Absolutely fantastic! Adjective amplification in English

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AUSTRALIA

Introduction to Amplification

A Usage-Based Classification of Amplifiers

Amplification in L1-acquisition

Amplification in SLA

Amplification within and across varieties

Aims of this talk

- Tell you something about adjective amplification
- Introduce basic concepts of CxG/ Usage-Based approaches
- Exemplify how quantitative, statistical methods can be used fruitfully in Linguistics and SLA research

Introduction to Amplification

What is Amplification?

Phenomenon: Adjective Amplification

(1) And you just have to hint well then it's a very good hint (ICE-AUS:S1A-012$A)

(2) They're all really cheap <#> They're all really nice, the t-shirts in there (ICE-AUS:S1A-009$B)

(3) It was so bad (ICE-AUS:S1A-044$B)

Intensification and Amplification

Intensification is related to the semantic category of *degree* (degree adverbs) and ranges from low (downtoning) to high (amplifiers) (Quirk et al. 1985: 589–590)

- Amplifiers
  - Boosters, e.g. *very*
  - Maximizers, e.g. *completely*
- Downtoners
  - Approximators, e.g. *almost*
  - Compromisers, e.g. *more or less*
  - Diminishers, e.g. *partly*
  - Minimizers, e.g. *hardly*

Forms of Amplification

(4) Lexical
very, *real(ly)*, *extremely*, *totally*, etc.

(5) Morphological
{uber#}, *{super#}*,*{hyper#}*,*{mega#}*,

Syntactic function of adjective

(6) Attributive
The very/so hungry caterpillar is nice.

(7) Predicative
The nice caterpillar is very/so hungry.

very vs. *really*: no meaning change → interchangeable
very vs. *hardly*: meaning change → not interchangeable

Motivation for Studying Amplification

Amplification

- Major area of gramm. change (cf. Brinton and Arnovick 2006: 441)
- Crucial for "social and emotional expression of speakers" (Ito and Tagliamonte 2003: 258)
- Linguistic subsystem which allows precise circumscription of a variable context (Labov 1972, 1966: 49)
- Ideal case for testing mechanisms underlying language change!

Previous research

- Extensive history of research on intensifiers (e.g. Borst 1902; Bolinger 1972)
- Intensification is considered a major area of grammatical change in English (cf. Brinton and Arnovick 2006: 441)
- Growing amount of variationist and historical research (e.g. Ito and Tagliamonte 2003; Tagliamonte and Roberts 2005; Macaulay 2006; Tagliamonte 2006)
- Very little research on the acquisition of intensification(!); an exception is Gülzow (2006)

(8) The queen herself welcomed the soldiers

A Usage-Based Classification of Amplifiers

Usage-Based/Data-Driven Classification

General idea

- Semantic Vector Space Modeling based on co-occurrence profiles of adjectives and amplifiers
- Amplifiers that co-occur with the same adjectives are semantically similar and thus interchangable

Advantages

- Relatively easy and can take variety specific differences and changes in use/meaning into account
- Does not rely on any theoretical framework
- Can provide a more fine-grained classification (different groups/clusters) that also informs about statistical significance

How data-driven classification works

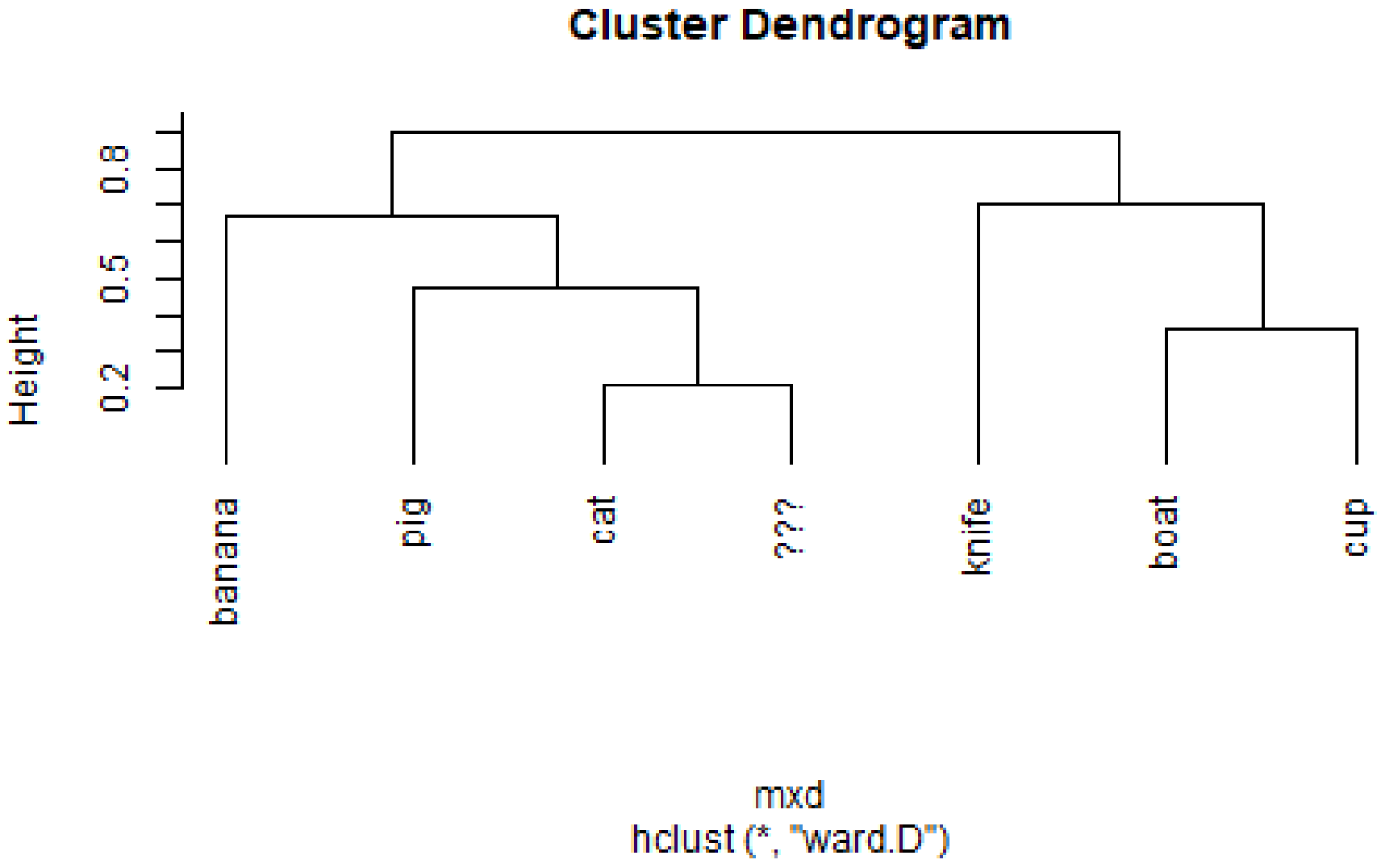
	get	**see**	**use**	**hear**	**eat**	**kill**
knife	31	16	69	0	2	0
cat	36	38	4	4	6	20
???	66	58	9	34	28	12
boat	46	21	17	4	0	0
cup	59	6	5	1	1	0
pig	4	15	3	1	7	21
banana	7	2	2	0	12	0

Table 1: Co-occurrences of selected nouns and verbs in the British National Corpus.

How data-driven classification works

	knife	**cat**	**???**	**boat**	**cup**	**pig**
cat	.62					
???	.60	.21				
boat	.48	.33	.32			
cup	.76	.59	.58	.36		
pig	.72	.36	.45	.64	.88	
banana	.71	.57	.47	.60	.72	.64

Table 2: Distance matrix based on co-occurrences of selected nouns and verbs in the British National Corpus.


Cluster Dendrogram
Height
0.2
0.5
0.8
banana
pig
cat
???
knife
boat
cup
mxd
hclust (*, "ward.D")

Q_1

Does a data driven classification reflect the classification proposed in the literature?

$\rightarrow$ Are there meaningful clusters of amplifiers?

International Corpus of English (ICE)

- Australian ICE component
- One million words (600,000 spoken and 400,000 written) from diverse spoken and written text types (cf. next slide) with each file containing app. 2,000 words.
- Accompanied by metadata and biodata of speakers
- For the semantic vector space modeling → only spoken data!

Corpus data: International Corpus of English (ICE)

Mode	Conversation type	Register	Text type	Number of text files
SPOKEN (300)	Dialogues (180)	Private (100)	Face-to-face conversations	90
			Phonecalls	10
		Public (80)	Classroom Lessons	20
			Broadcast Discussions	20
			Broadcast Interviews	10
			Parliamentary Debates	10
			Legal cross-examinations	10
			Business Transactions	10
	Monologues (120)	Unscripted (70)	Spontaneous commentaries	20
			Unscripted Speeches	30
			Demonstrations	10
			Legal Presentations	10
		Scripted (50)	Broadcast News	20
			Broadcast Talks	20
			Non-broadcast Talks	10

Table 3: Schematic overview of the common design shared by all ICE components.

Data Processing

- POS-tagged all utterances
- Extraction of all adjectives and subsequently identifying adj. preceded by an amplifier
- Removed
  - Adj. that did not occur before a full stop or before a noun (to determine syn. function; predicative vs attributive)
  - Adj. that were not intensified by at least two different amplifier types (e.g. *right honorable*)
  - Adj. that were preceded by downtoners
  - Adj. preceded by strange forms (e.g. *much*)
  - Adj. that were negated (e.g. *not good* or *not very nice*)
  - Comparative and superlative forms (e.g. *better* or *strongest*)

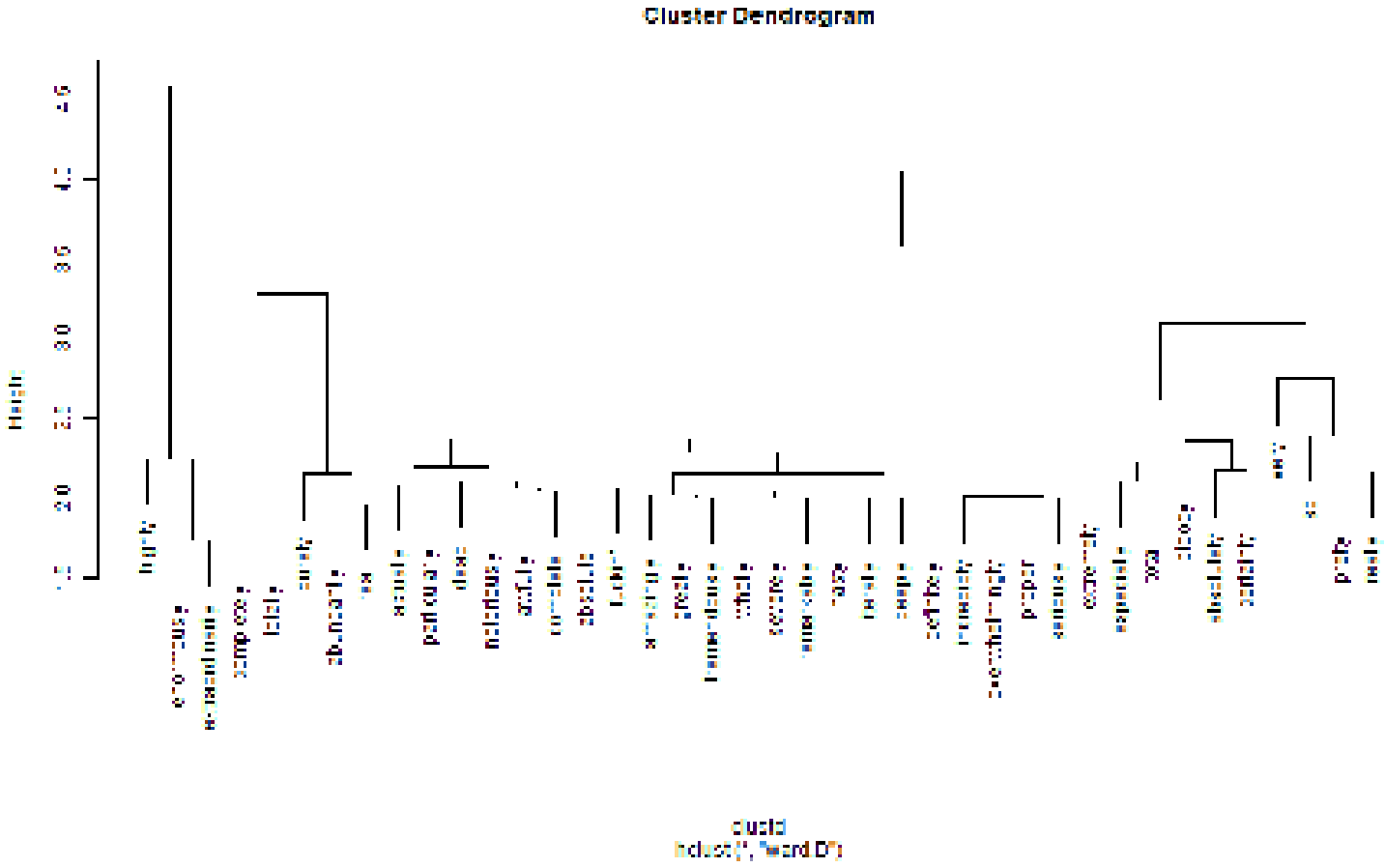


Figure 1: Rooted dendrogram showing the clustering of amplifiers in Australian English based on the semantic vector space model.

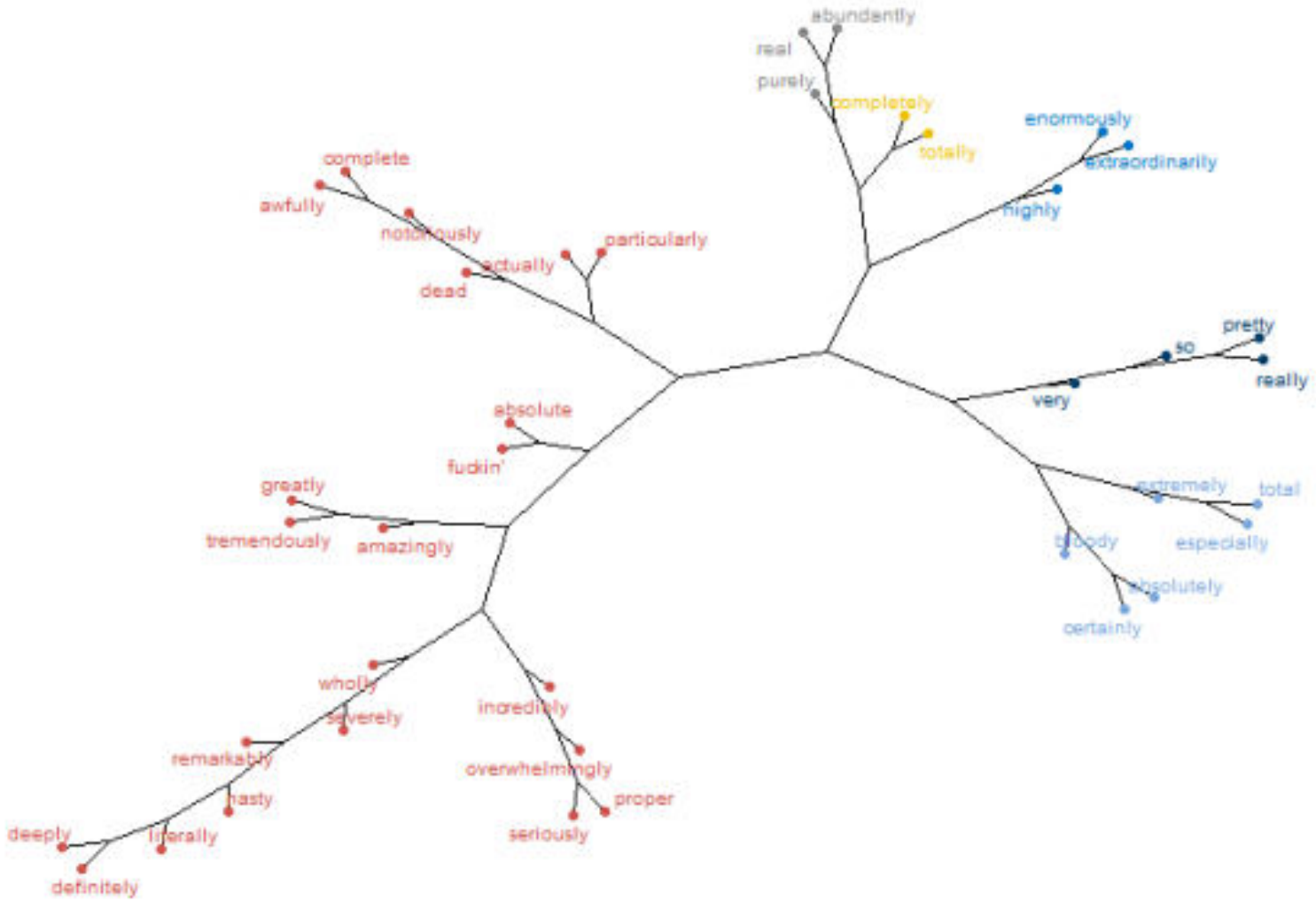


Figure 2: Unrooted dendrogram showing the clustering of amplifiers in Australian English based on the semantic vector space model.

