeping or concord relationships)
- especially “weighty” inflected verbs (WICs) may idiomatize and grammaticalize

# STRUCTURE OF THE TALK

- I. describe what we mean by “inflectional islands
- II. survey examples from published literature and our own queries of the BNC
- III. suggest implications for linguistic theory, lexicography, typology, and psycholinguistic research



# Looking for **Islands** (Stranded Verbs)

searched BNC with Mark Davies' corpus tool:

Variation in English Words and Phrases: <http://view.byu.edu>

de-lemmatized the verb (re-inflectionalized it)

downloaded 100 hits each for every verb matching a BNC tag

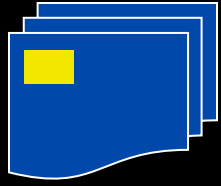
factored in genre/register

Casual Conversation (4.2M sub-corpus)

tracked subject & TAM distribution

coded each hit for subject, tense, complement type, etc.

examined inflectional “skew”



# Some Classic Stranded Verbs (inflectional islands)

**MODALS**

**rumour**

**IMPERSONALS**

**rid**

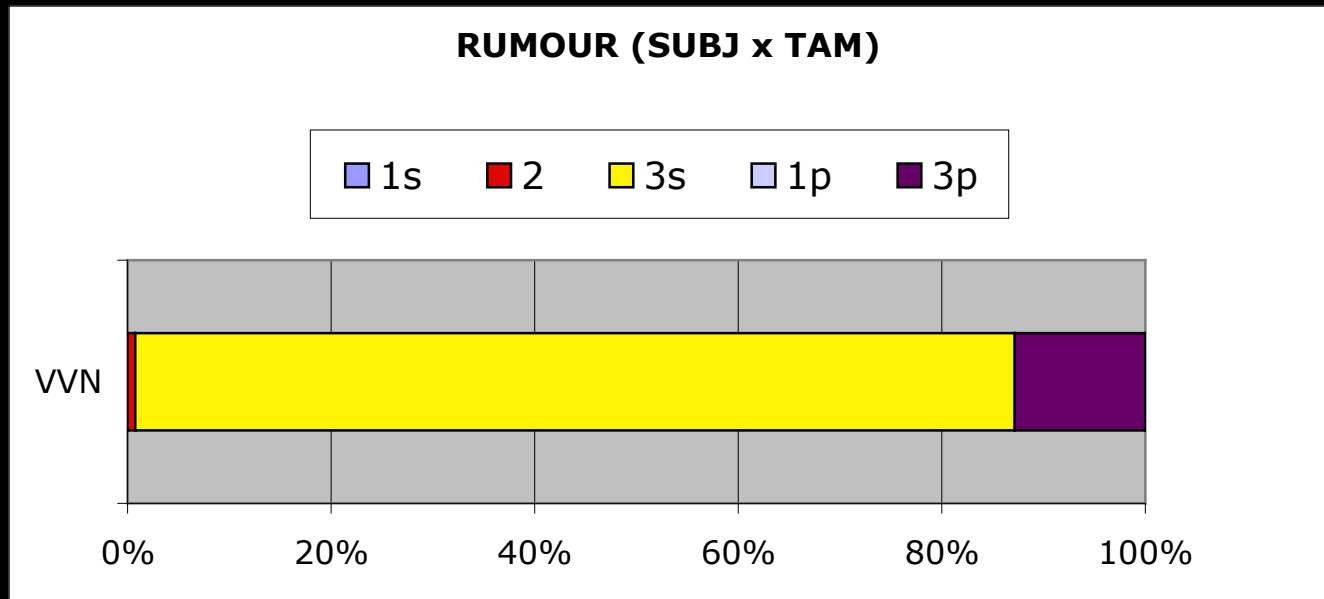
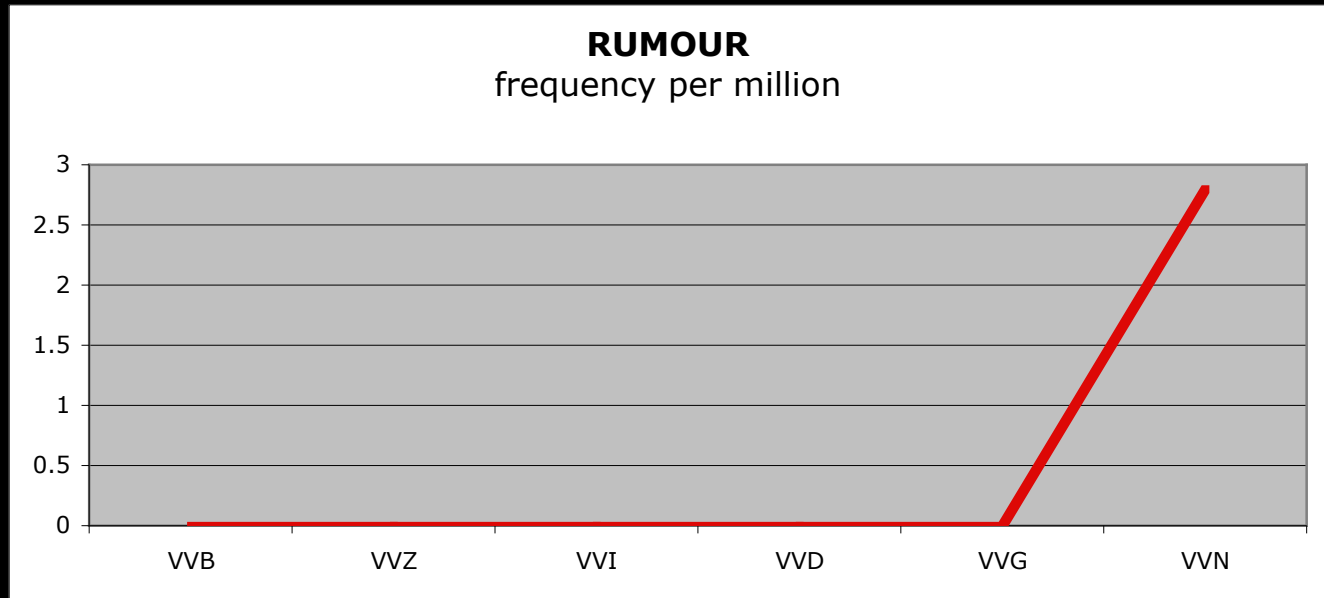
**WEATHER VERBS**

**allow**

# rumour

BRITISH NATIONAL CORPUS

- VVB-base
- VVZ-3sg.pres
- VVI-inf
- VVD-past
- VVG-prog
- VVN-perf part



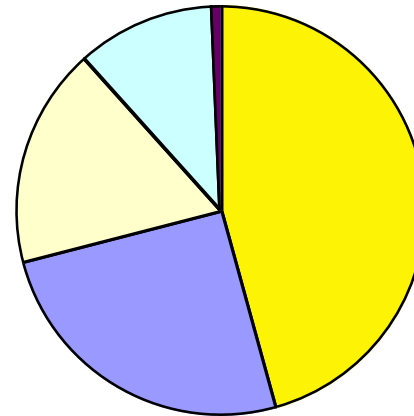


# rumour

it BE rumoured to V...

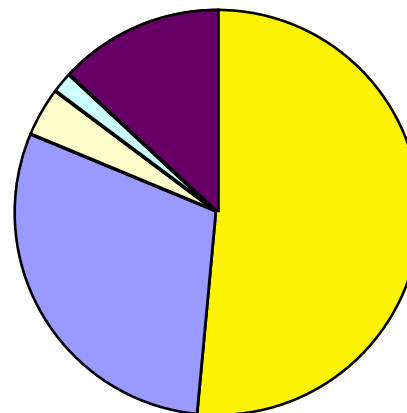
- 100M BNC
- 273 hits
- 2.8 (freq per M)
- not in casual conversation

Subjects of (BE) RUMOURED  
[VVN]



- dummy it/there
- personal
- inanimate
- corporations
- animate

Complements of (BE) RUMOURED  
[VVN]



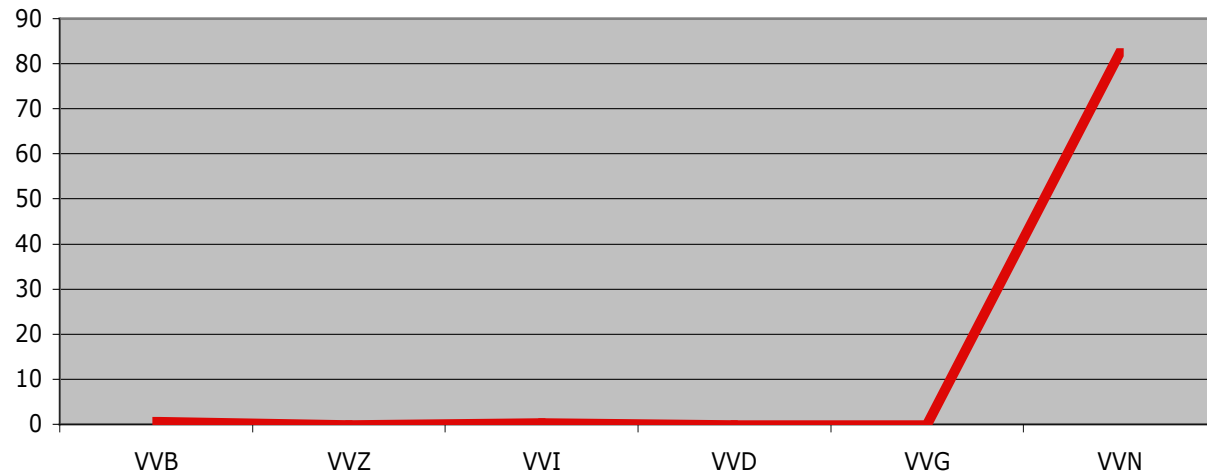
- inf
- that S
- S
- other (as, for)
- none