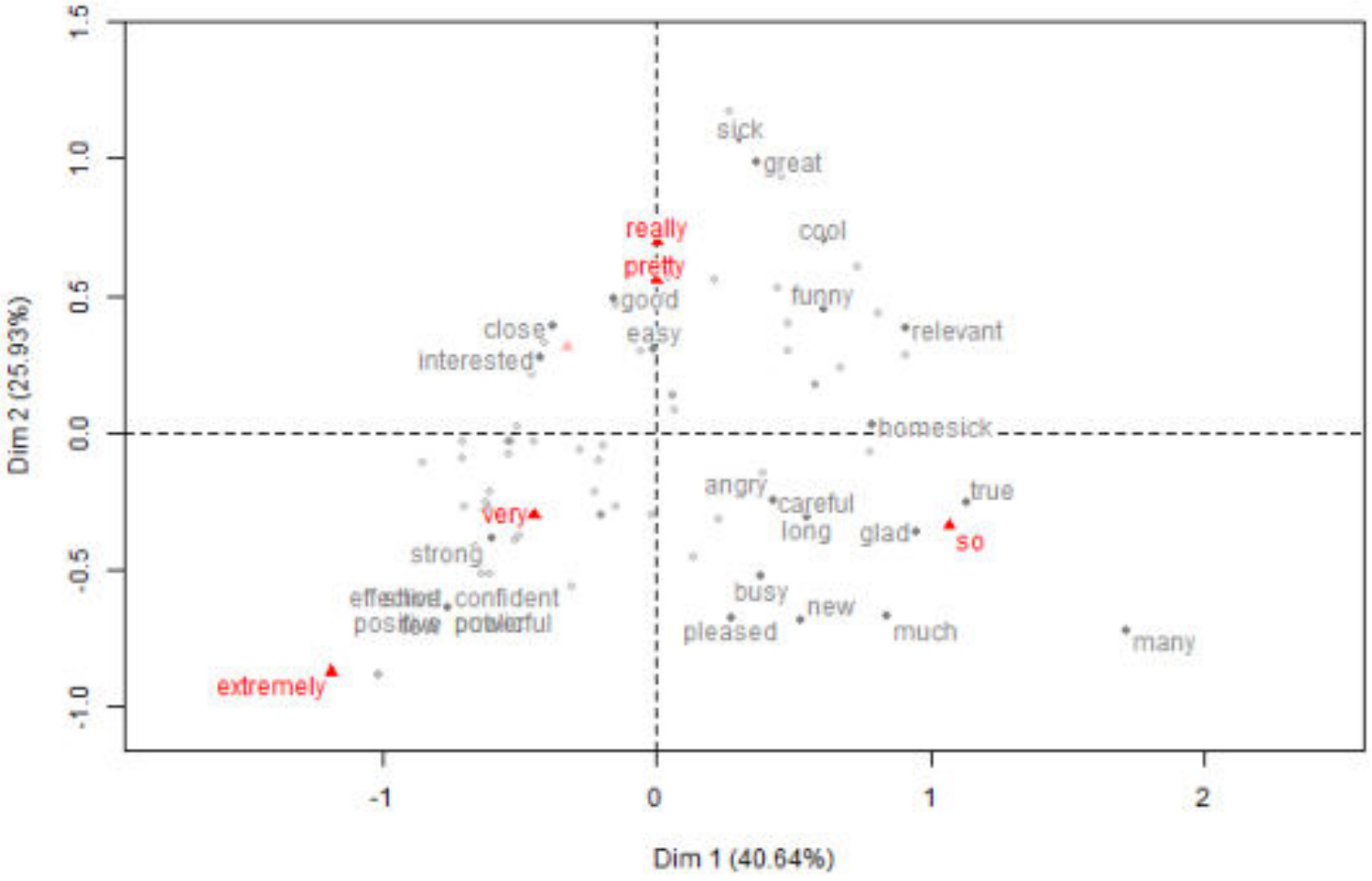


Figure 3: Results of a correspondence analysis based on amplifiers and their co-occurrences with adjectives in Australian English.

Amplification in L1-acquisition

Q_2

How do children acquire amplification?

$\rightarrow$ How does the use of amplifiers pattern among children?

Data

Home–School Study of Language and Literacy Development (part of CHILDES: *Child Language Data Exchange System*)

- Longitudinal data of English-speaking children from low-income families growing up in the Boston area.
- Transcripts collected during 5 home visits
- Visits took place at ages 3 (hv1), 4 (hv2), 5 (hv3), 2nd grade (hv4) and 4th grade (hv5)
- During visits children performed different tasks: book reading, toy play, child narratives, elicited report, and experimental tasks.

Data processing as described before.

Data Summary: HSLLD (Children only)

Amplifier	**N**	**%**	**Amp.** (%)
∅	4,776	95.16	
so	77	1.53	31.69
very	63	1.26	25.93
real	34	0.68	13.99
pretty	27	0.54	11.11
really	24	0.48	9.88
wicked	9	0.18	3.70
totally	5	0.10	2.06
completely	2	0.04	0.82
extra	1	0.02	0.41
fucking	1	0.02	0.41
Total	5,019	4.84	100

Table 4: Frequencies and percentages of amplifiers in variable contexts in the HSDDL.

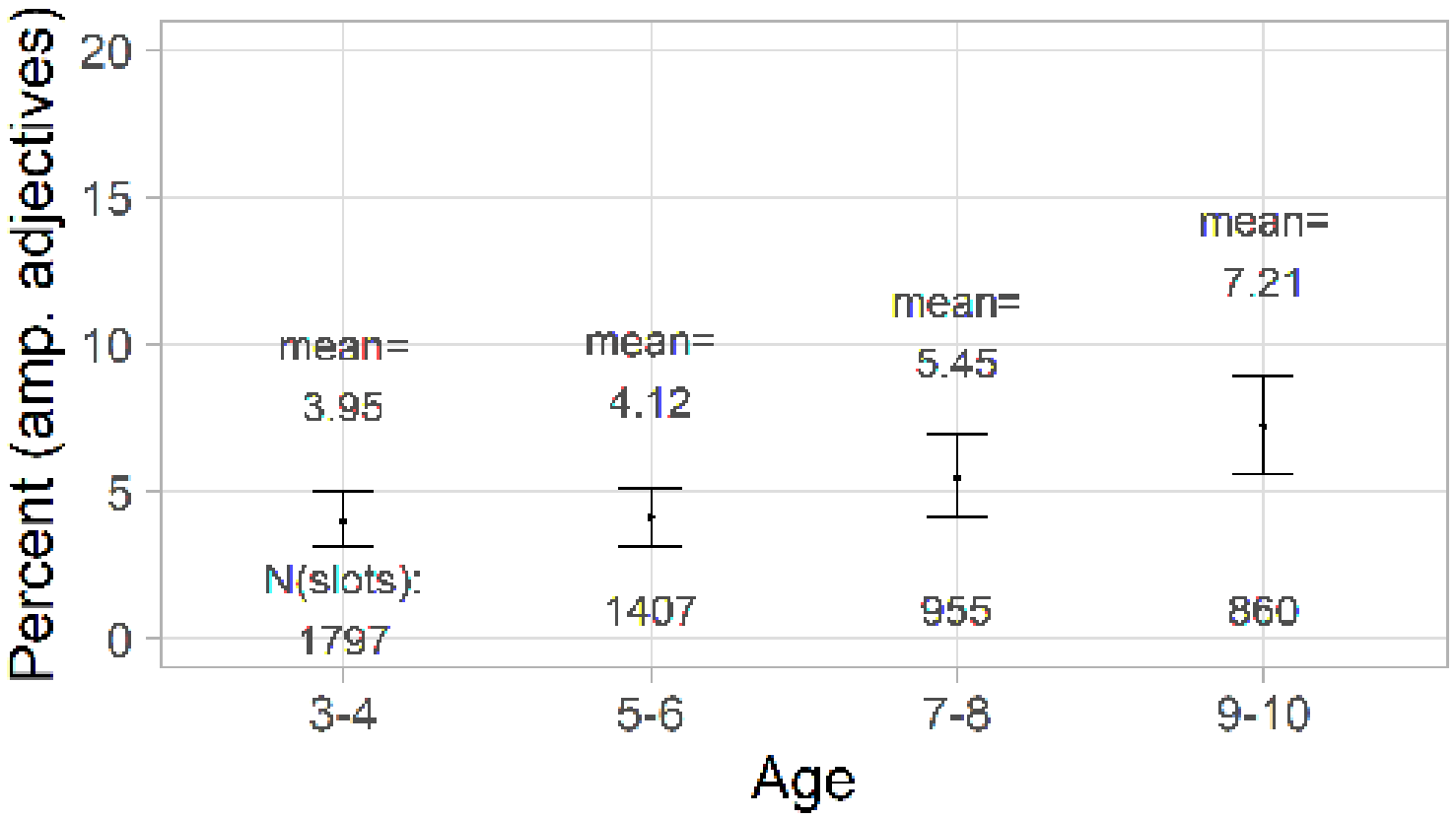


Figure 4: Percent of amplified adjectives by age (HSLLD)

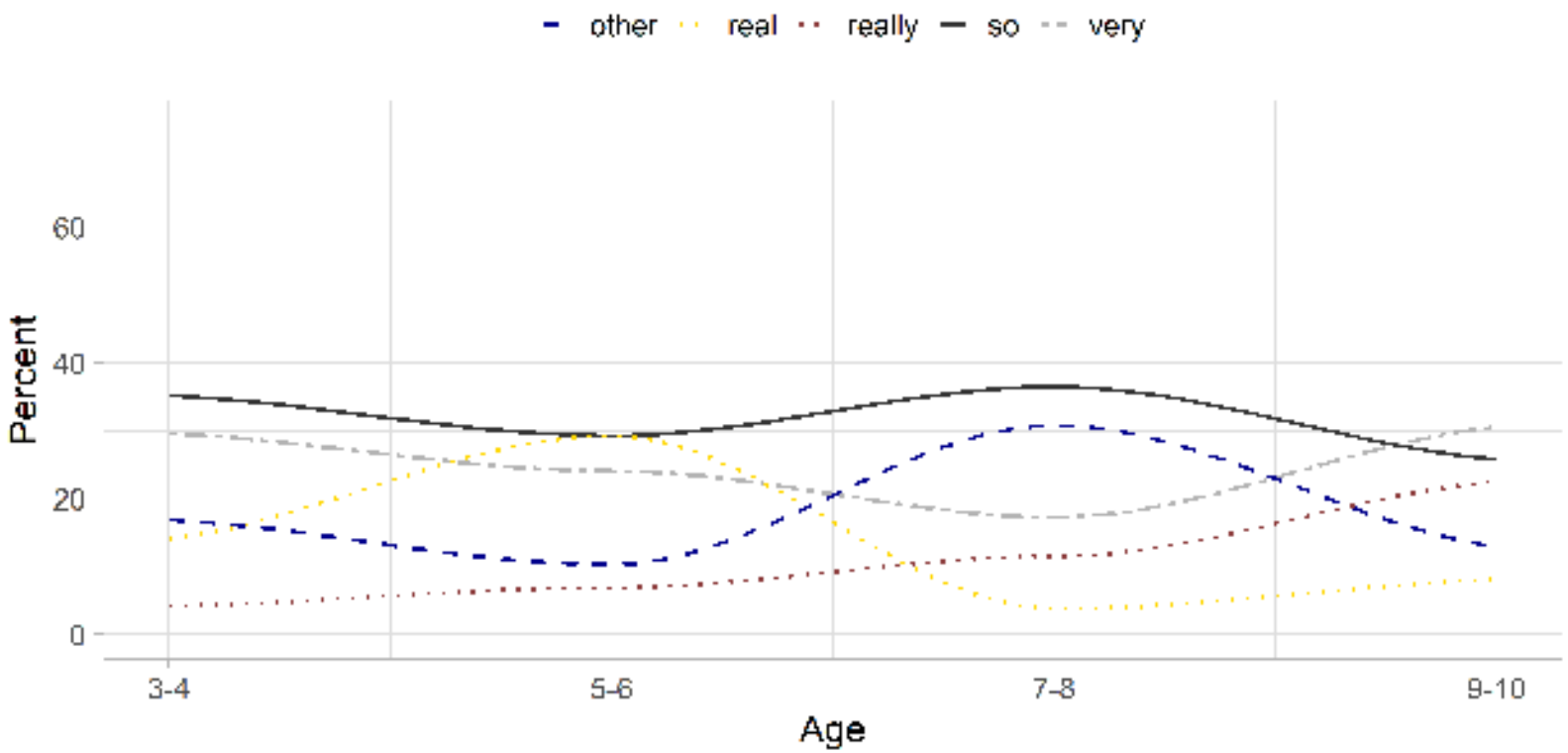


Figure 5: Amplifier types by age (HSLLD)

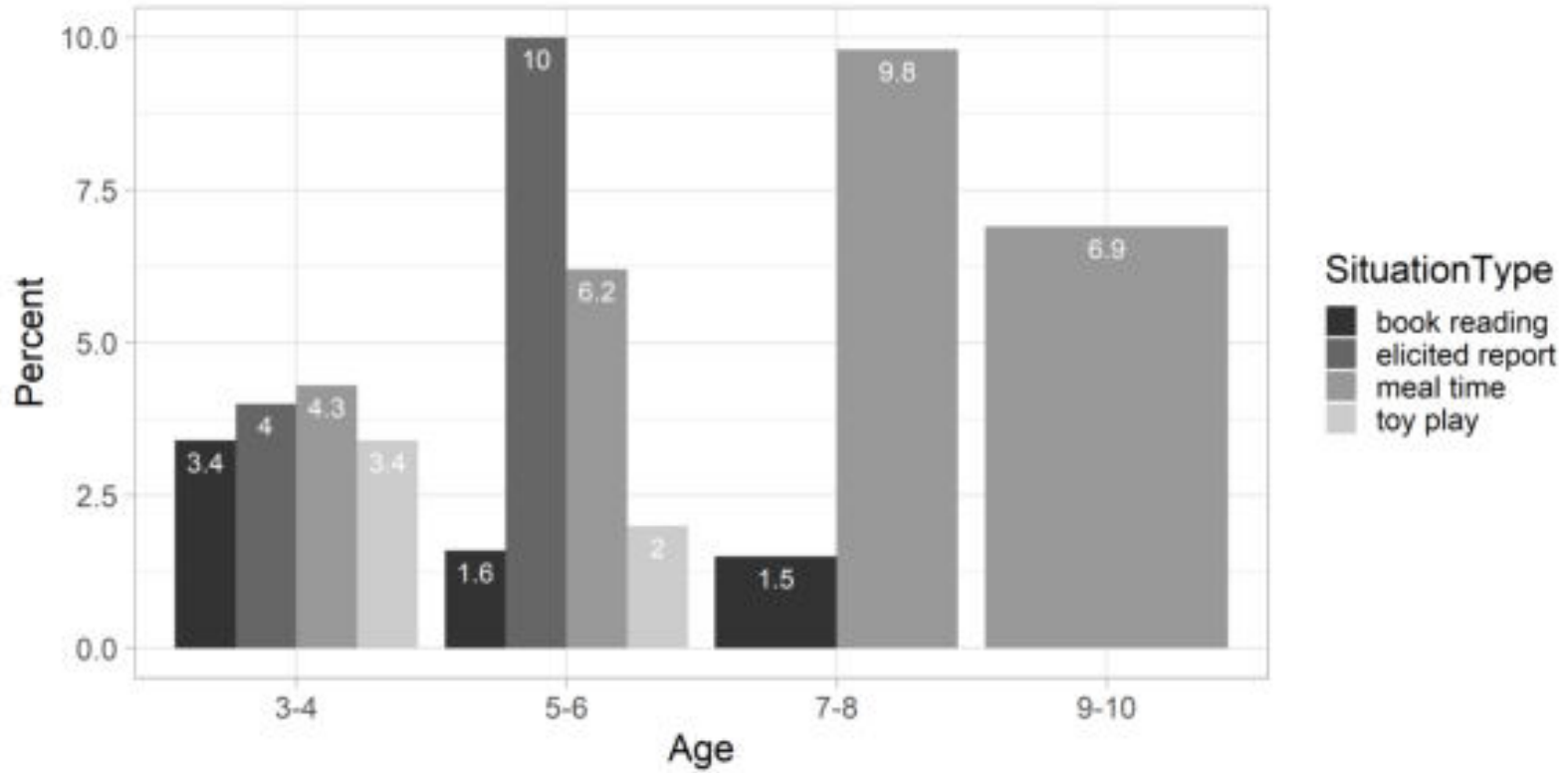


Figure 6: Percentages of amplification by age and situation type (HSLLD)

Interim synopsis

- Overall frequency
  Stability among younger speakers, increase in amplification among children aged 9 and 10
- Type frequency
  Chaotic use among younger children, patterning emerges after an age of 5 (*so* outperforms rival variants)
- Extra-ling. constraints
  - Similarity among children aged 3 and 4, situational differentiation emerges at age 5
  - Differentiation in use: freq. increase in meal time conversations but substantial decrease in book reading situations.

Q_3

How does the input of the mother pattern?

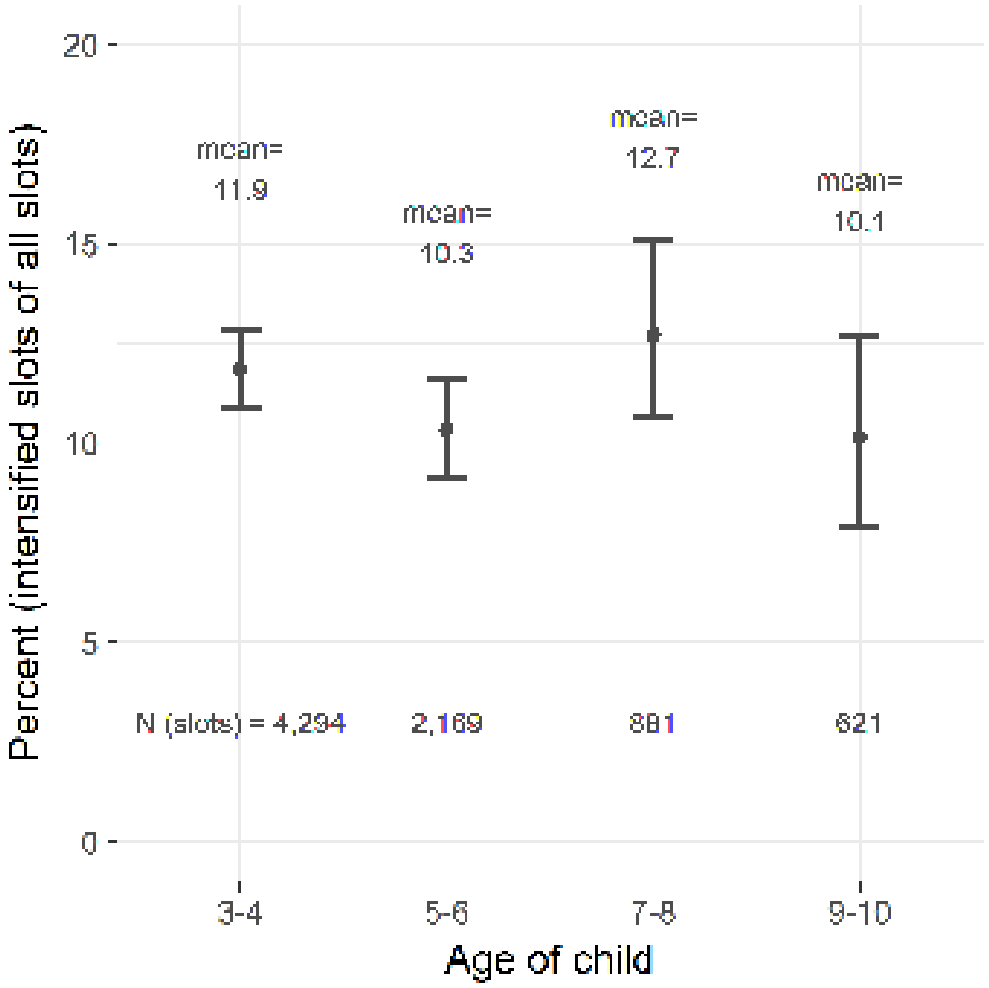


Figure 7: Percent of amplified slots in mother's CDS by age of child (HSLLD)