# rid allow

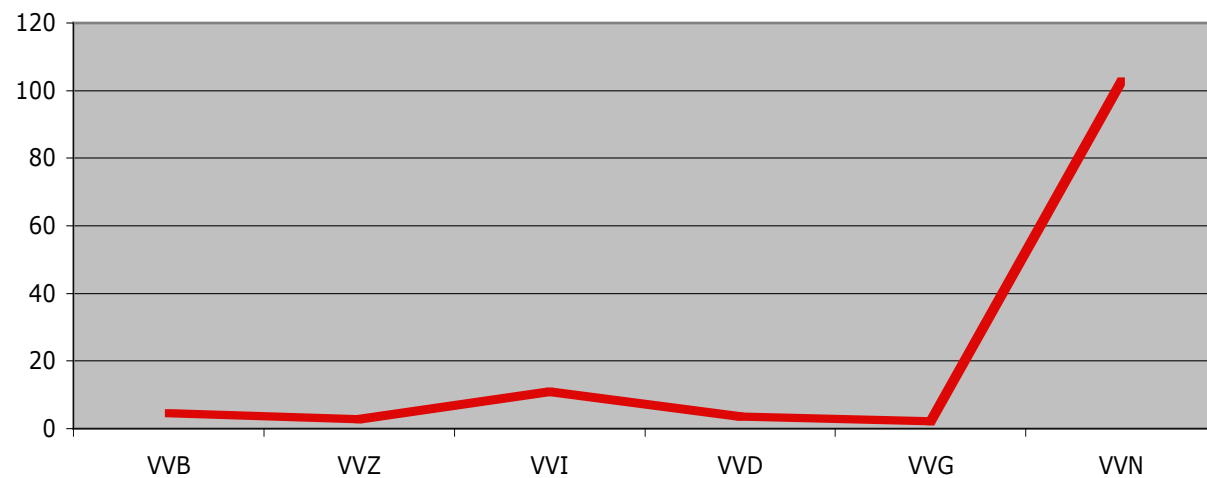
BRITISH NATIONAL CORPUS

- VVB-base
- VVZ-3sg.pres
- VVI-inf
- VVD-past
- VVG-prog
- VVN-perf part

**RID**  
frequency per million



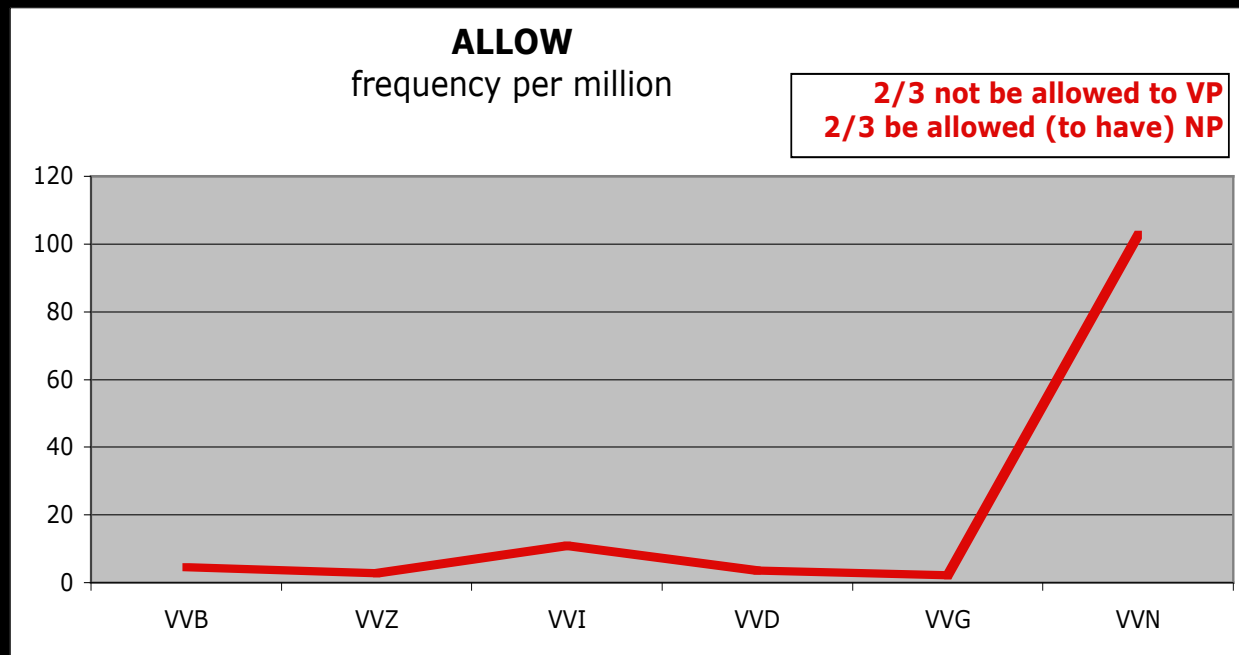
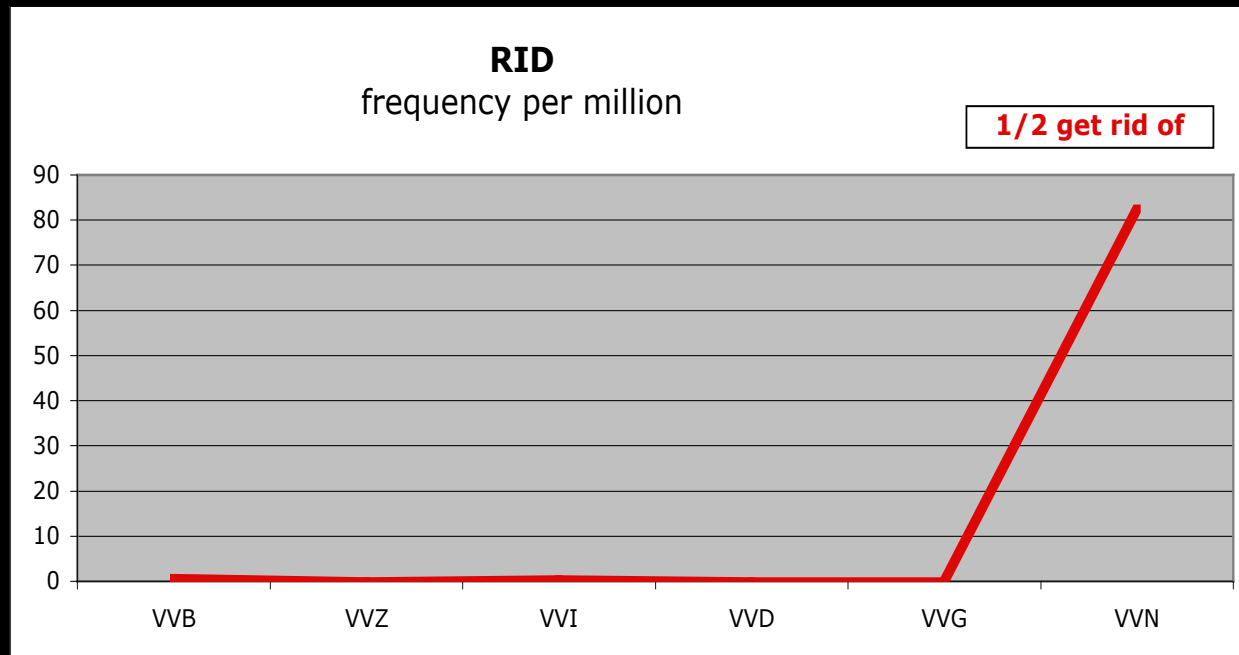
**ALLOW**  
frequency per million

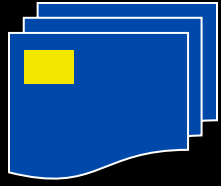


# rid allow

BRITISH NATIONAL CORPUS

- VVB-base
- VVZ-3sg.pres
- VVI-inf
- VVD-past
- VVG-prog
- VVN-perf part





# Some Emerging Stranded Verbs (inflectional islands)

**think**

**know**

**mean**

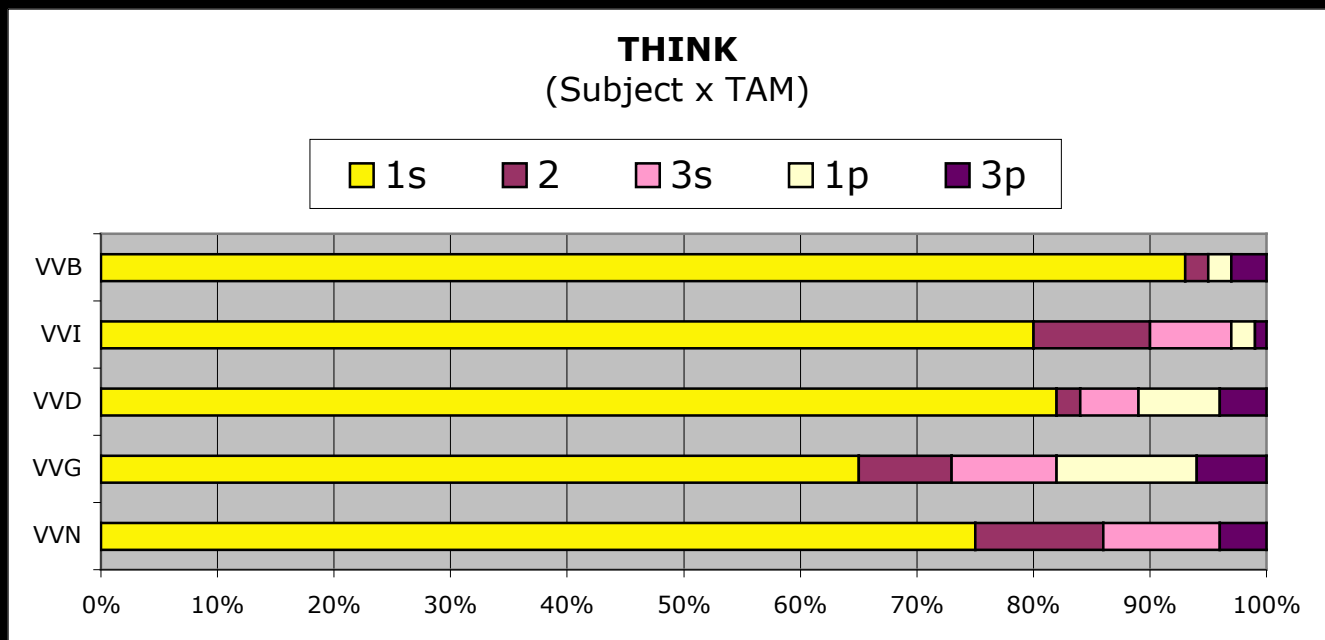
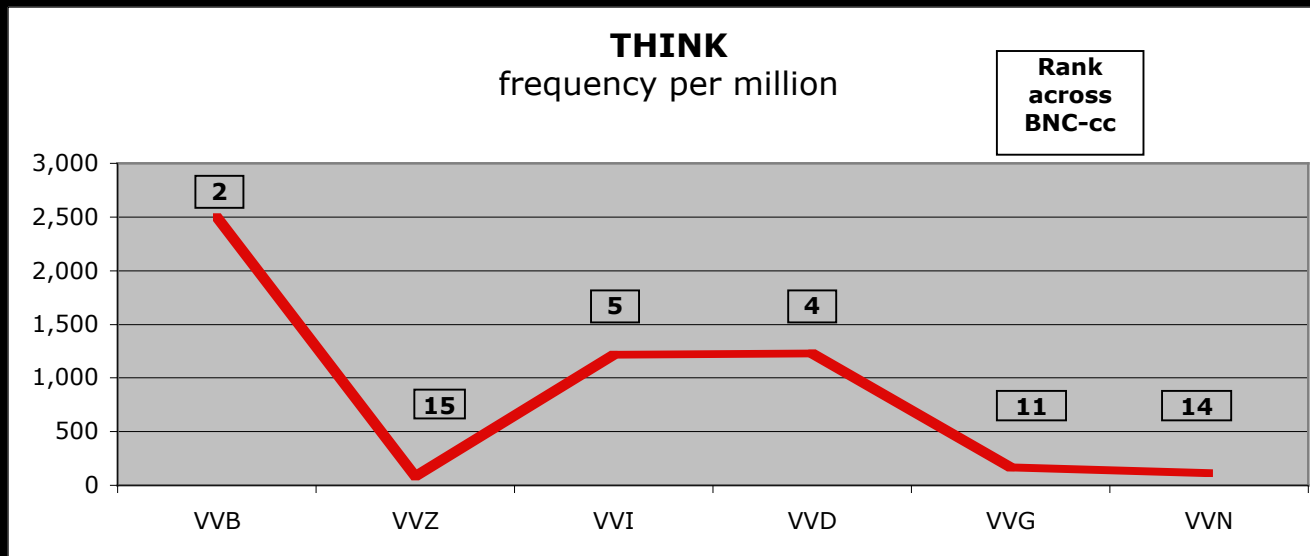
**want**