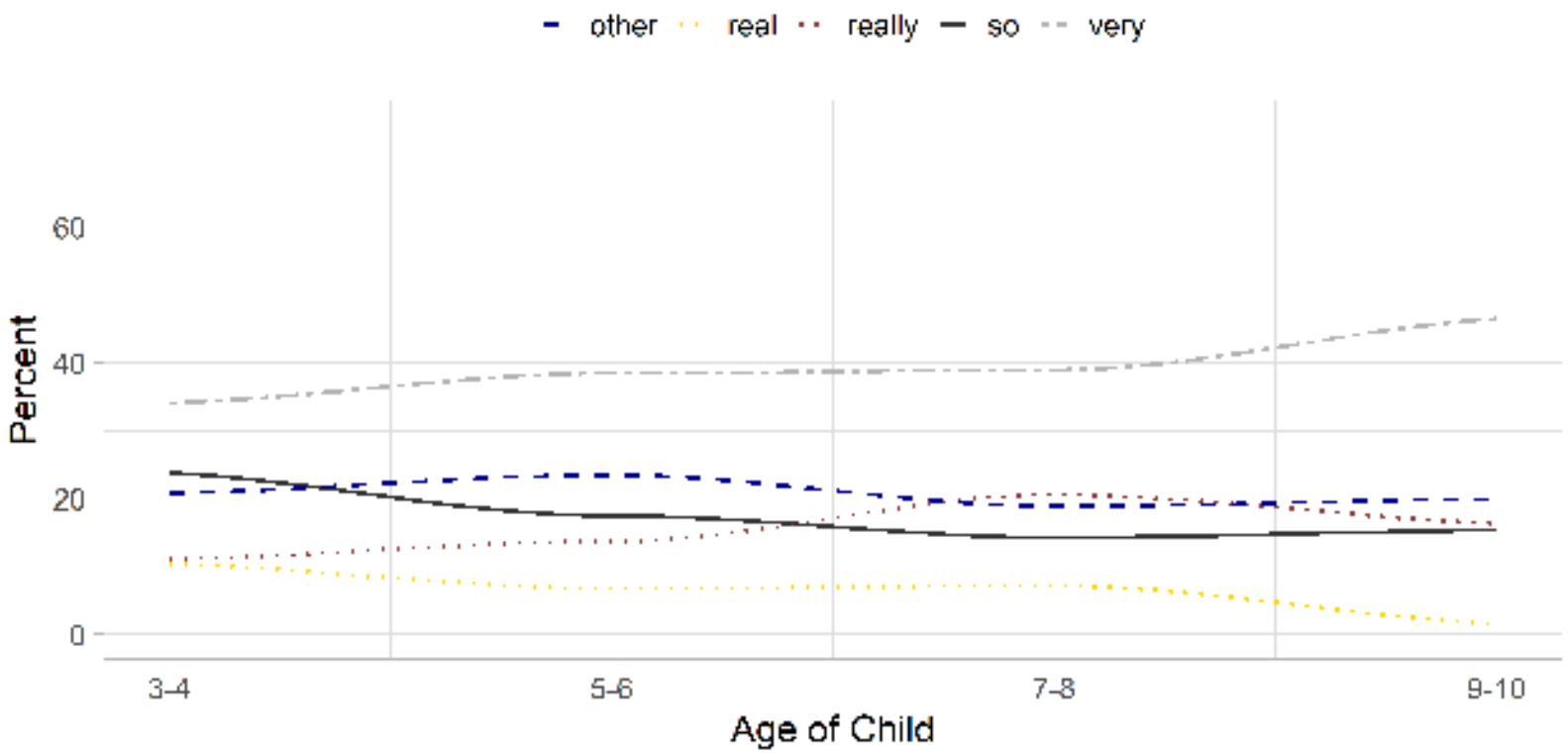


Figure 8: Mothers' amplifier types by child's age (HSLLD)

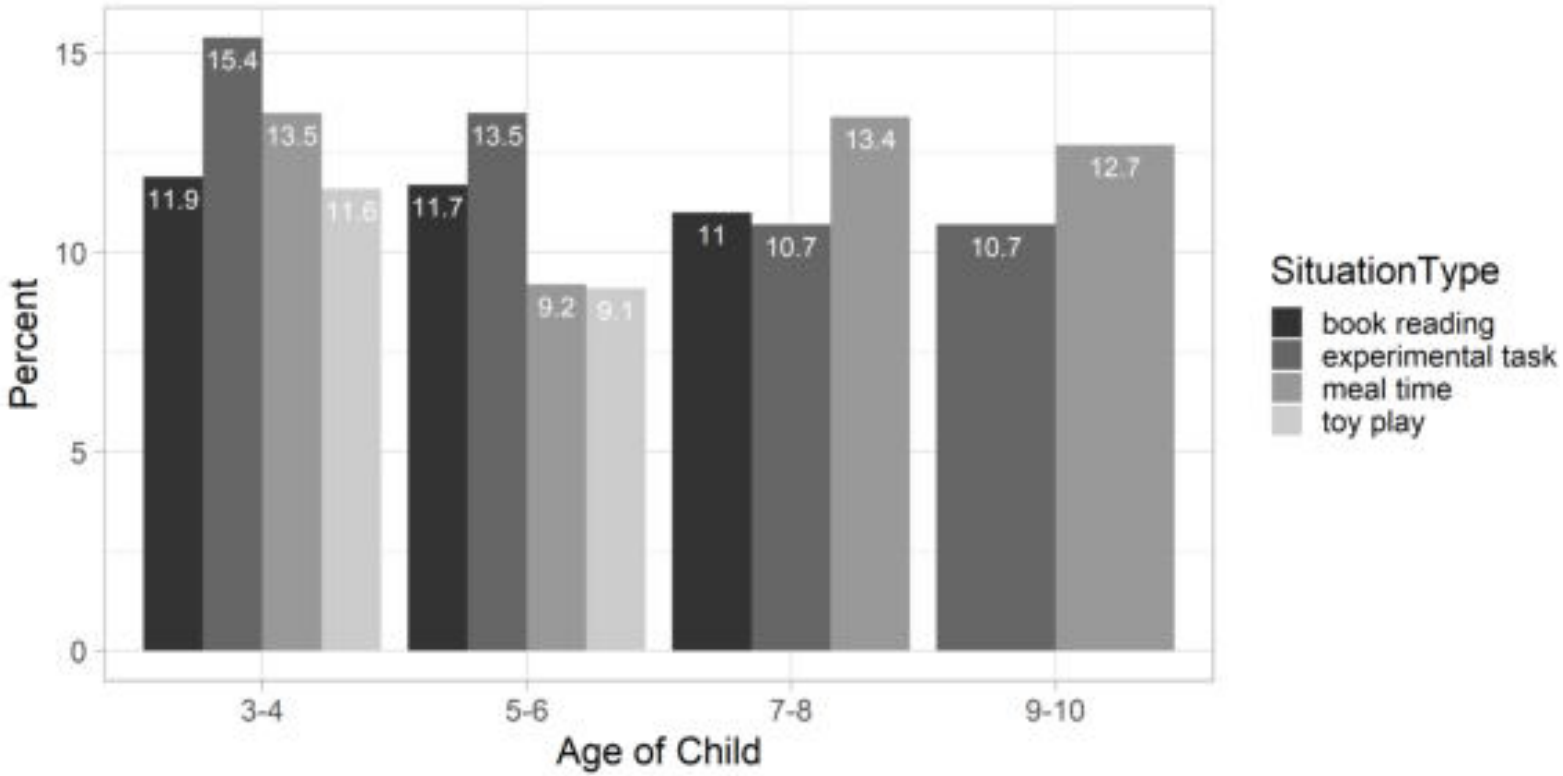


Figure 9: Percentages of amplification in mother's CDS by child's age and situation type (HSLLD)

Q_4

What causes the obs. stratification if not the CDS input?

$\rightarrow$ How does the use of women in non-CDS pattern?

Data and Data Processing

Santa Barbara Corpus of Spoken American English (SBC) (part of the American component of the *International Corpus of English* compiled between 2000 and 2005)

- Same processing as for HSLLD data
- Only speech of women between 19 and 50 years of age

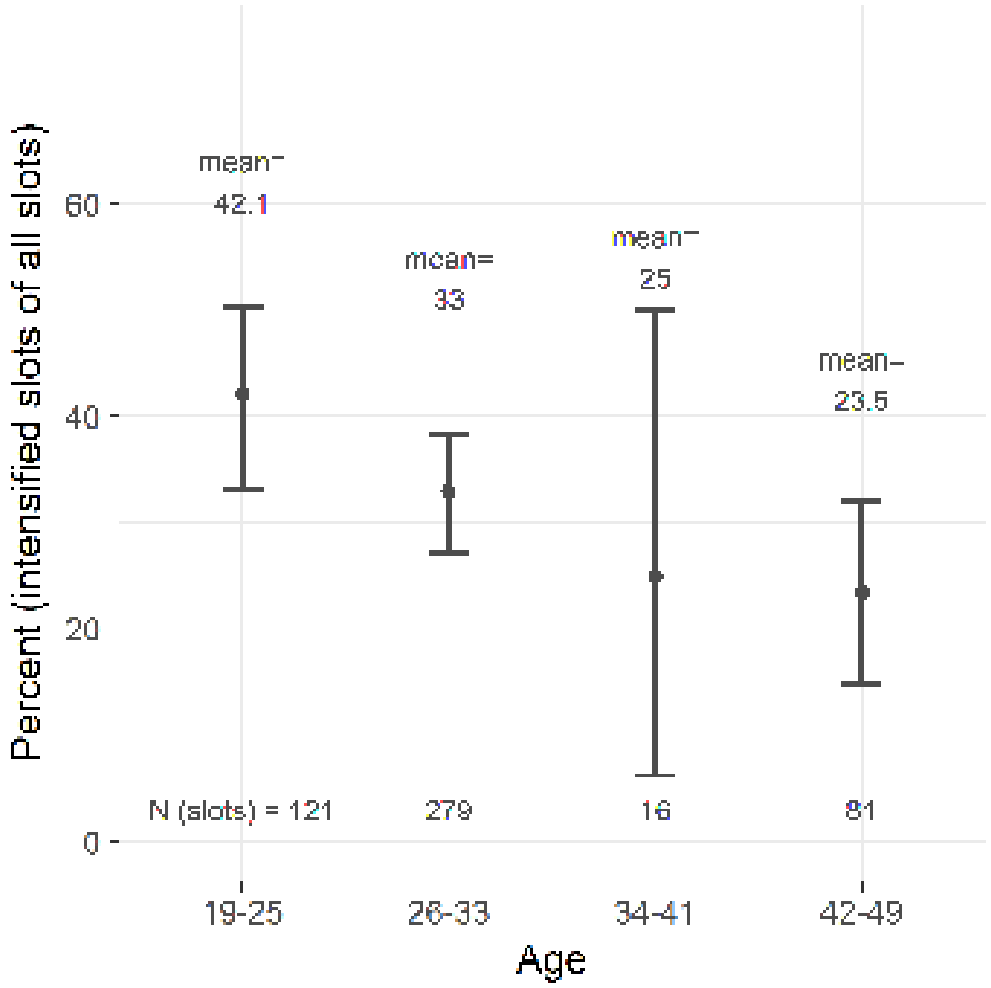


Figure 10: Percent of amplified adjectives by women against age (SBC)

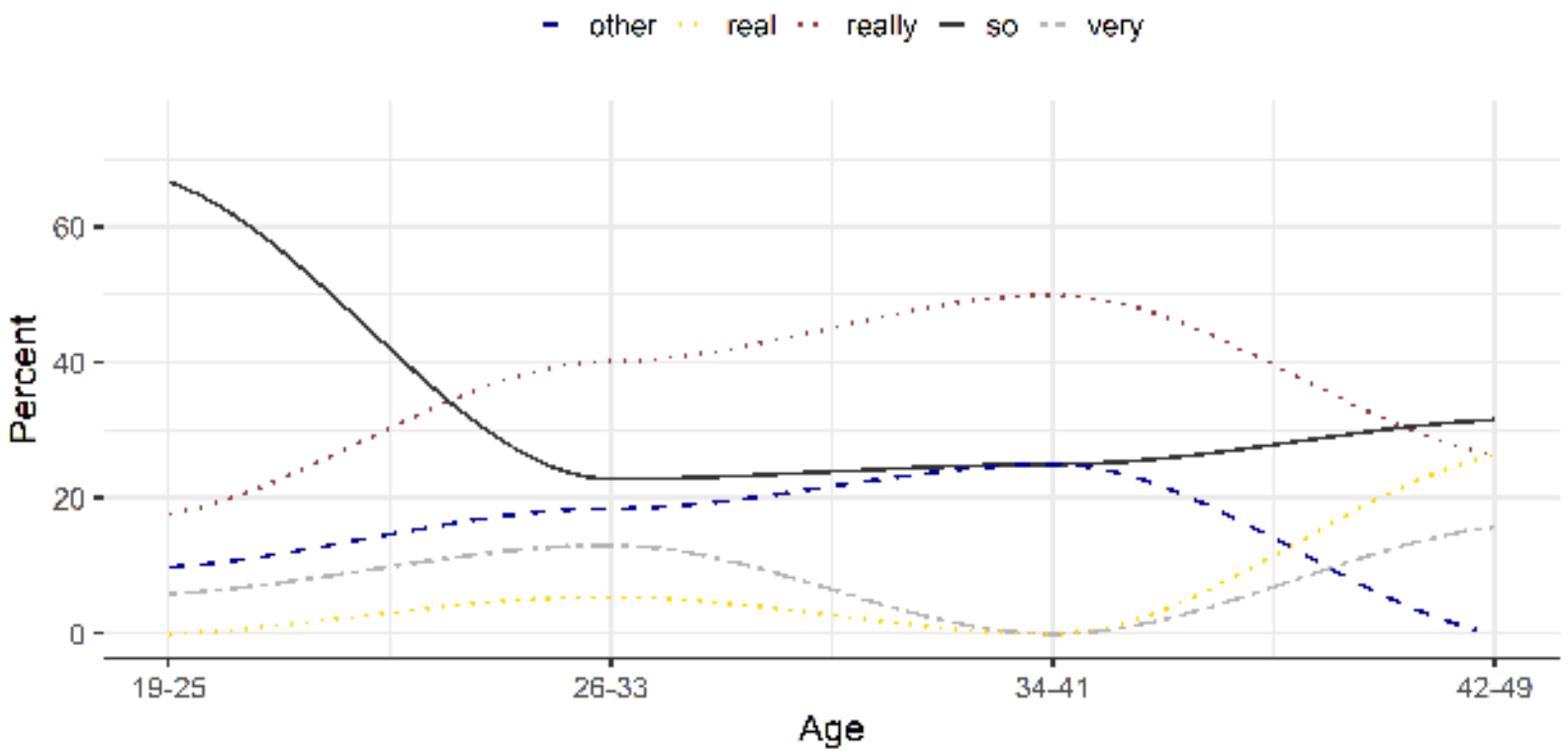
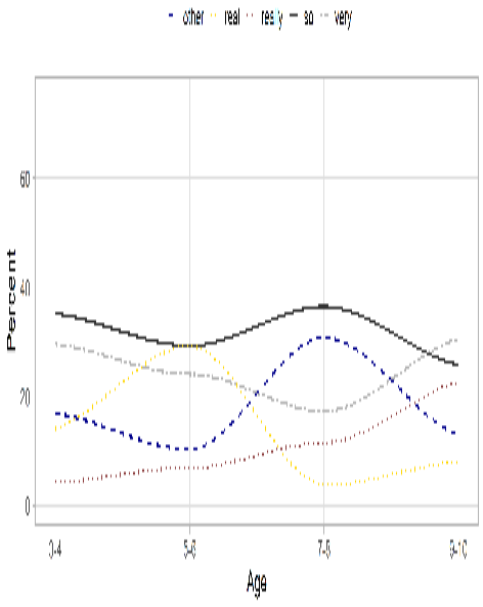
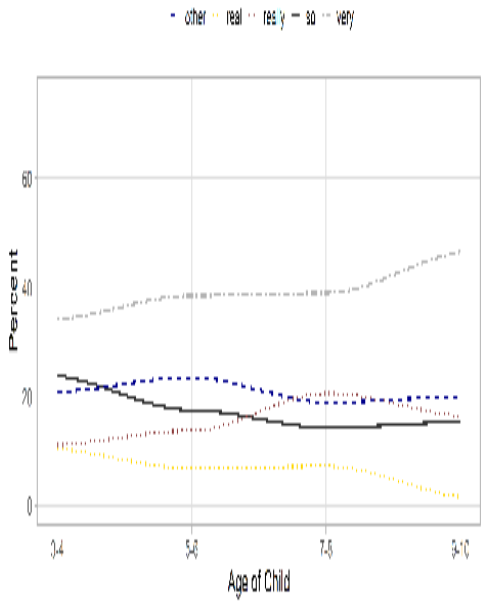


Figure 11: Women's amplifier types by age (SBC)

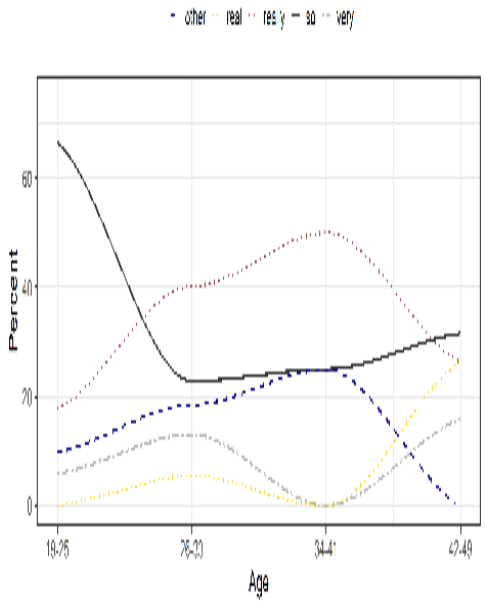
Interim recapitulation



Children



Mothers



Women

Interim synopsis

- Overall frequency
  Substantially higher compared to both children and CDS
- Type frequency
  Youngest group similar patterning to children
  (*so* > *really* > *very*)
- Extra-ling. constraints
  SBC represents private dialogue data: cannot test for effects of situation type (register)

Summary, Discussion & Problems

Summary

Main points (with pinches of salt)

- Frequency of children's use of amplifiers mirrors the frequency of CDS but not that of women of child bearing age (frequencies of youngest cohort in SBC much higher)
- Patterning of children's use of amplifier types mirrors the use of women of child bearing age (youngest cohort in SBC) but not CDS
- CDS very conservative(!) in terms of amplifier use
- Little register stratification in the speech of children aged 3-4 (similar to CDS)
- Drastic register differences are observable from age 5 onward (extra-ling. constraints!)

Discussion

- Results indicate that the children model their use based on non-CDS input rather than CDS (true for type patterning but not with respect to frequency).
- Frequency of amplification differs across situation types
  - extra-ling. constraints are acquired very early on.
  - extra-linguistic constraints seem to be acquired alongside linguistic forms rather than separate from linguistic forms as previously suggested (Labov 1964; Nardy et al. 2013: 258-260).