**\*say**

# think

BRITISH NATIONAL CORPUS

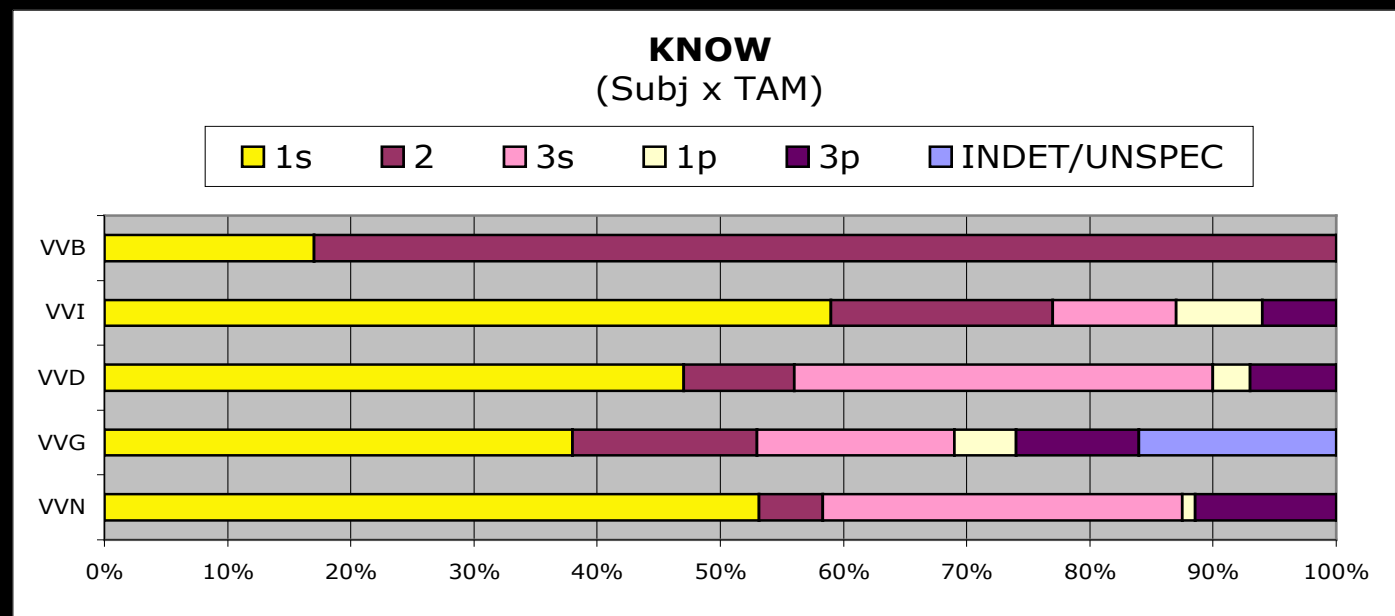
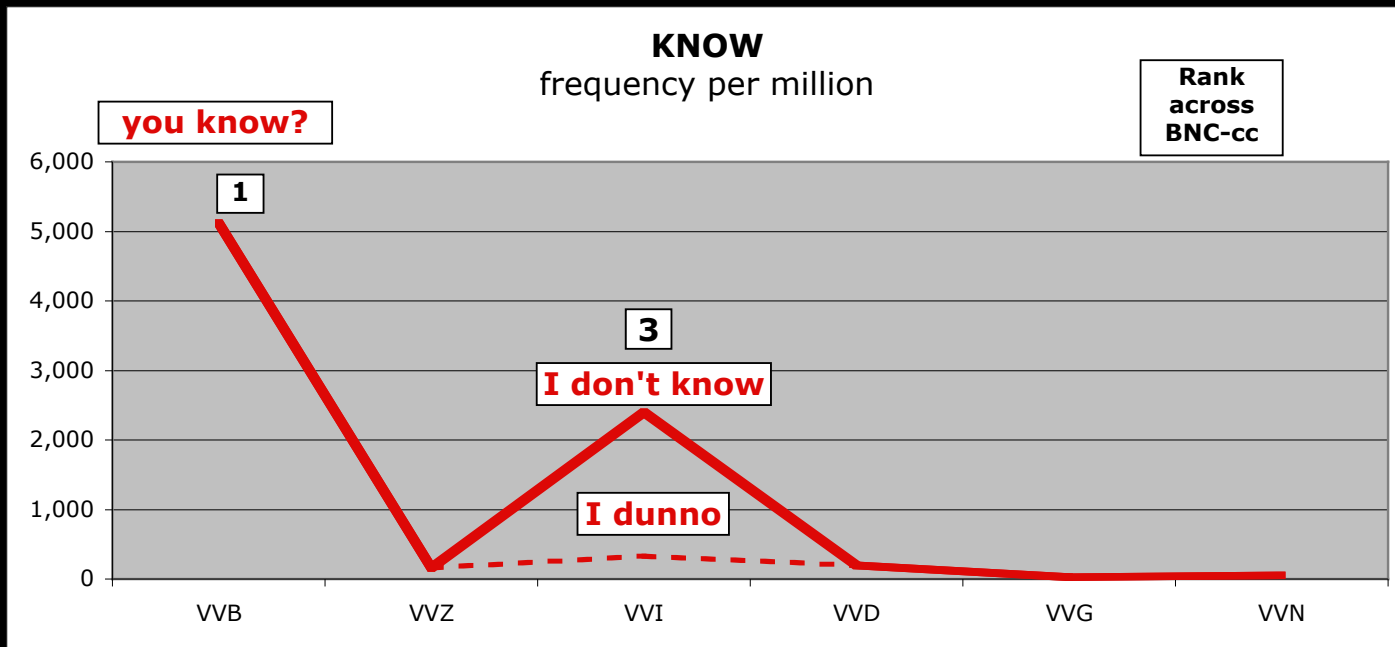
- VVB-base
- VVZ-3sg.pres
- VVI-inf
- VVD-past
- VVG-prog
- VVN-perf part



# know

BRITISH NATIONAL CORPUS

- VVB-base
- VVZ-3sg.pres
- VVI-inf
- VVD-past
- VVG-prog
- VVN-perf part

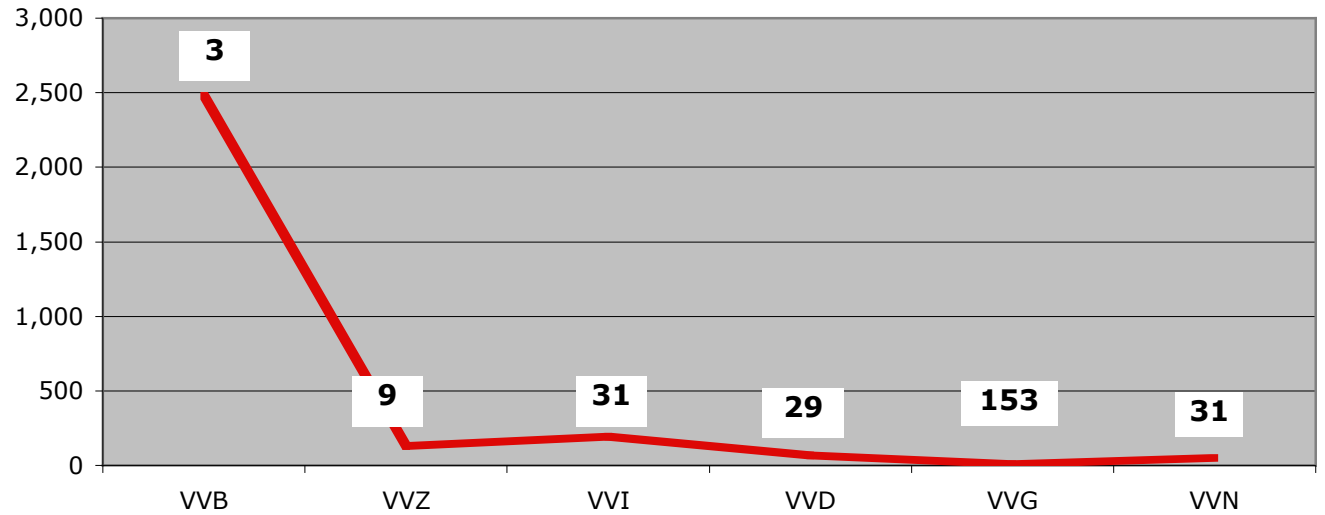


# mean

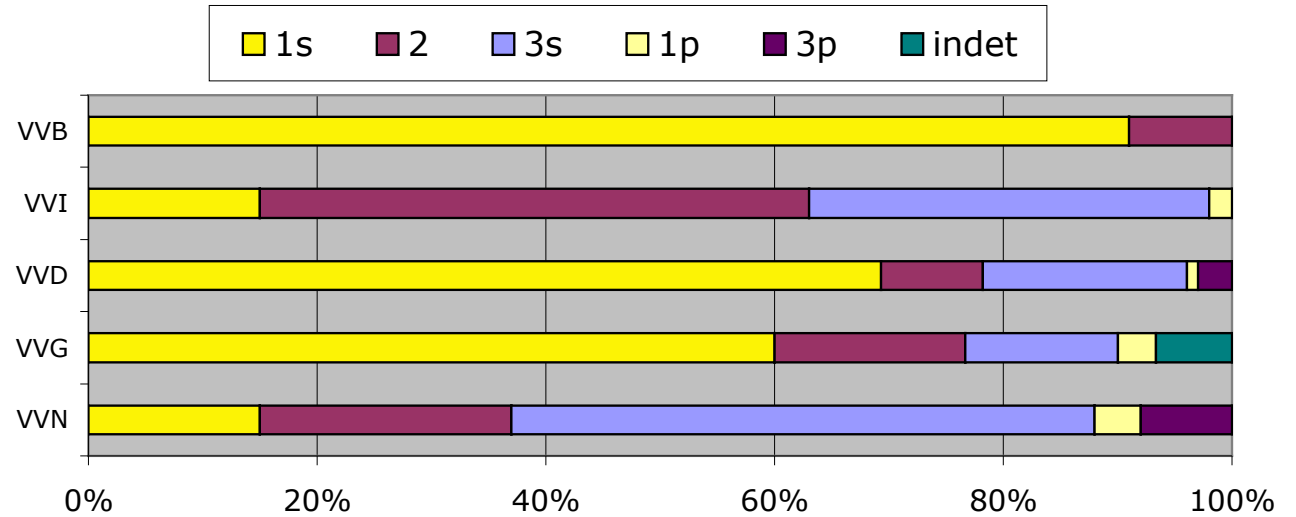
BRITISH NATIONAL CORPUS

- VVB-base
- VVZ-3sg.pres
- VVI-inf
- VVD-past
- VVG-prog
- VVN-perf part

**MEAN**  
frequency per million



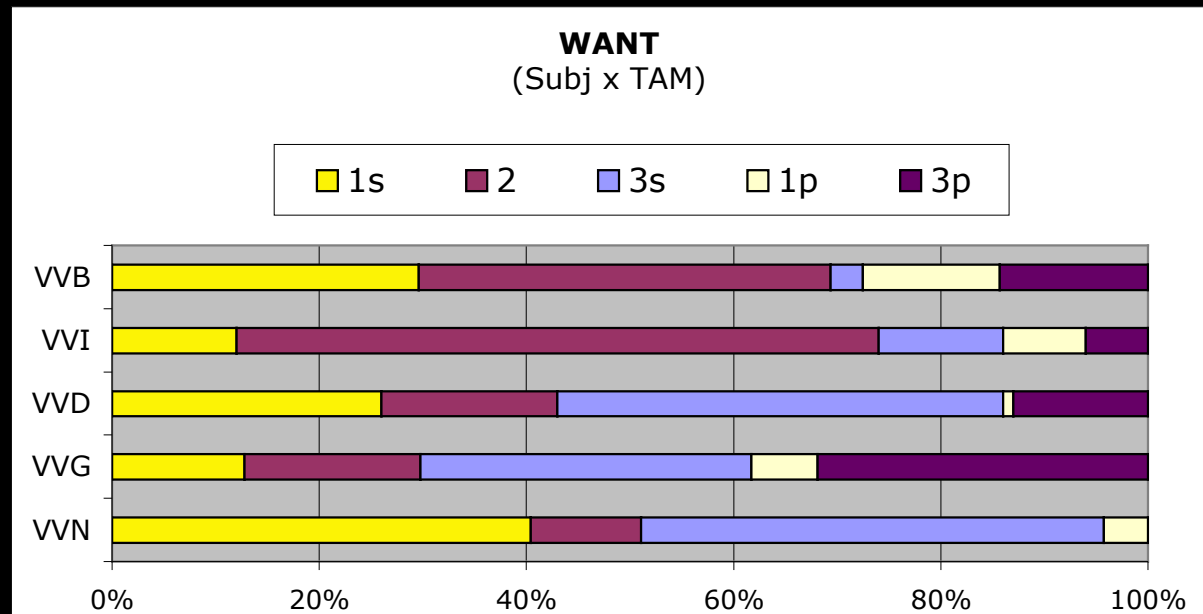
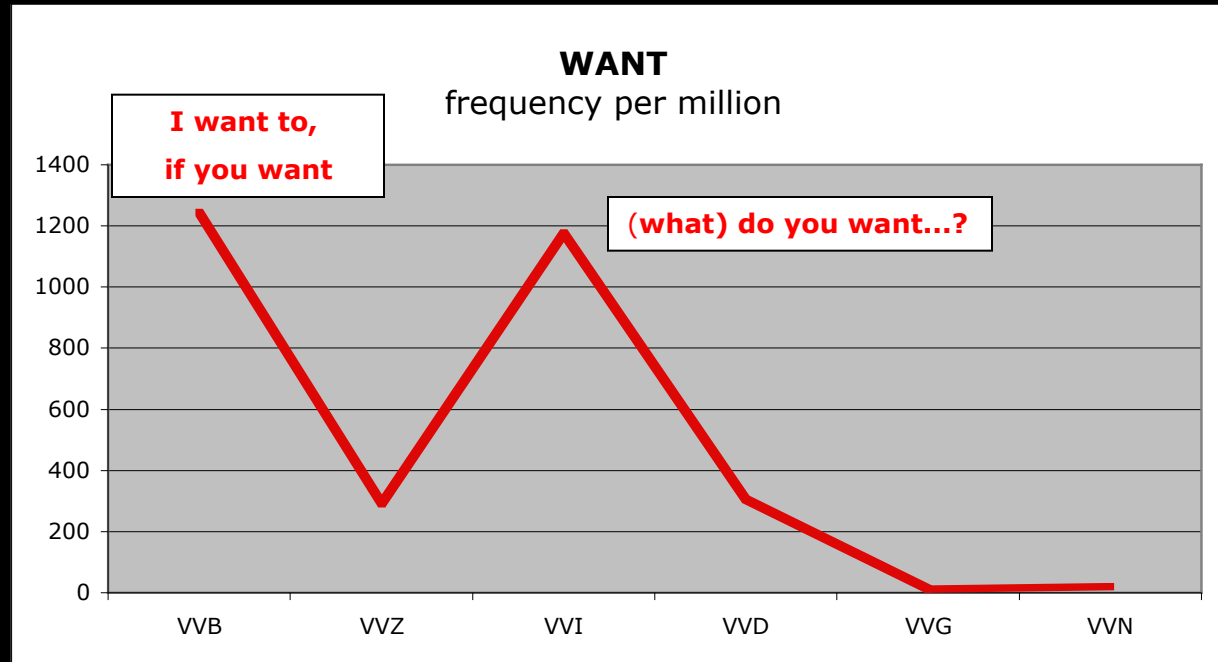
**MEAN**  
(Subject x TAM)