Discussion

L1-Acquisition from a usage-based CxG perspective

- Children are thought to start out with concrete pieces of language and gradually develop more schematic constructions. . . . Constructivists see these early constructions as the building blocks for later development. . . (Lieven 2006: 84–85)

Stage 1	**Stage 2**	**Stage 3**
Holophrases	Pivot schemas	Schematic constructions
↓	↓	↓
It's daddy! It's mommy! It's Elmo!	It's X_{NN}	$[Y_{Dem./Existential/Dummy} + X_{NN}]$
very busy very wet very hungry	very $X_{Adjective}$	$[Y_{Intensifier} + X_{Adjective}]_{Int.Construction}$

Discussion

Social Grounding of L1-Acquisition

- Children "acquire language in a socially grounded fashion. On the constructional view, the item-based schemas that children acquire are . . . tied to specific situations and situation types" (Hilpert 2014: 159)
- The patterning of amplifiers produced by children aged 5 and older supports predictions of usage-based approaches of language acquisition (cf. Tomasello 2003)

Remaining Issues

- Data set too small to warrant reliable/conclusive conclusions
- Situation types not across all age groups (data compilation not optimal; D'Arcy is compiling better data)
- SBC and HSLLD not fully comparable (SBC compiled later (2000-2005) than HSLLD (1987-1991) and regional difference: California vs Boston)

Amplification in SLA

Q_5

How and where do learners of English (NNS) differ from native speakers (NS) with respect to adjective amplification?

Data

- *International Corpus of Learners of English* (ICLE)
  - 2.5 mil. words representing argumentative writing by intermediate to advanced Bulgarian, Czech, Dutch, Finnish, French, German, Italian, Japanese, Norwegian, Polish, Russian, Spanish, and Swedish learners of English
- *Louvain Corpus of Native English Essays* (LOCNESS)
  - 290.000 words of argumentative essays by American and British university students and British A-level students
  - LOCNESS was specifically designed to allow meaningful comparisons between the learner data represented in the ICLE.

- Processing as described above.

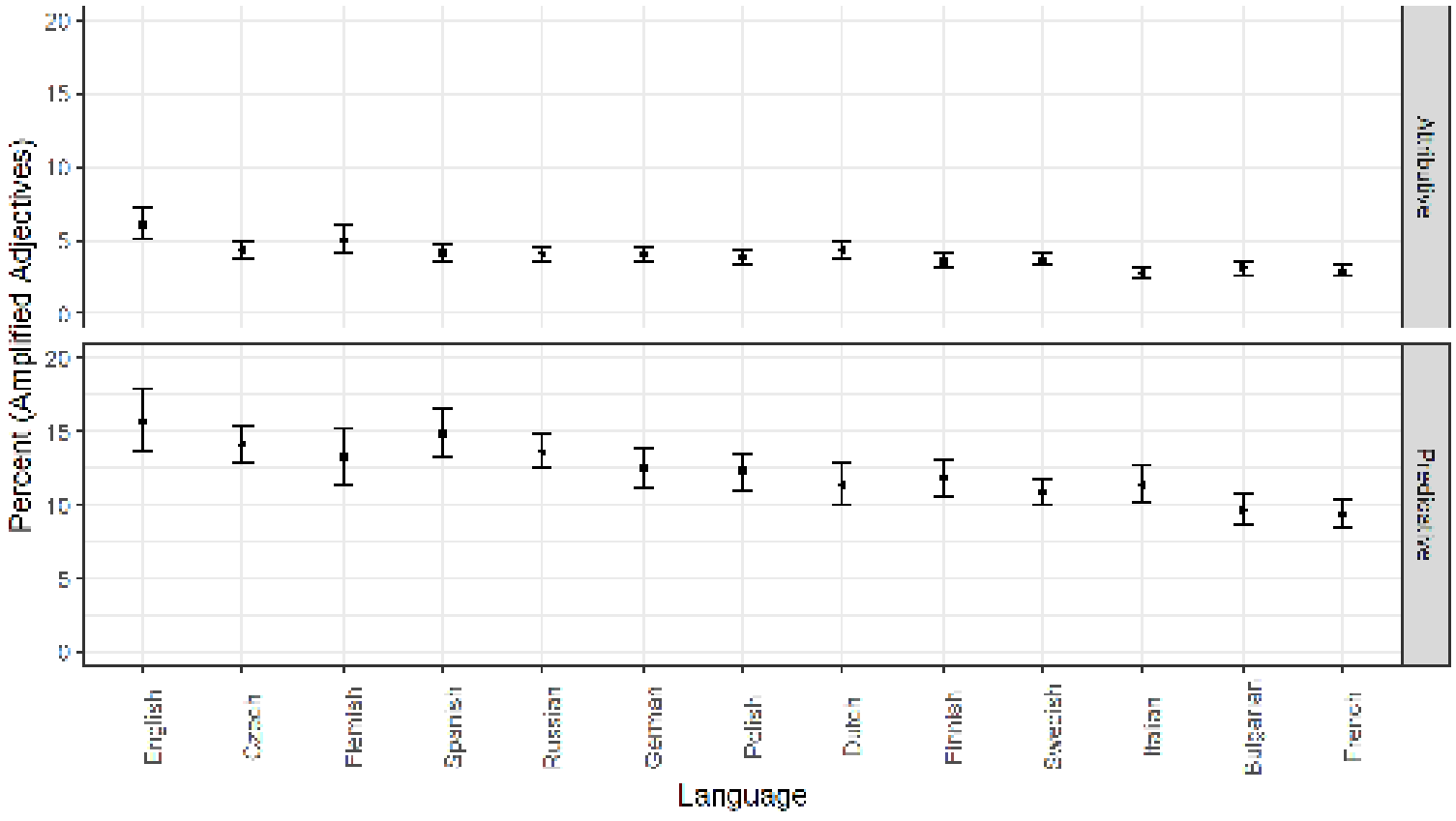


Figure 15: Percent of amplified slots across L1-backgrounds by syn. function in descending order.

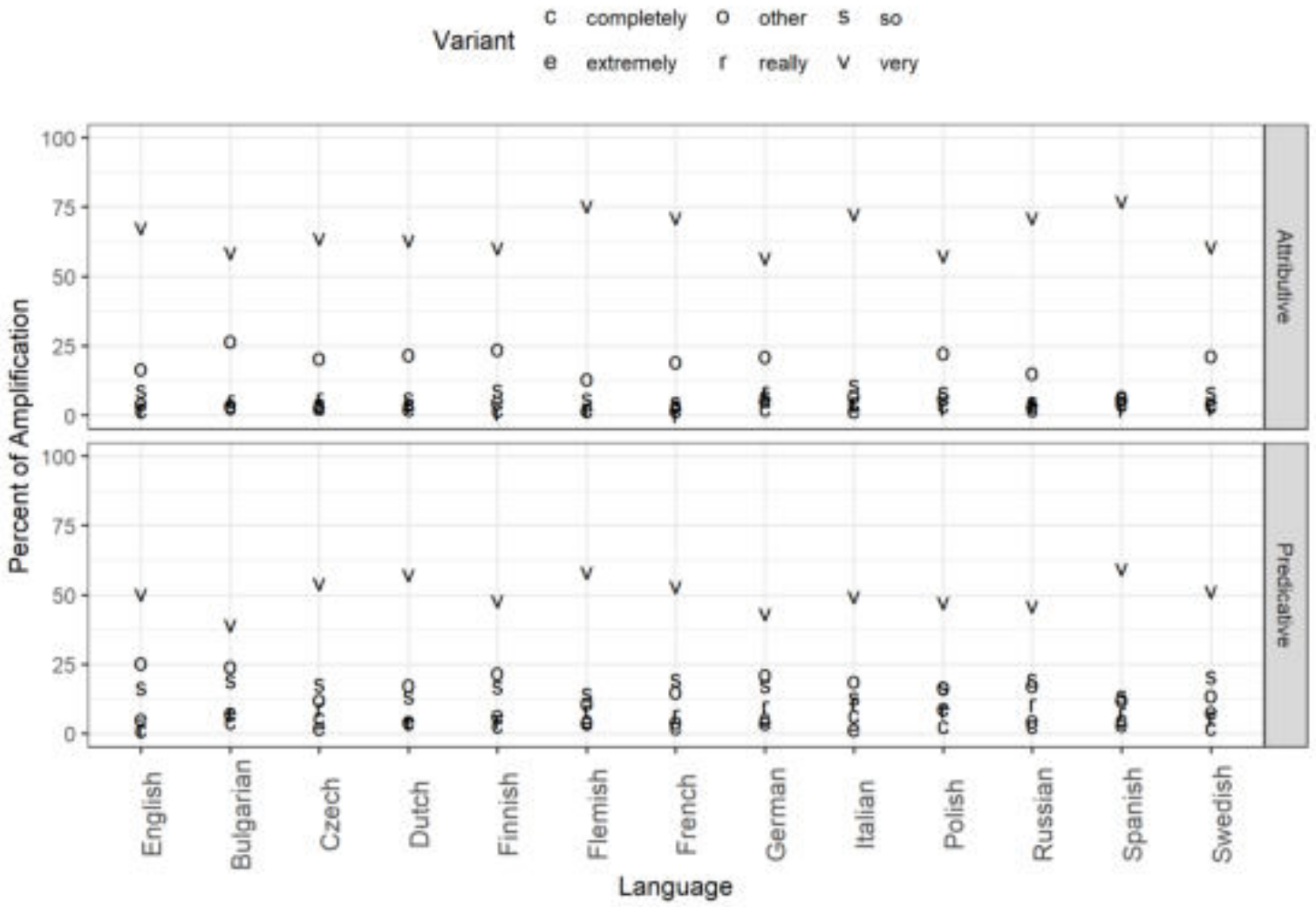


Figure 16: Percentages of amplifiers by L1-background.

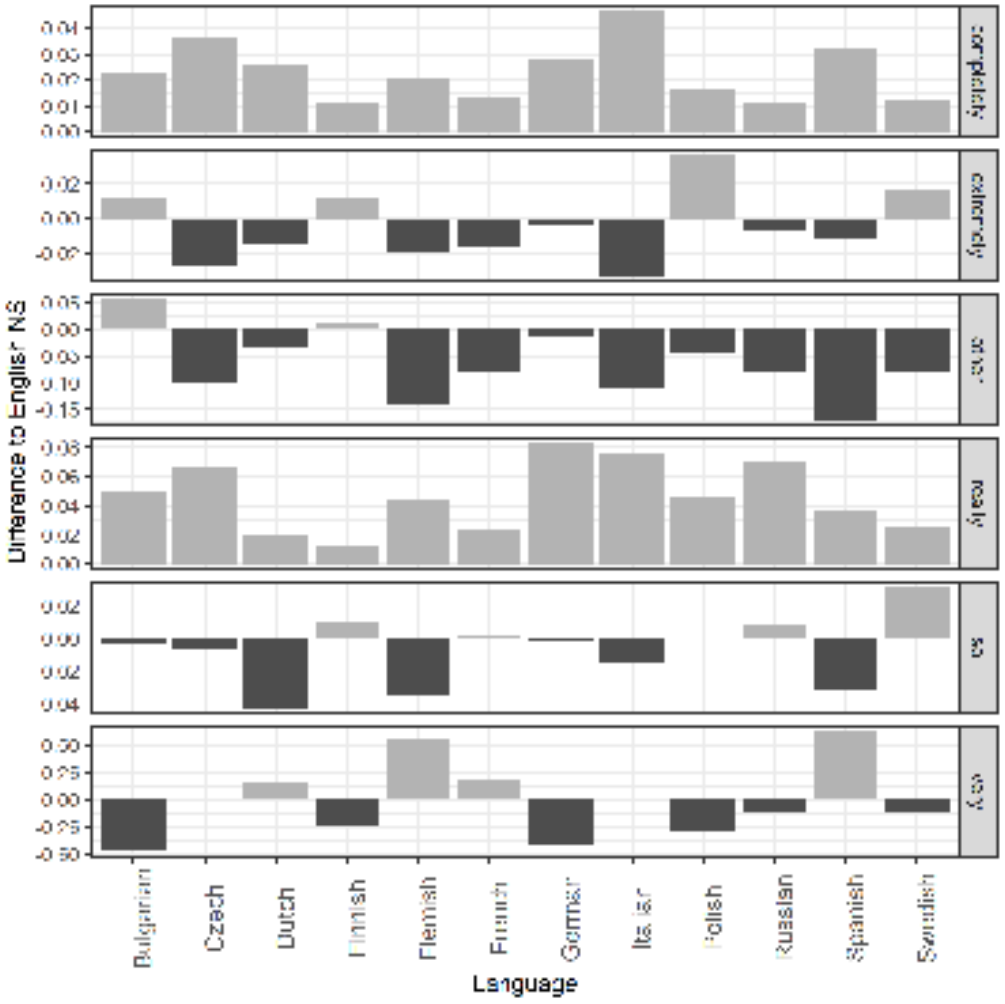


Figure 17: Bar graphs showing the difference to expected frequencies of amplifier types based on NS use.

Statistical Analysis

Covarying Collexeme Analysis (CCA) (Stefanowitsch and Gries 2005)

- Extension of Fisher's Exact test
- Evaluate attraction between elements that occur in two distinct slots within a specified construction
- How does a variant in a first slot affect the likelihood of another variant from another set in a second slot?
- Values below 0 indicate rejection while values above 0 indicate attraction
- Advantage of CCA
  - very robust(!)
  - does not rely on distributional assumptions (unlike the χ^2-family of tests)

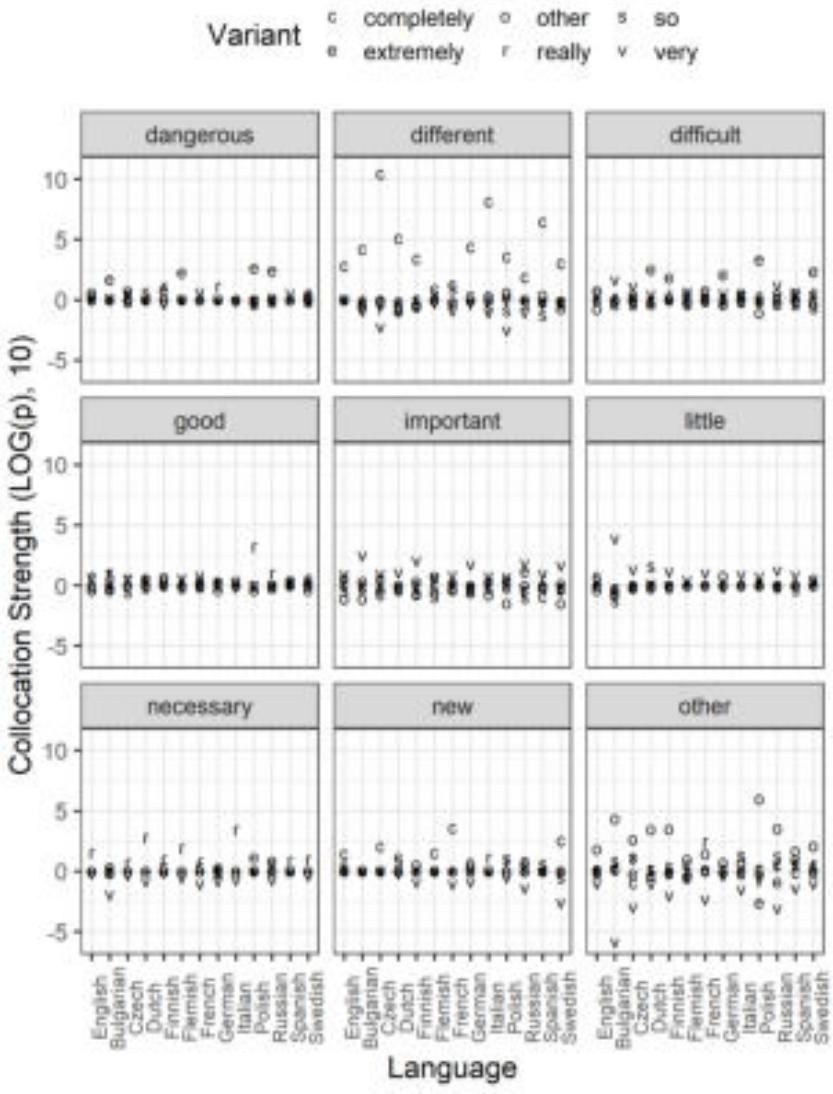


Figure 18: Results of the covarying collexeme analysis by L1-background and adjective.

Summary

- NS amplify more than NNS
- Patterning of amplification varies substantially across L1-backgrounds
- Common trends among NNS
  - Overuse of *completely* and *really*
  - Overuse of *completely* with *different*
  - Overuse of *really* with *necessary*
  - Overuse of *extremely* with *difficult*

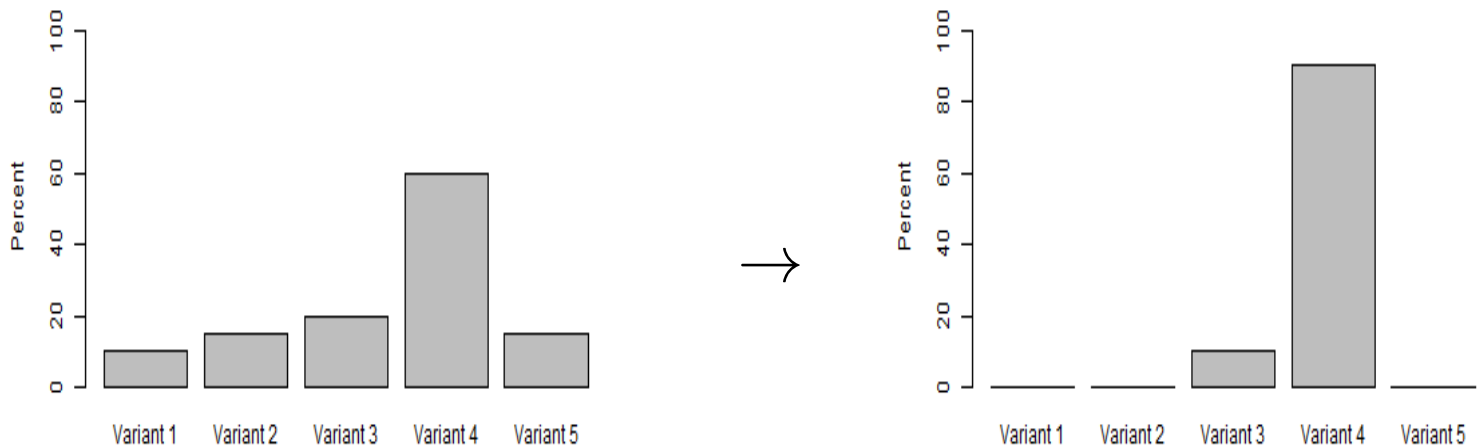
Discussion

- Results indicate that the NNS use collocational patterns that are typical of informal speech
- Lack of pragmatic/stylistic awareness (poverty of input)
- Language teachers can profit from learning about such systematic divergences among NNS
- NNS can profit from learning about stylistic constraints (pragmatic competence)

Discussion

Statistical Learning and SLA from a usage-based CxG perspective

- Children overgeneralize and form default Cxs while ignoring (systematic) variability/variation.