# want

BRITISH NATIONAL CORPUS

- VVB-base
- VVZ-3sg.pres
- VVI-inf
- VVD-past
- VVG-prog
- VVN-perf part

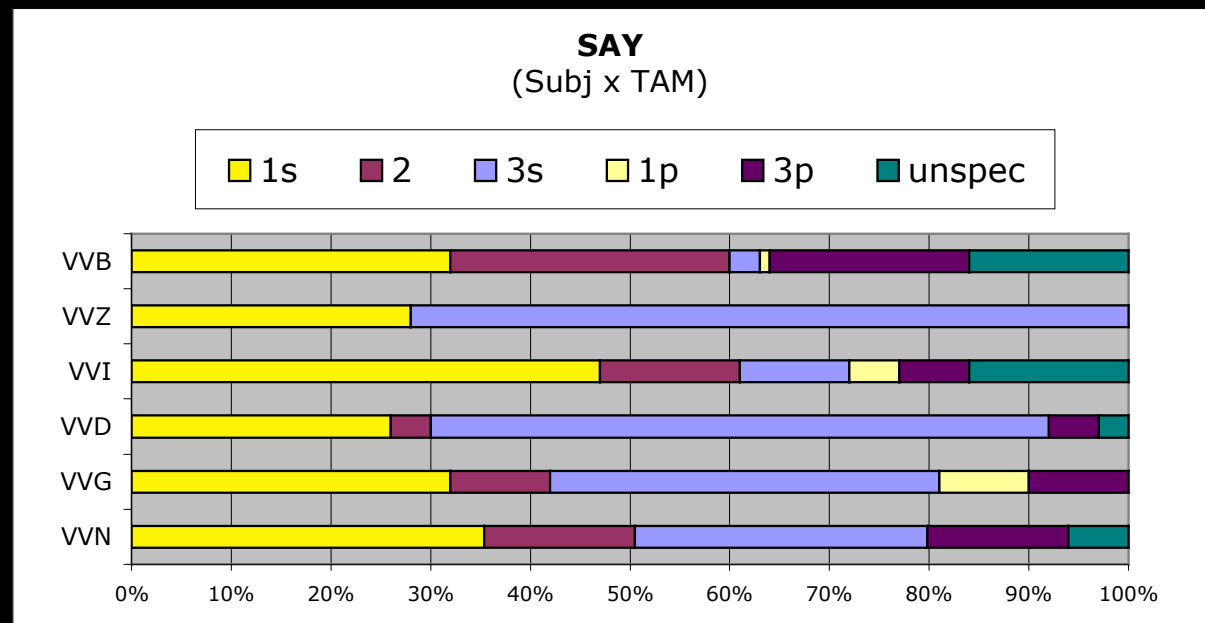
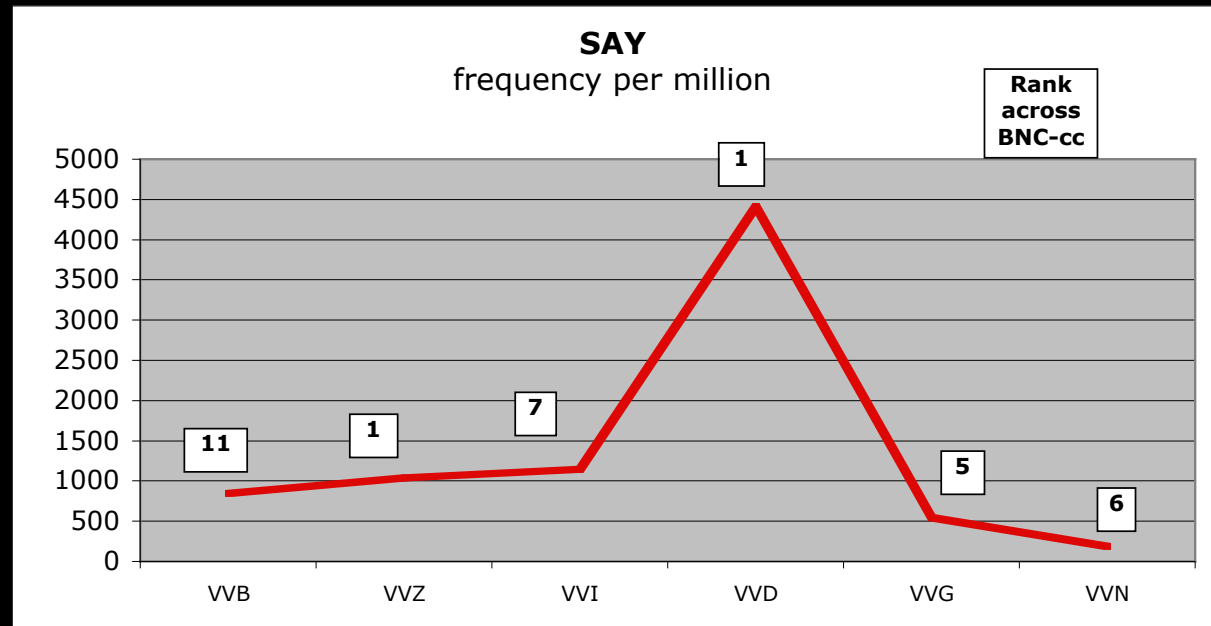