Input (by mother/later: peers

Output (by child)

Discussion

Statistical Learning and SLA from a usage-based CxG perspective

- Children overgeneralize and form default Cxs while ignoring (systematic) variability/variation.

Stage 1 Beginner (Holophrases)	**Stage 2** Advanced learner (Overgeneralization)	**Stage 3** Near native-like (Stylistic variability)
very good	really good	really good
very difficult	extremely difficult	very difficult
very different	completely different	completely different
very $X_{Adjective}$	fixed $[Y_{Intensifier}+X_{Adjective}]$	$[Y_{Intensifier}] + [X_{Adjective}]$

Amplification within and across varieties

Previous Research

Amplification

- substantial amount of corpus-based research on intensification (e.g Aijmer 2011, 2018; Fuchs 2016, 2017; Núñez Pertejo and Palacios 2014; Palacios and Núñez Pertejo 2012)
  → but mostly either focused on individual intensifiers or without regard to the intensified adjectives
- recently amplifier-adjective bigrams have come more into focus (e.g. Schweinberger 2017; Wagner 2017a,b)
- associated with teenage talk and young(ish) (female) speakers
  (Bauer and Bauer 2002; D'Arcy 2015; Macaulay 2006; Tagliamonte 2006, 2008)

Focus

- Amplifying *really* replaces *very* (lexical replacement)

(see D'Arcy (2015) for NZE; see Ito and Tagliamonte (2003) and Barnfield and Buchstaller (2010) for North East British English, Tagliamonte (2008) and Tagliamonte and Denis (2014) for Toronto English; see Tagliamonte and Denis (2014) for South Eastern Ontario English)

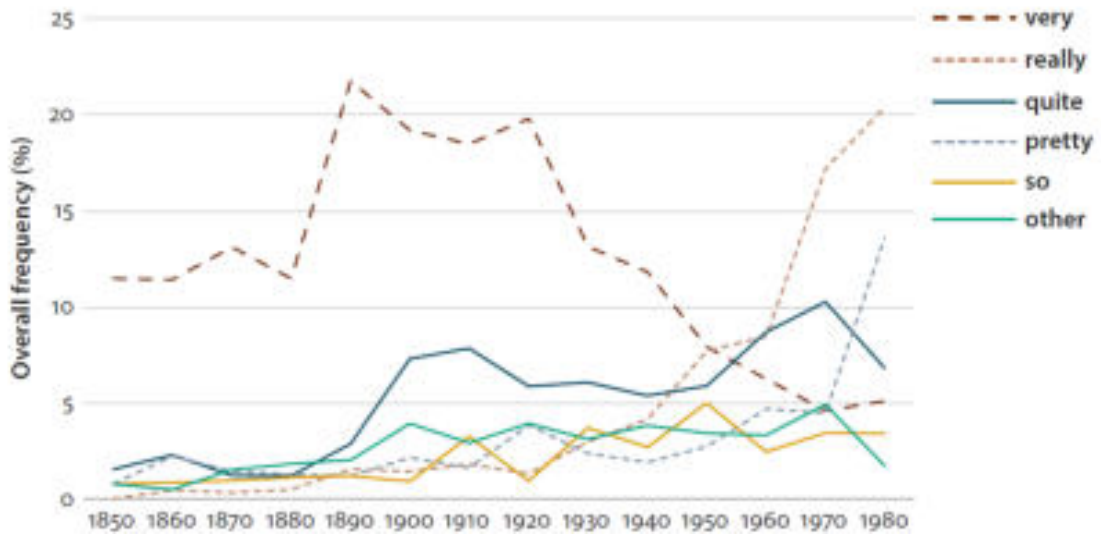


Figure 21: Adapted from D'Arcy (2015: 468)

Variationist Sociolinguistics

- Language is not homogeneous: variation is ubiquitous
  - Social factors : language use
  - Linguistic variation not random
  - Systematic correlation between certain social factors (age, gender, class, ethnicity, etc.) and language use
- Linguistic differentiation $\leftrightarrow$ social stratification

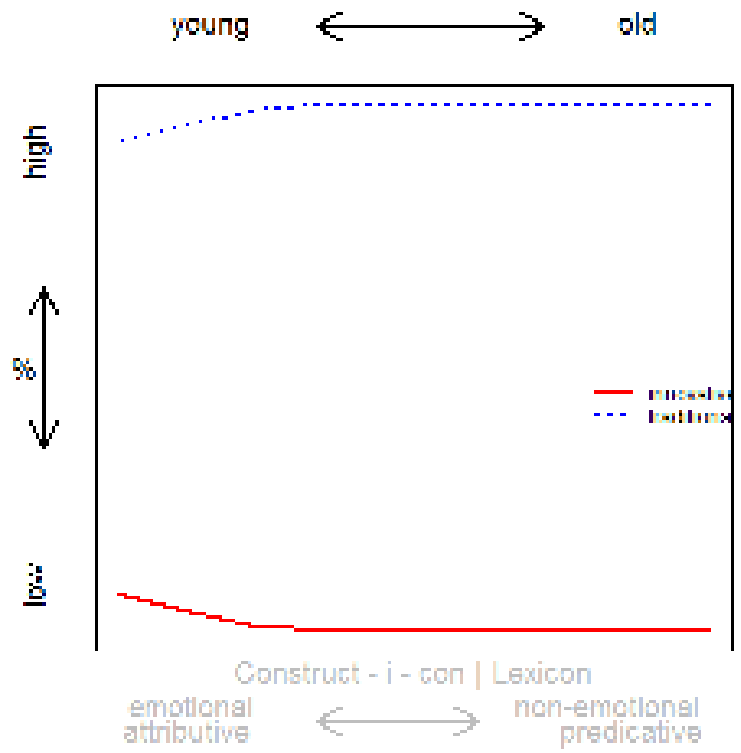
Diffusion of Innovations

young ⟷ old

upper

⟷

working



Diffusion of Innovations

young ⟷ old

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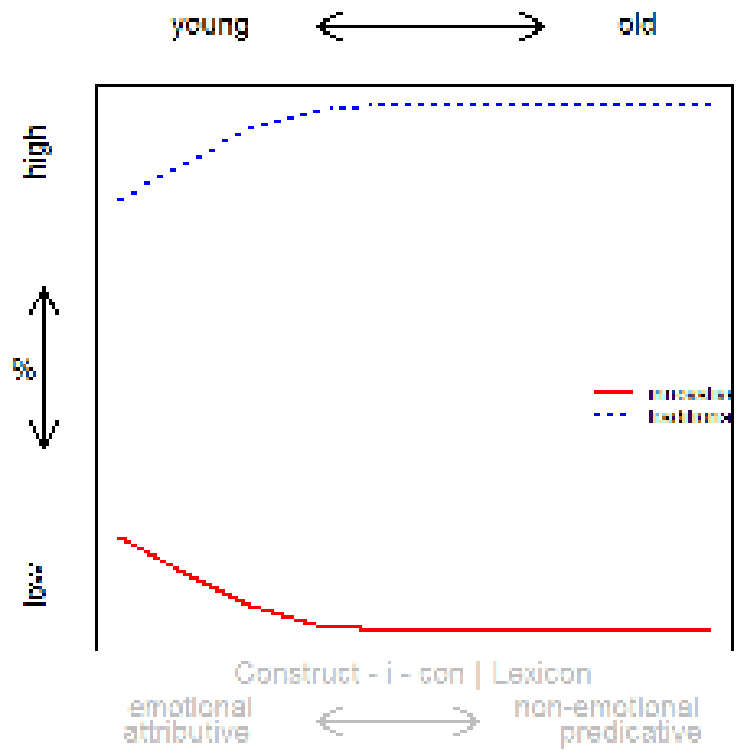
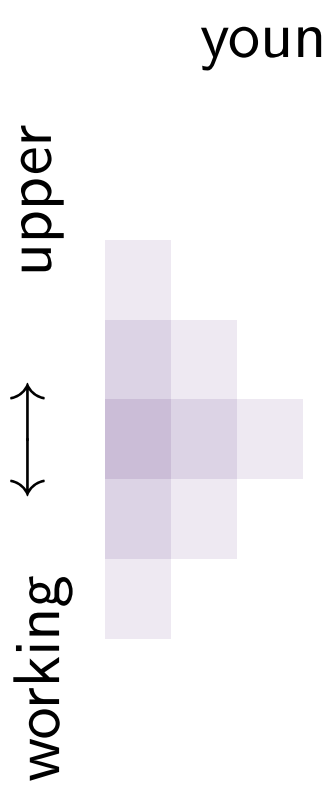
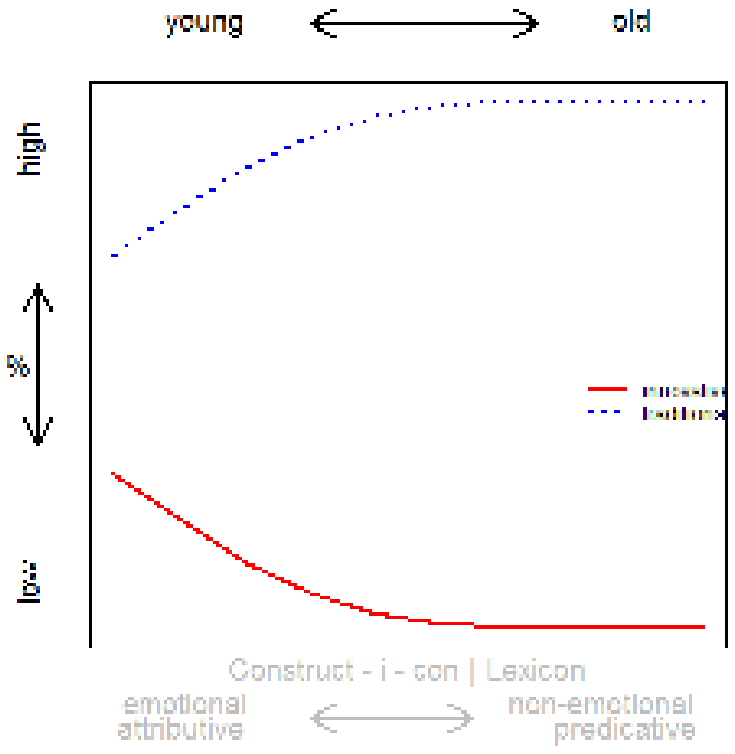
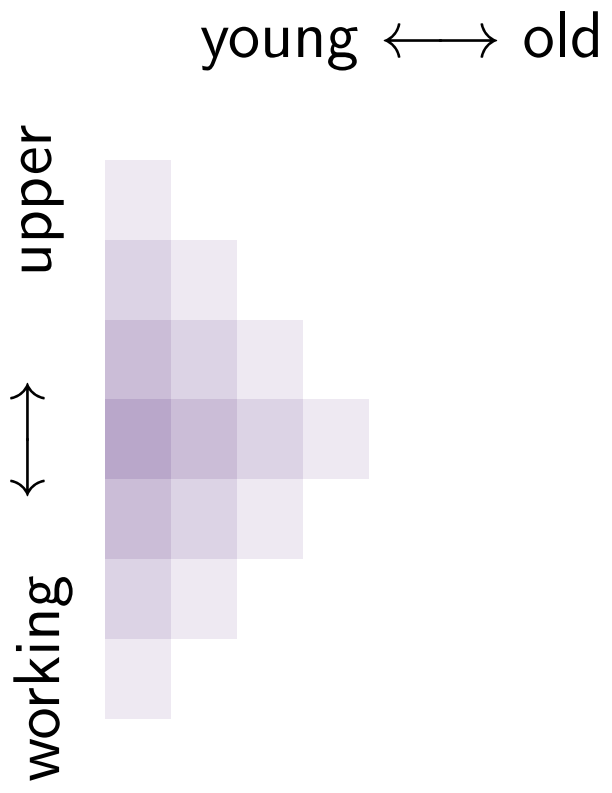


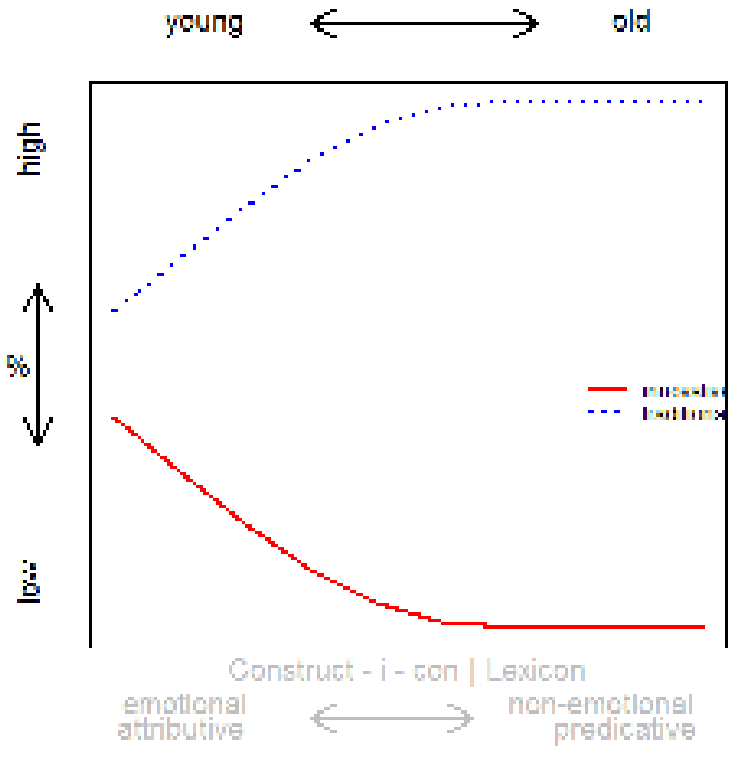
Diffusion of Innovations



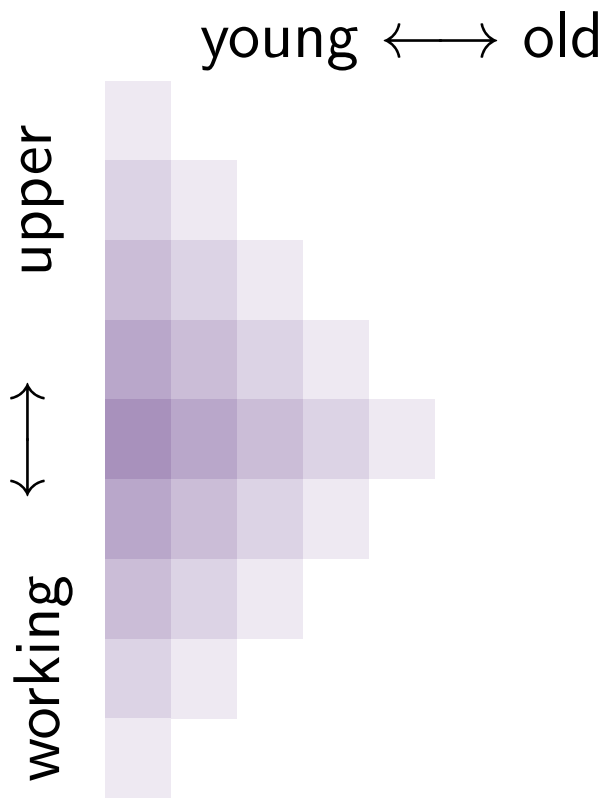


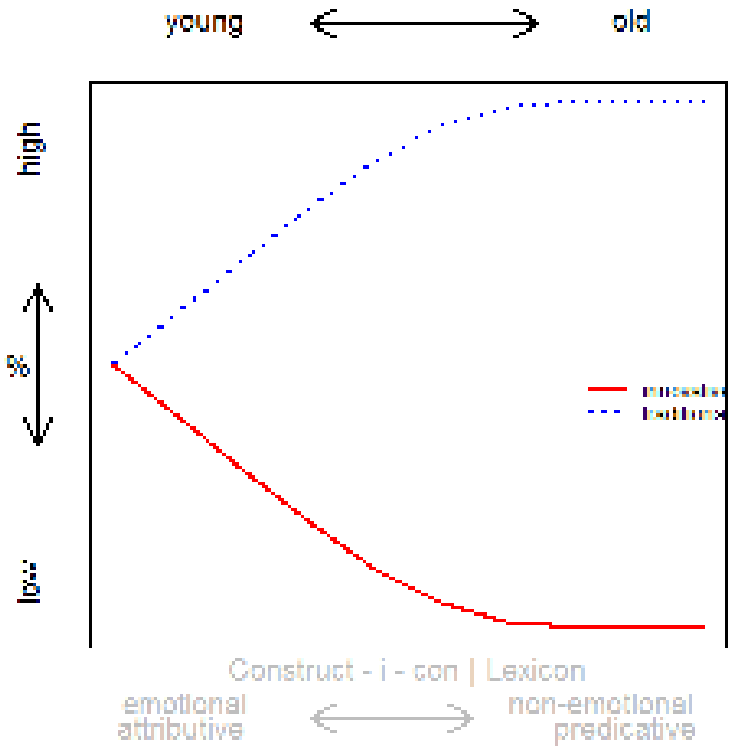
Diffusion of Innovations



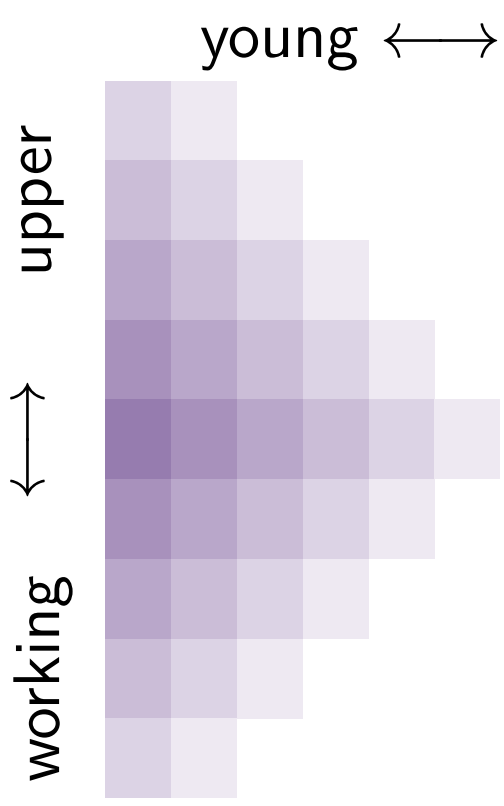


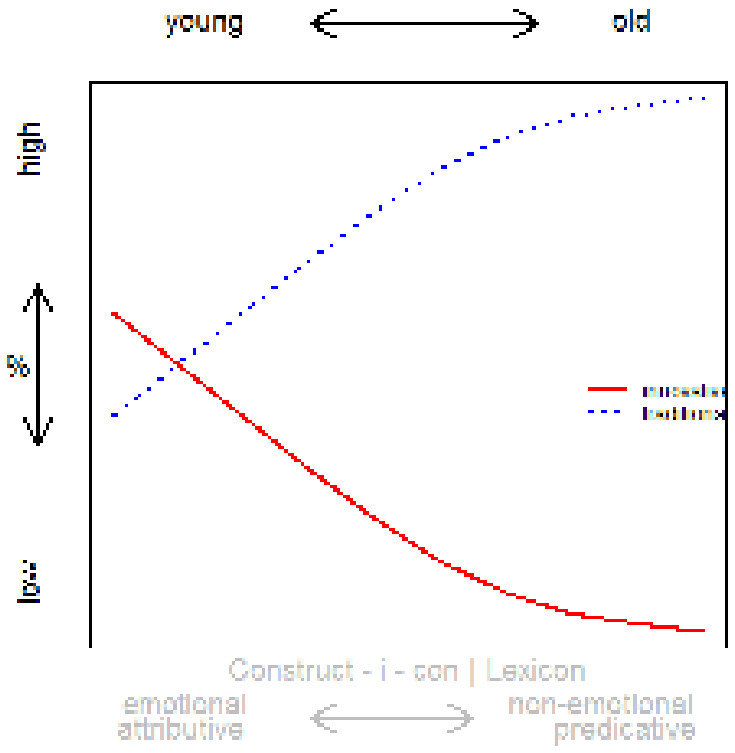
Diffusion of Innovations





Diffusion of Innovations





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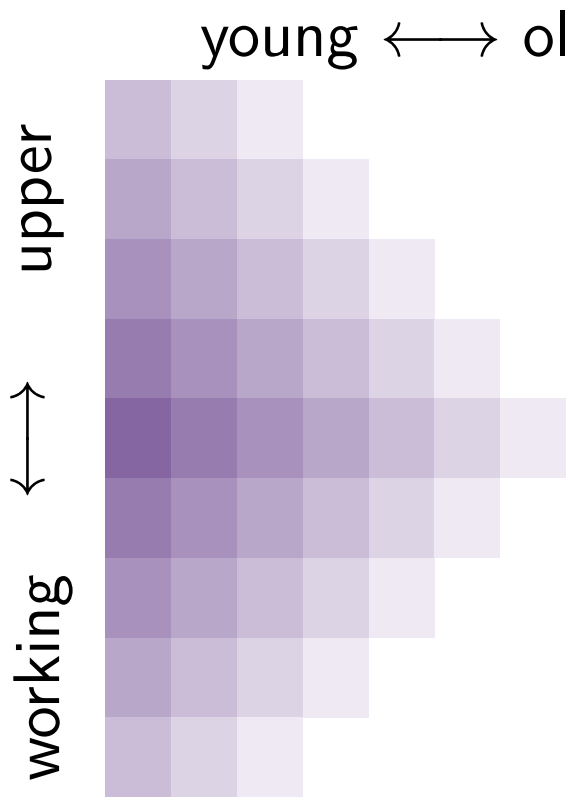

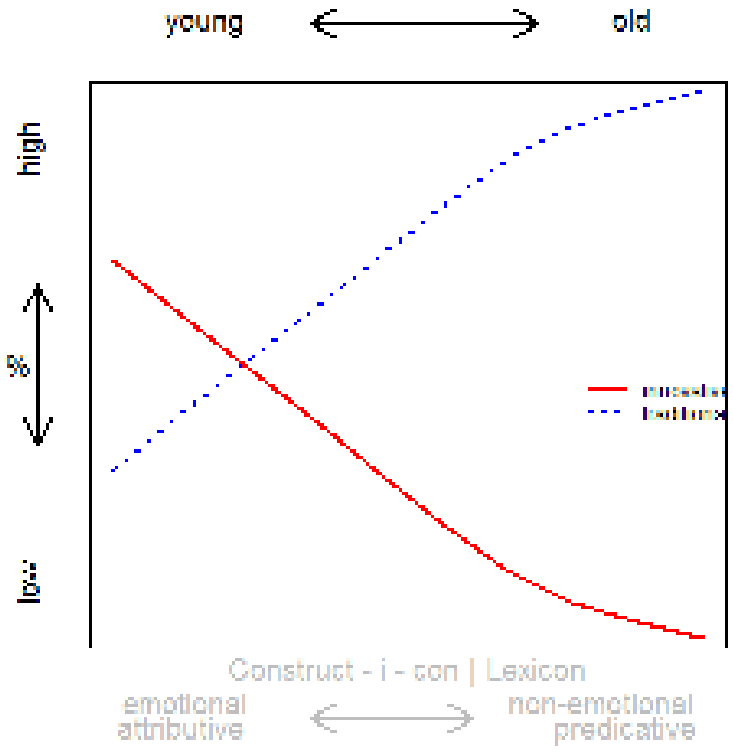

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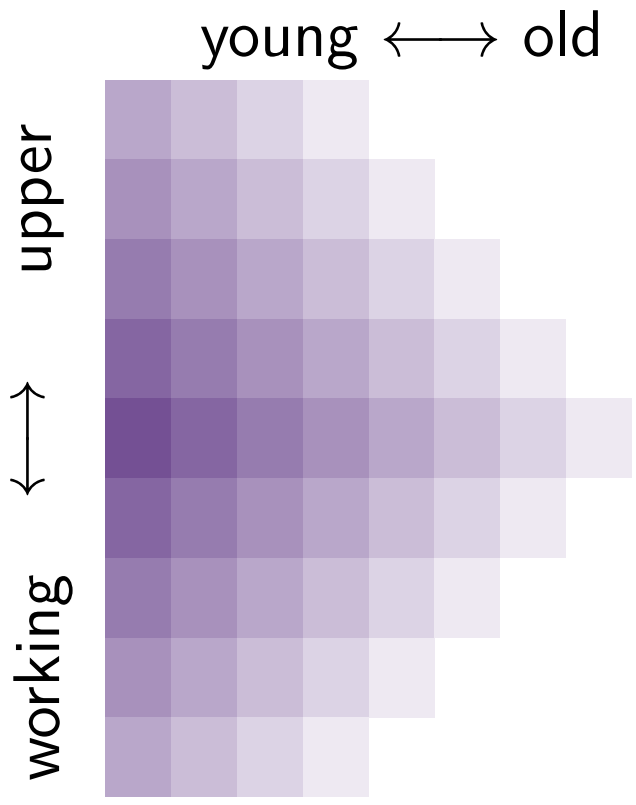

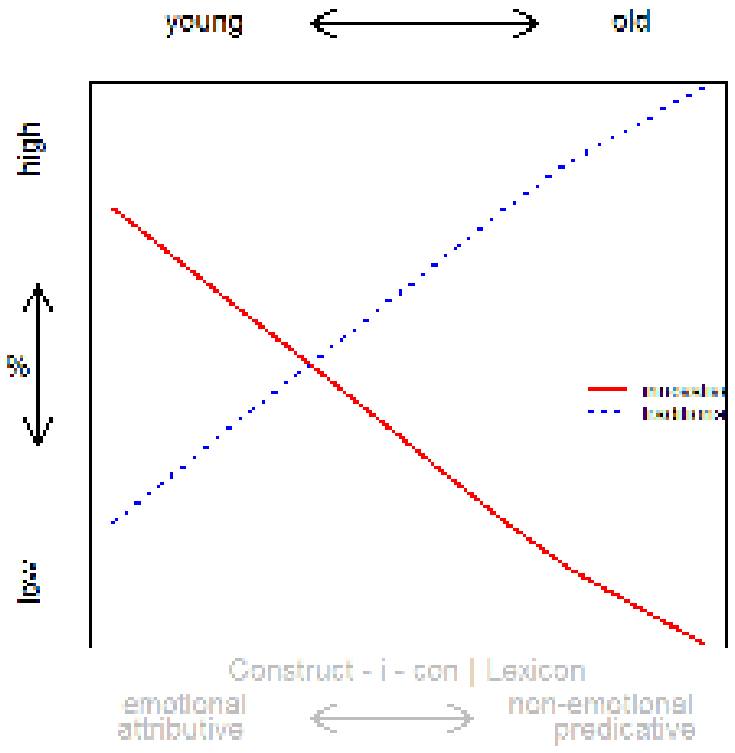

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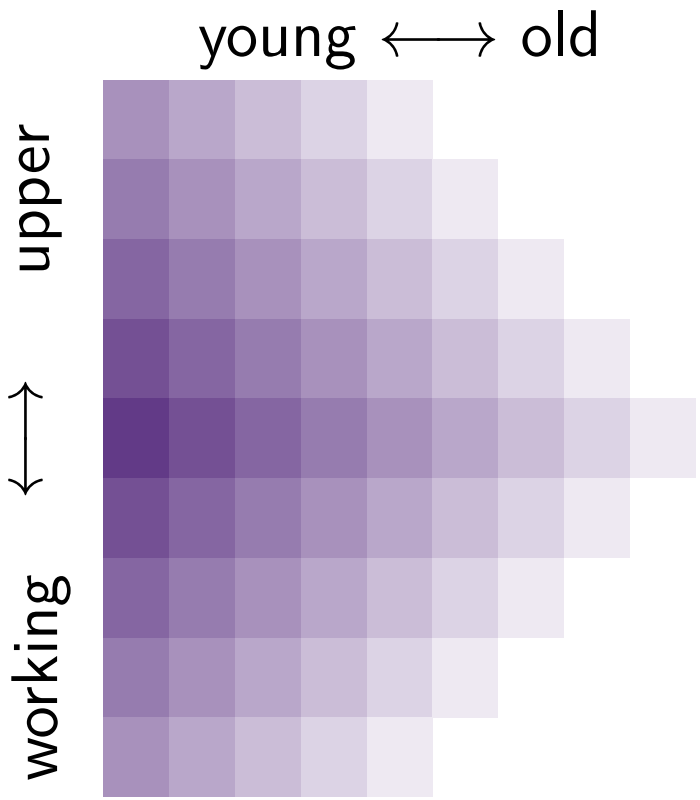

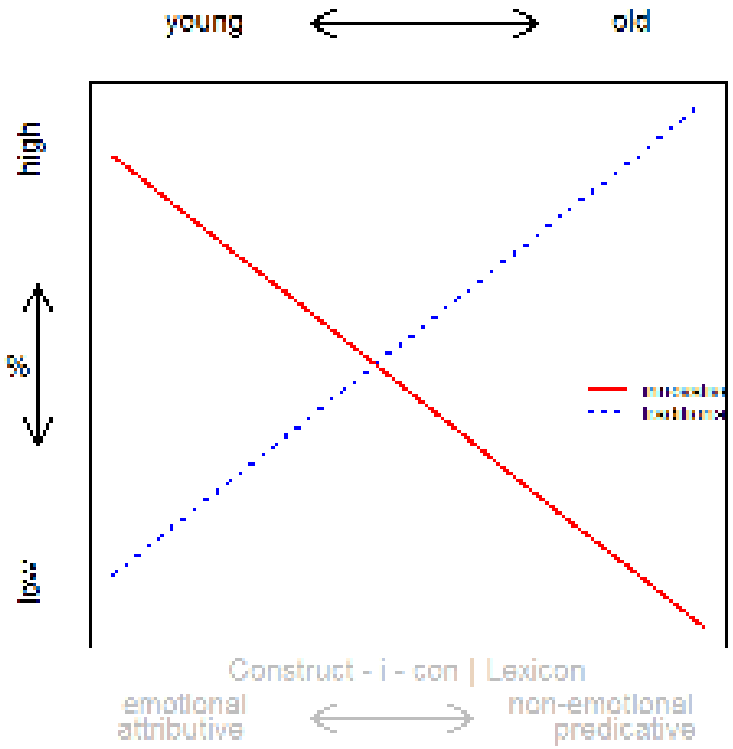

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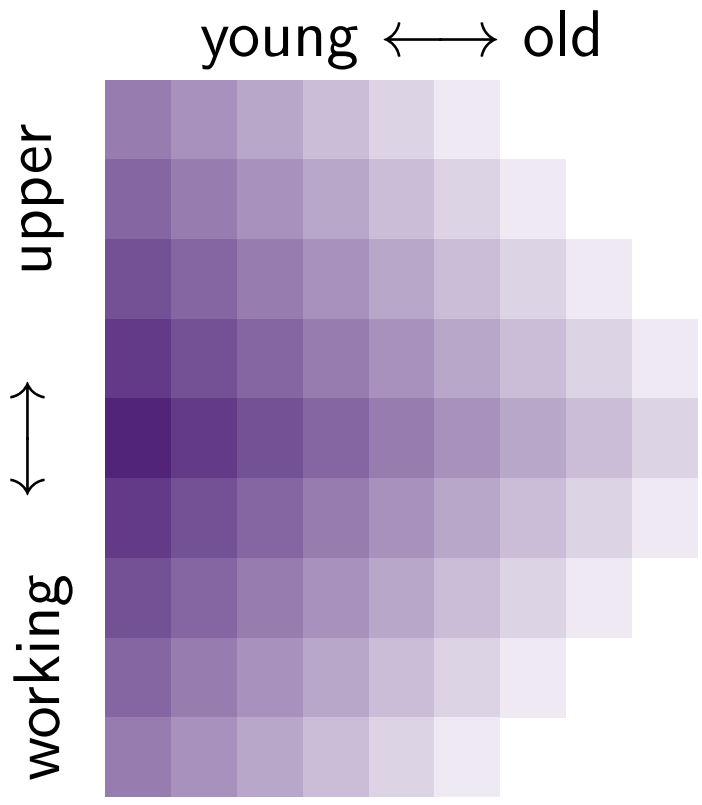
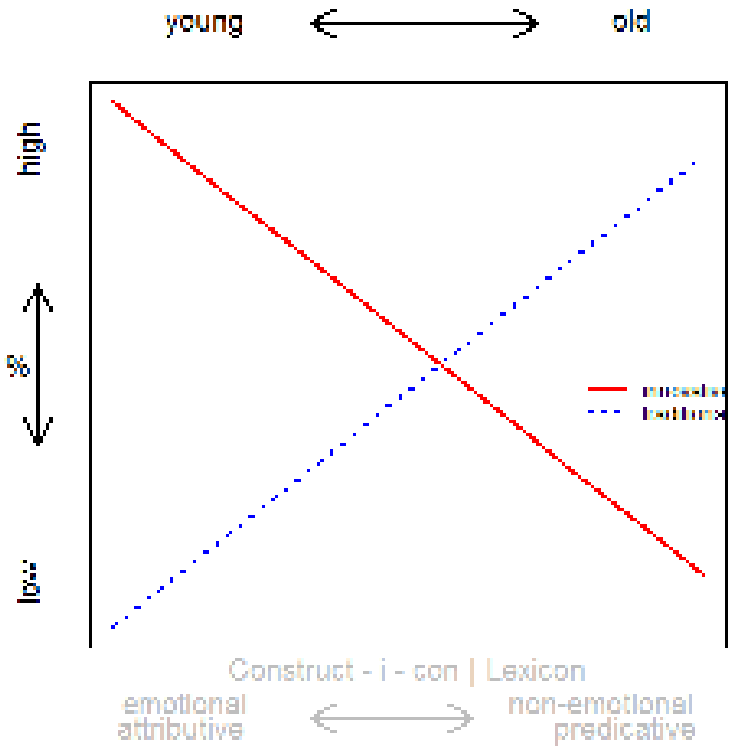
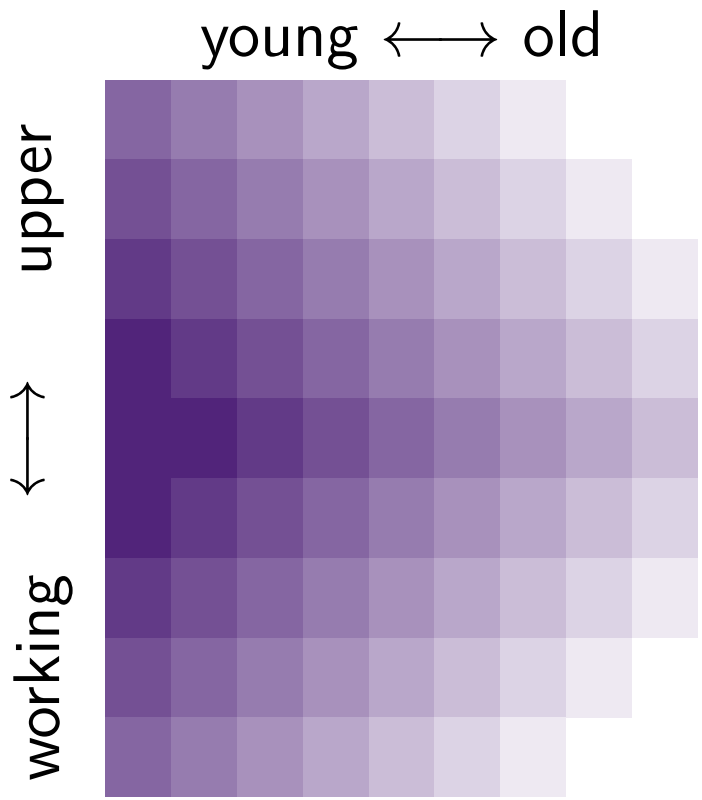
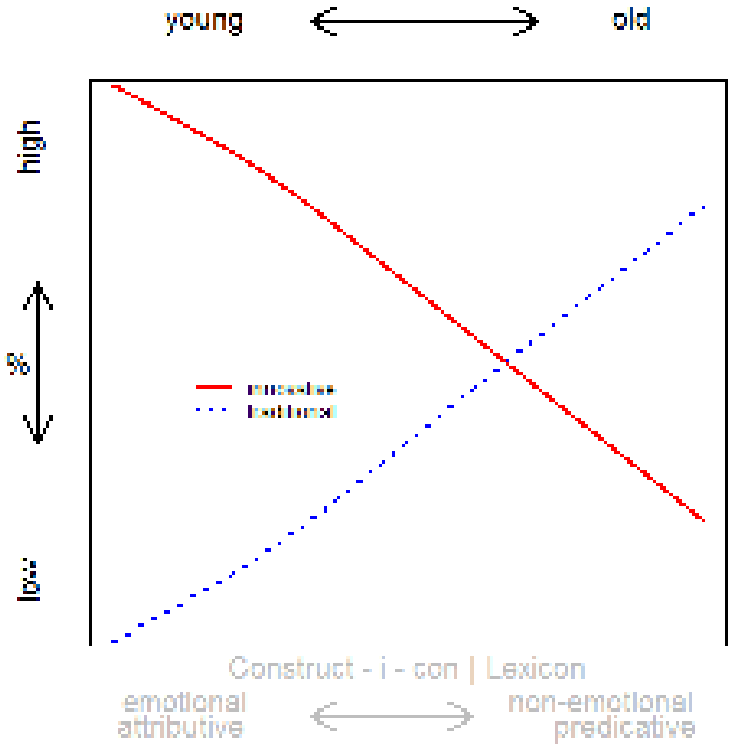