say

BRITISH NATIONAL CORPUS

- VVB-base
- VVZ-3sg.pres
- VVI-inf
- VVD-past
- VVG-prog
- VVN-perf part

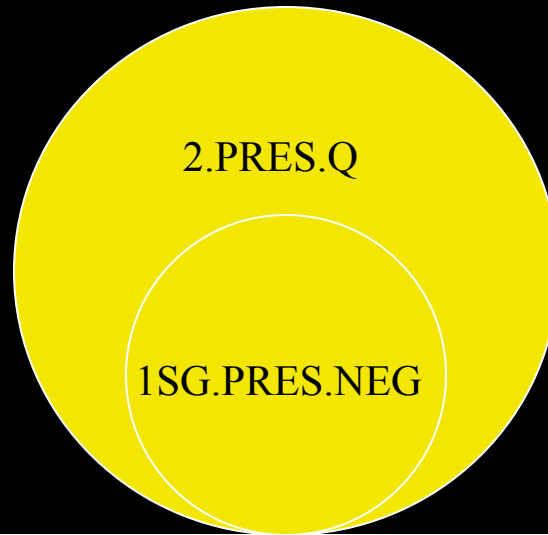




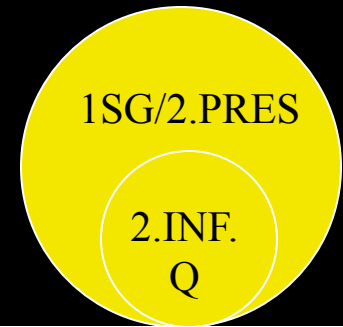
think



mean



know



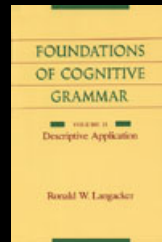
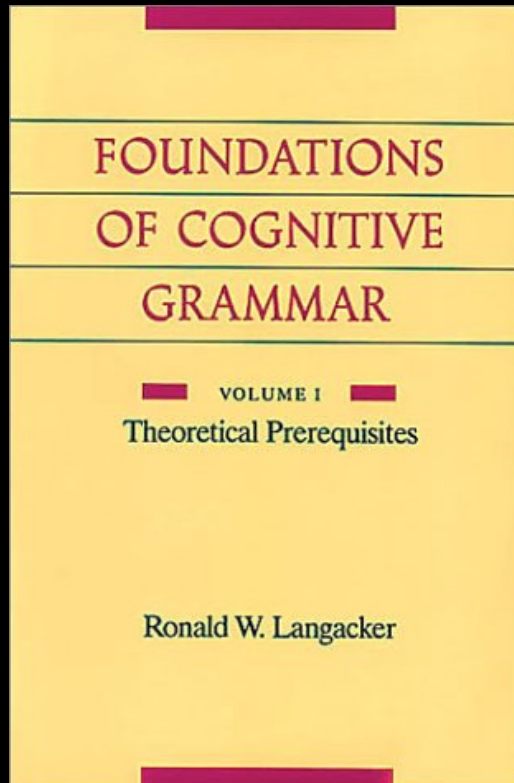
want

High frequency constructions are more likely to undergo semantic/pragmatic and phonological change over time.

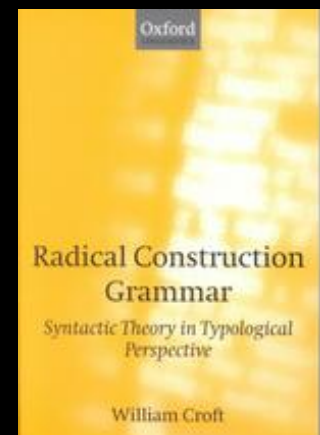
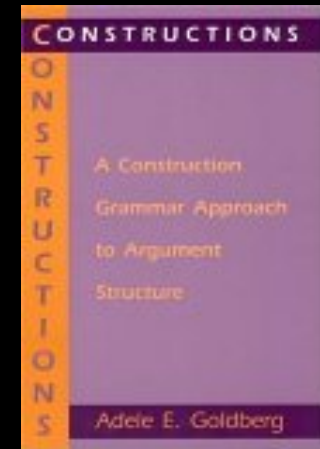
Bybee 1985, Bybee & Hopper 2001

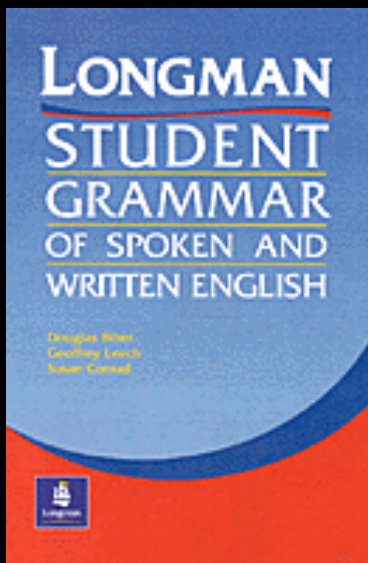
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# USAGE-BASED GRAMMARS





LEMMA x GENRE



INFLECTED FORMS

# IMPLICATIONS OF USAGE-BASED APPROACHES TO GRAMMAR

a new starting point for linguistic analysis

**put lemmas aside** (as done earlier with syntactic rule in favor of constructions)

**substitute words-in-context or WICs** (intersection of genre, register, & inflection)

a new (lower) level of linguistic generalization

**find the “hierarchy of lower-level structures...[that] specify the actual array of subcases and specific instances that support and give rise to the higher-level generalization”**

*RWL, Concept, Image, & Symbol, 1991:281-282*

# WICs

locus of grammaticalization

active in borrowings & morphological realignment

spawn psychological associations, induce priming effect

**WICs are relevant for speakers....why not for linguists??**

# WICs

locus of grammaticalization

active in borrowings & morphological realignment

spawn psychological associations, induce priming effect

normalize suppletion & polysynthesis



# A Typical Dene (Athapaskan) Verb Paradigm

sit.IMPF	SG	DU	PL
1	thida	th7ke	deth7lth' i
2	th8da	thuhke	dumtth' i
3	theda	heheke	d4mtth' i

# Another Dene (Athapaskan) Verb Paradigm

go.IMPF	SG	DU	PL
1	hessa	h7t' 1s	h7d4m
2	h8gha	huh/1s	huhd4m
3	hegha	he/1s	hed4m

# Another Dene (Athapaskan) Verb Paradigm

PERF forms are different again....so which is chosen as the head word?

go.IMPF	SG	DU	PL
1	hessa	h7t' 1s	h7d4m
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3	hegha	he/1s	hed4m

Thank you.

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