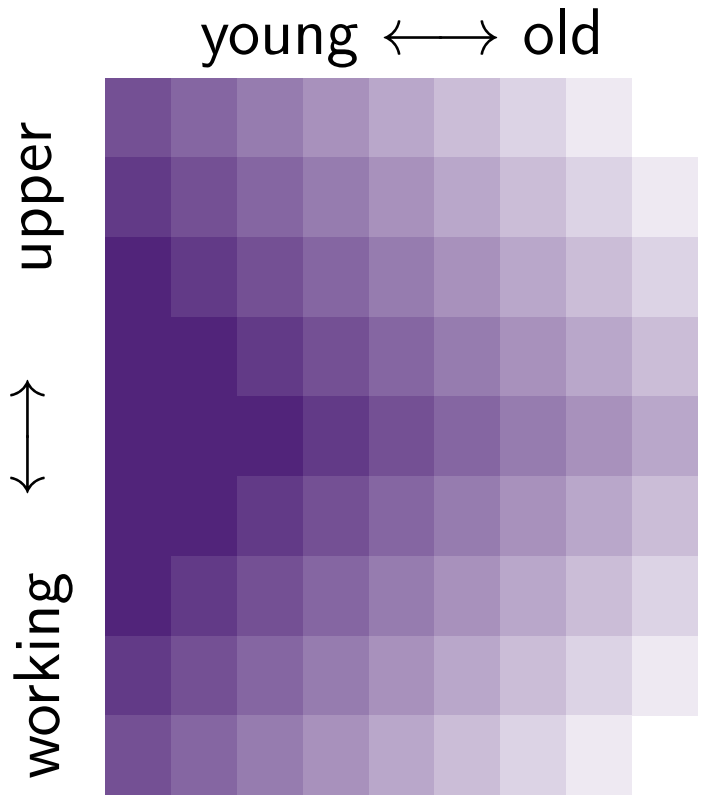


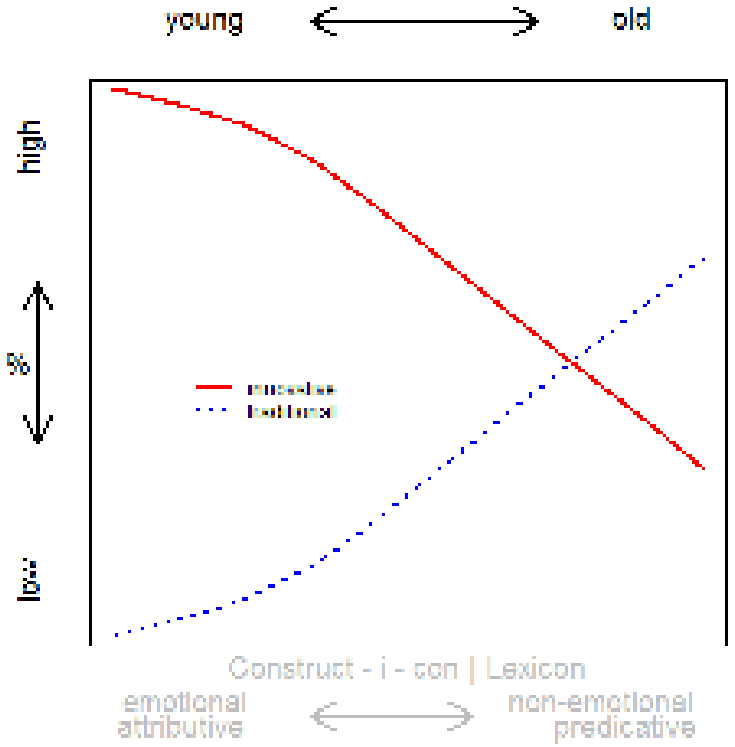
Diffusion of Innovations





Diffusion of Innovations





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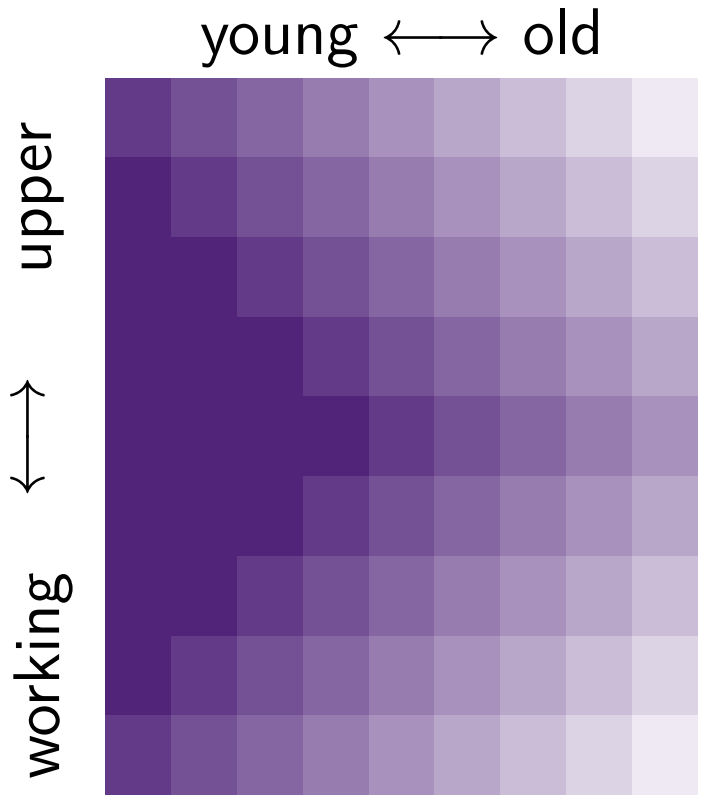
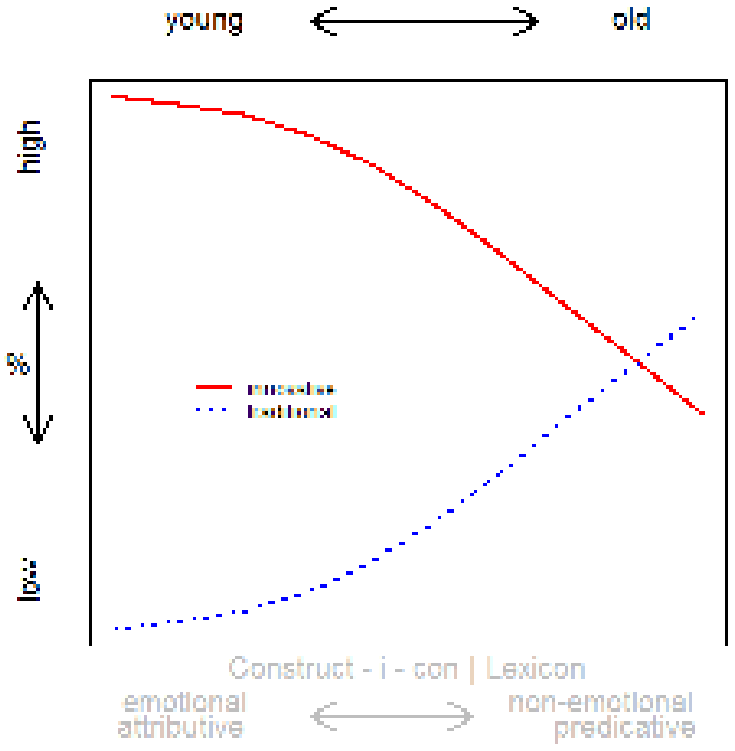
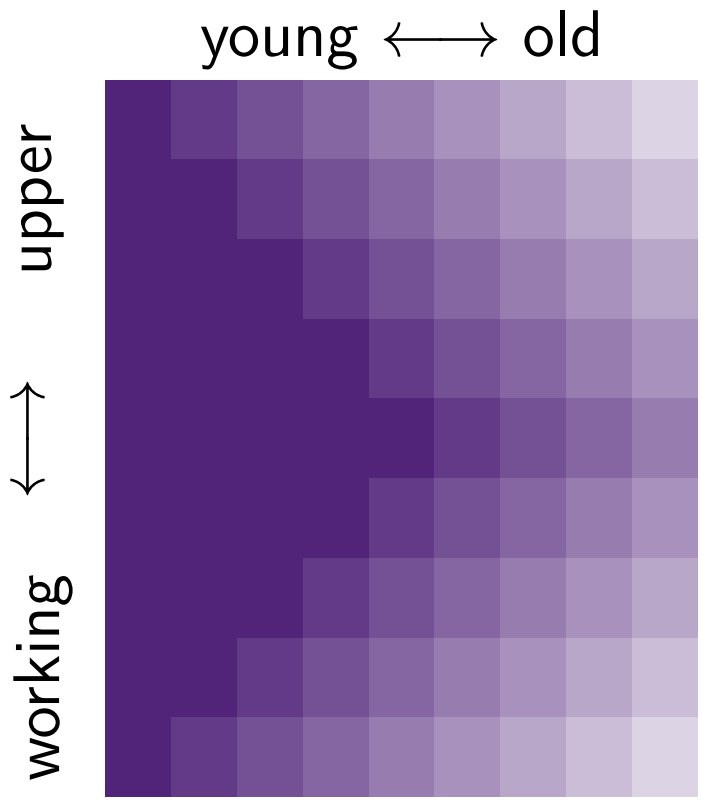
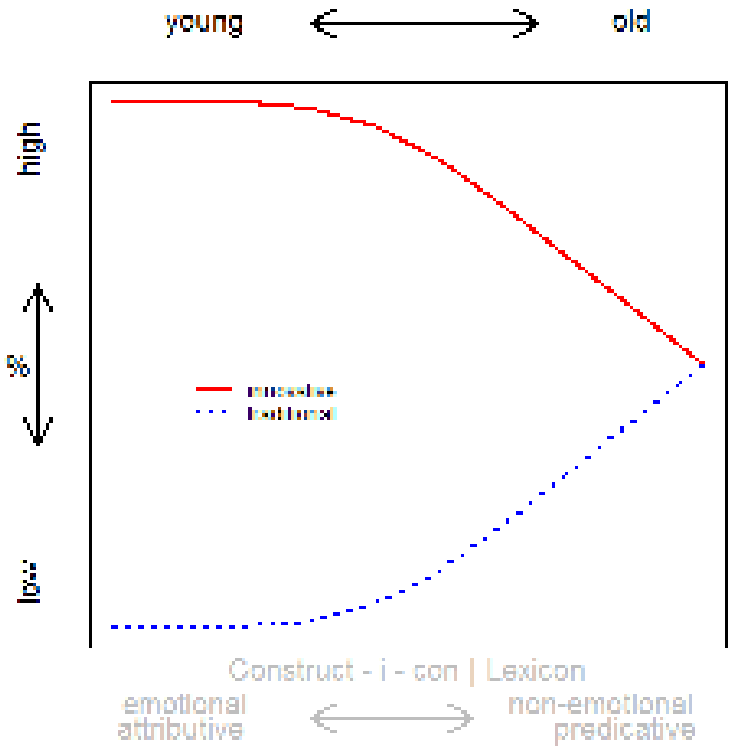


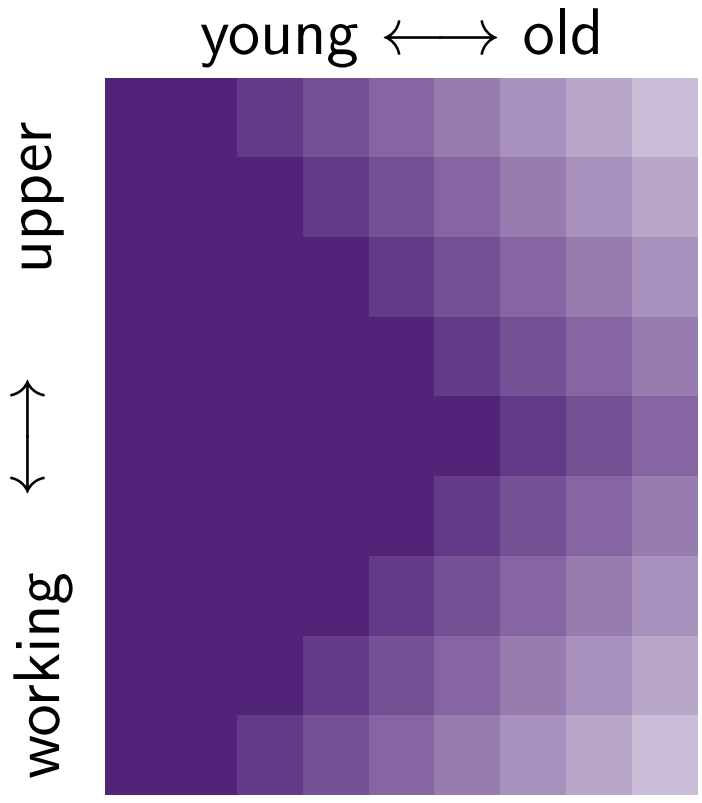


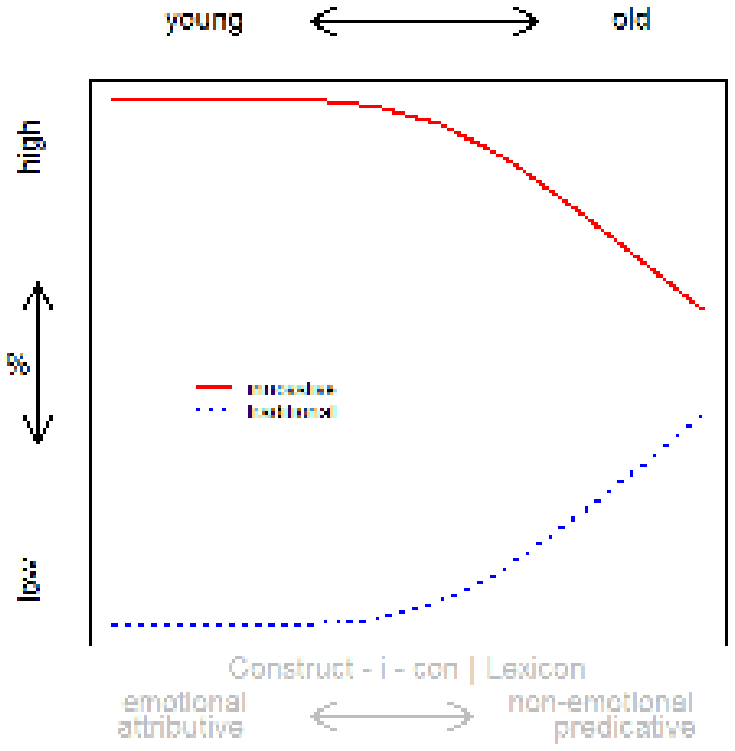
Diffusion of Innovations





Diffusion of Innovations





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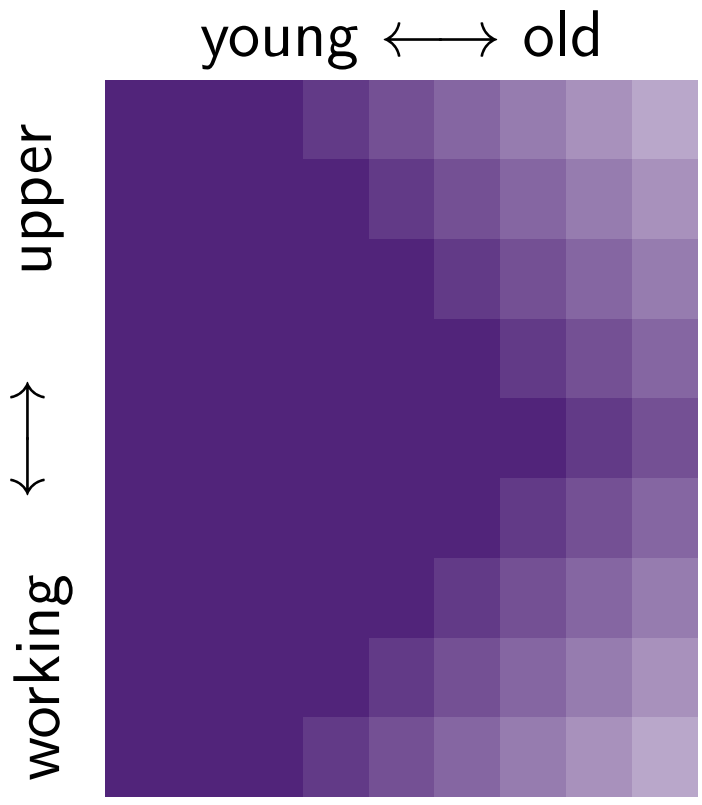
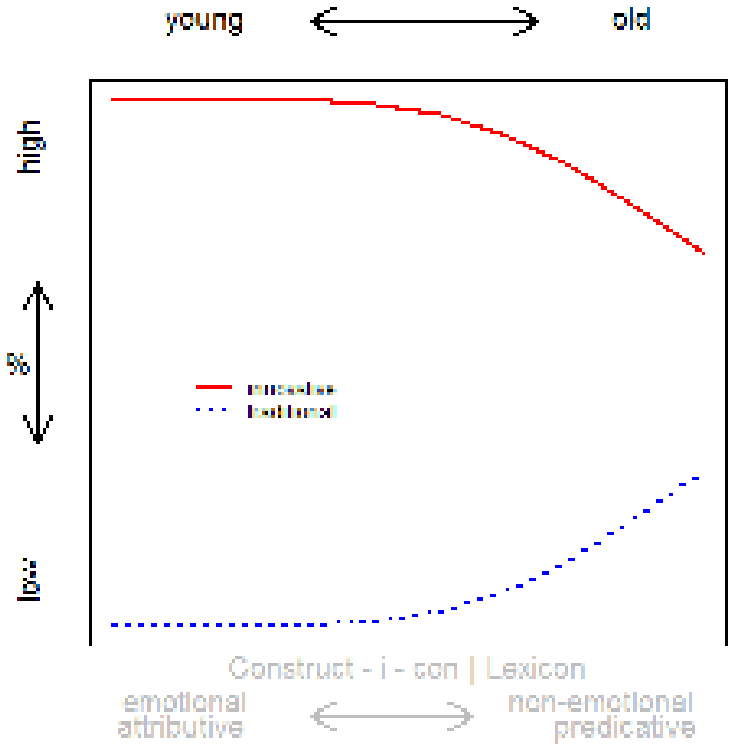
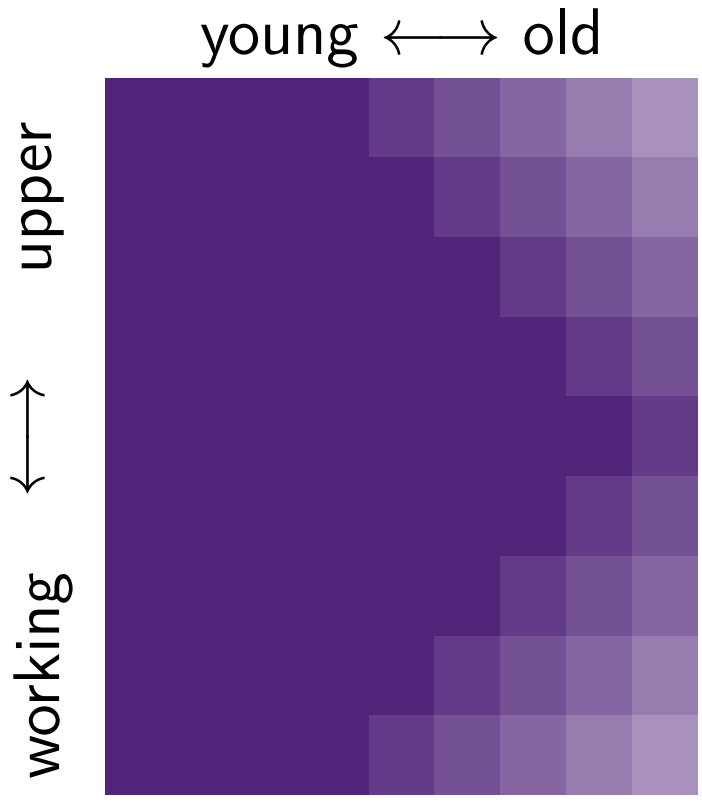
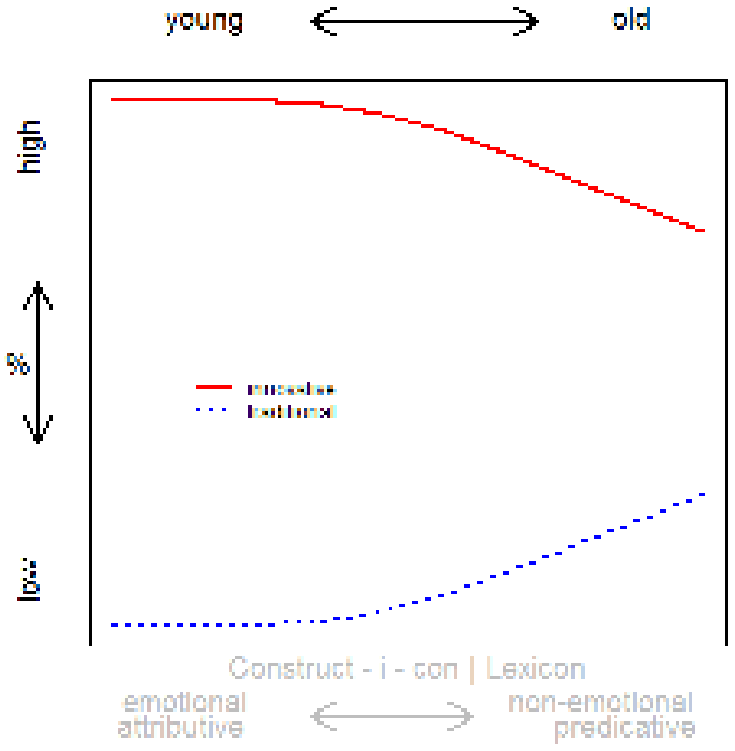




Diffusion of Innovations





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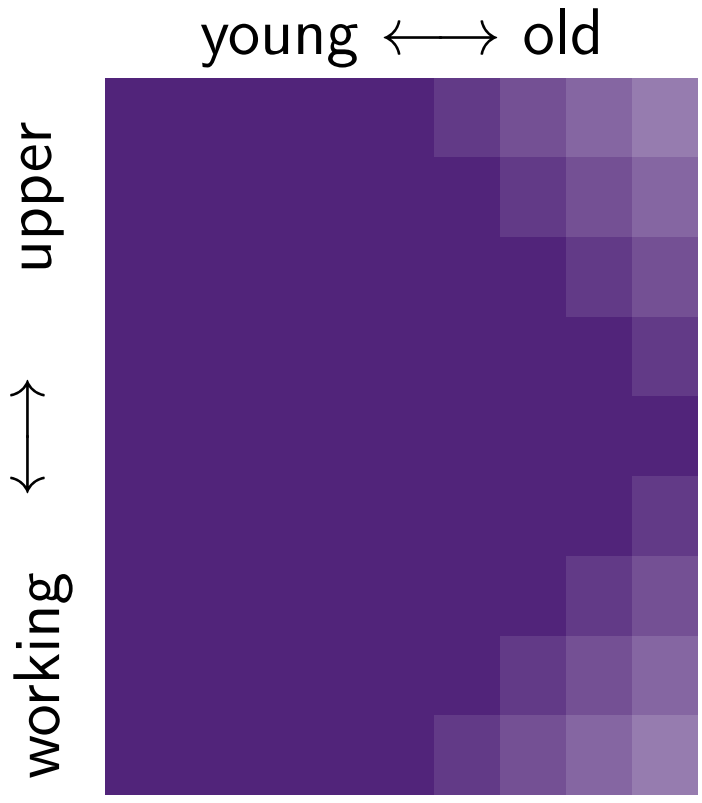
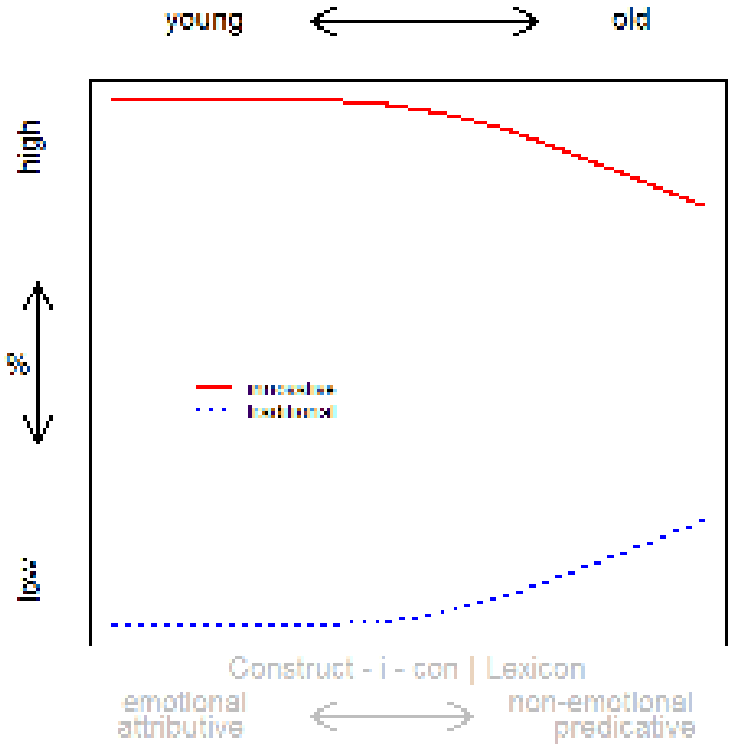
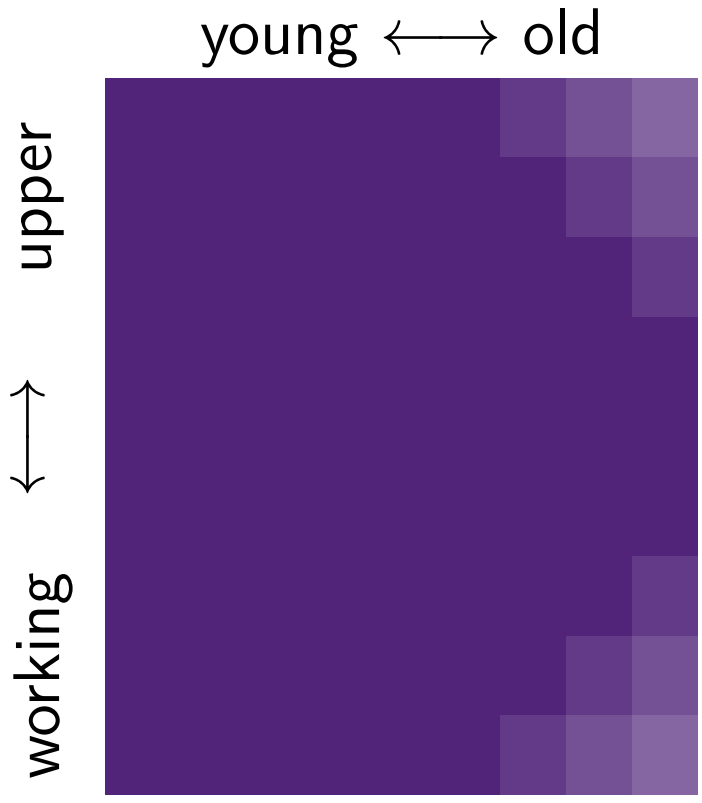
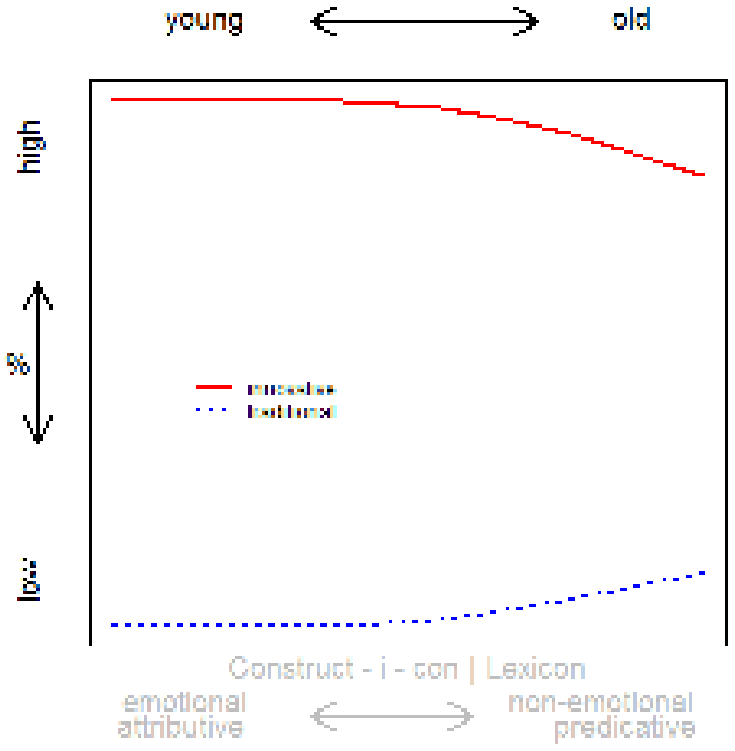




Diffusion of Innovations





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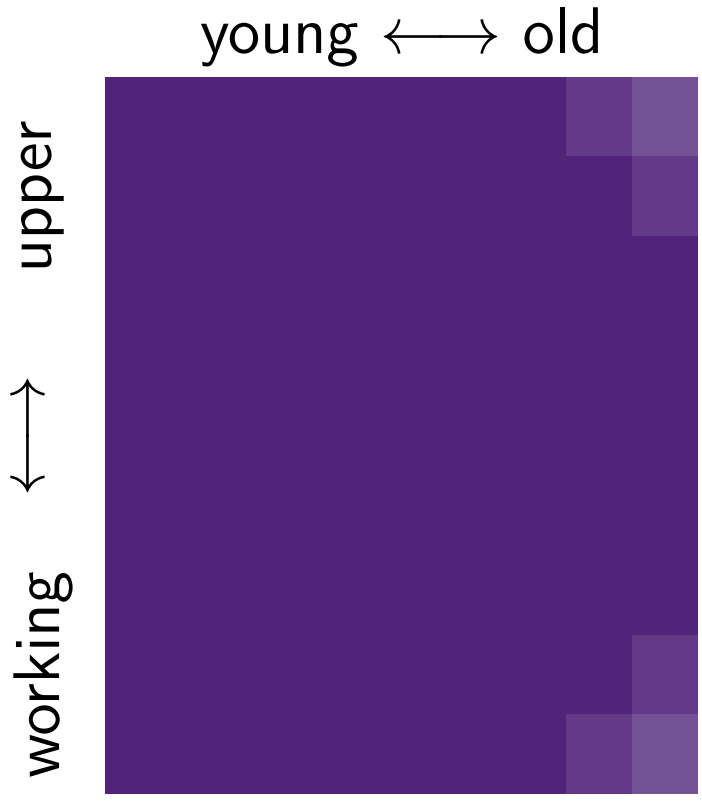

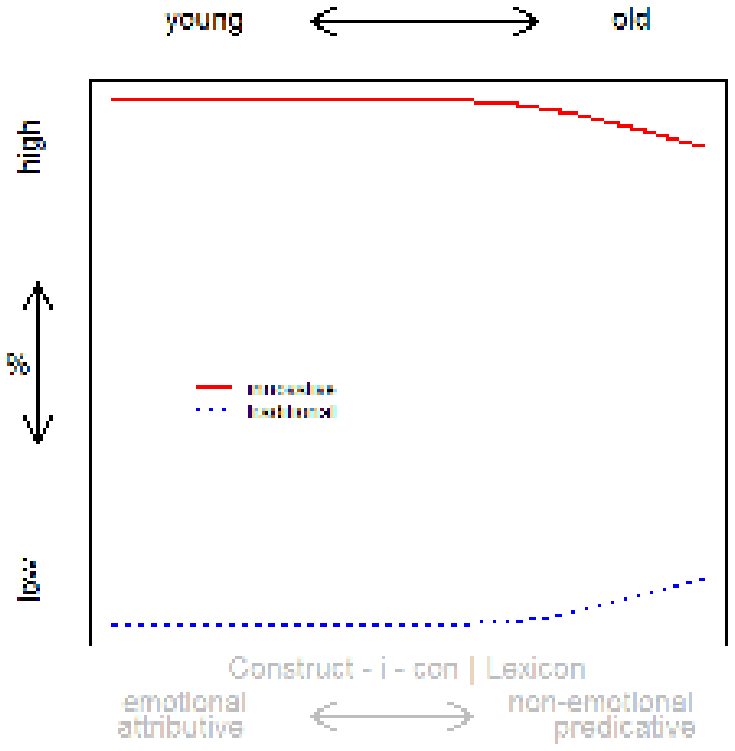

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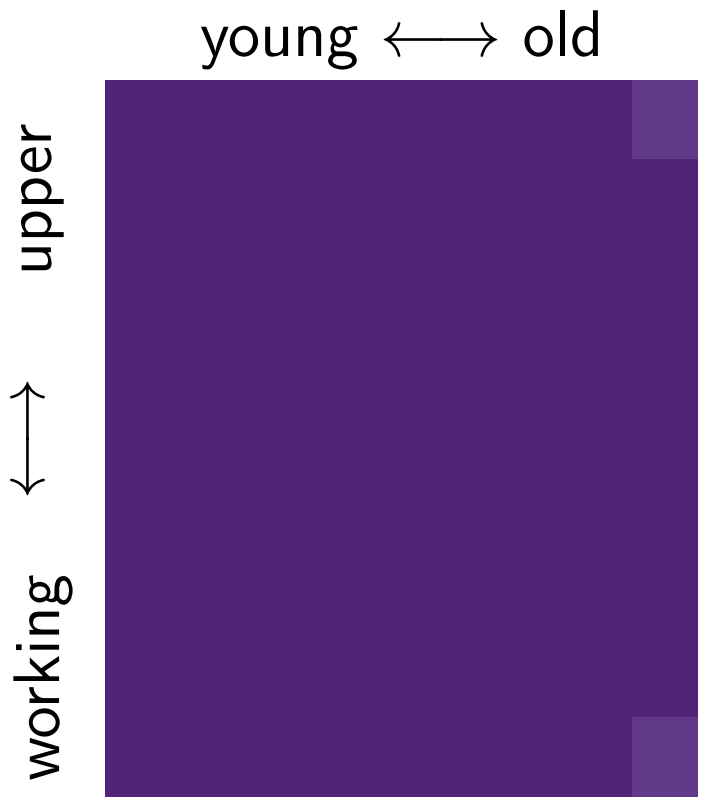

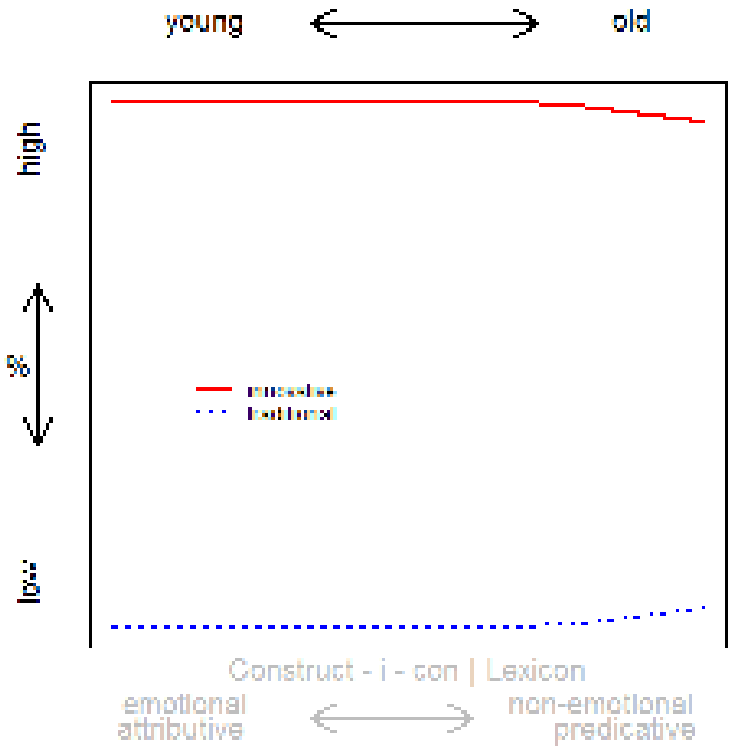

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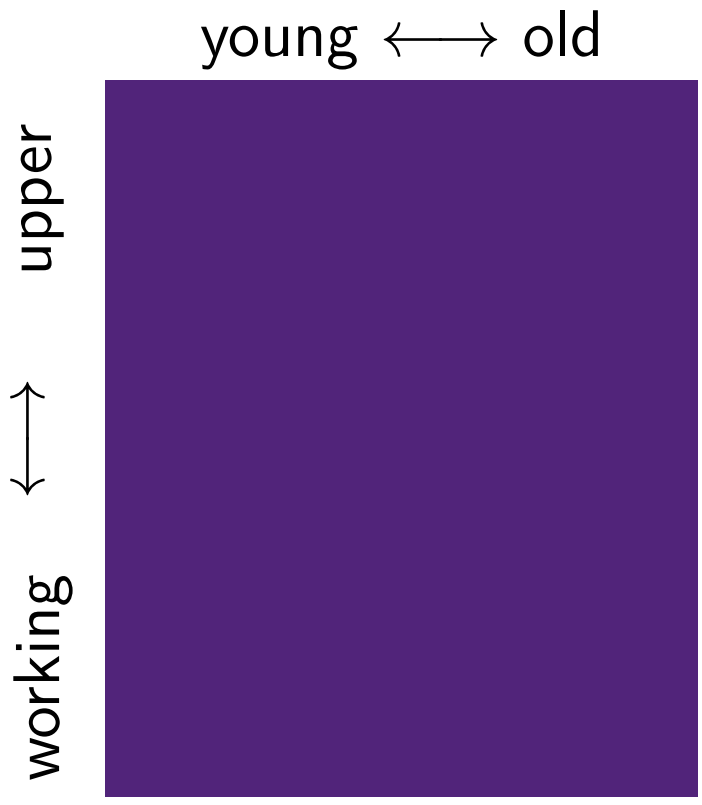
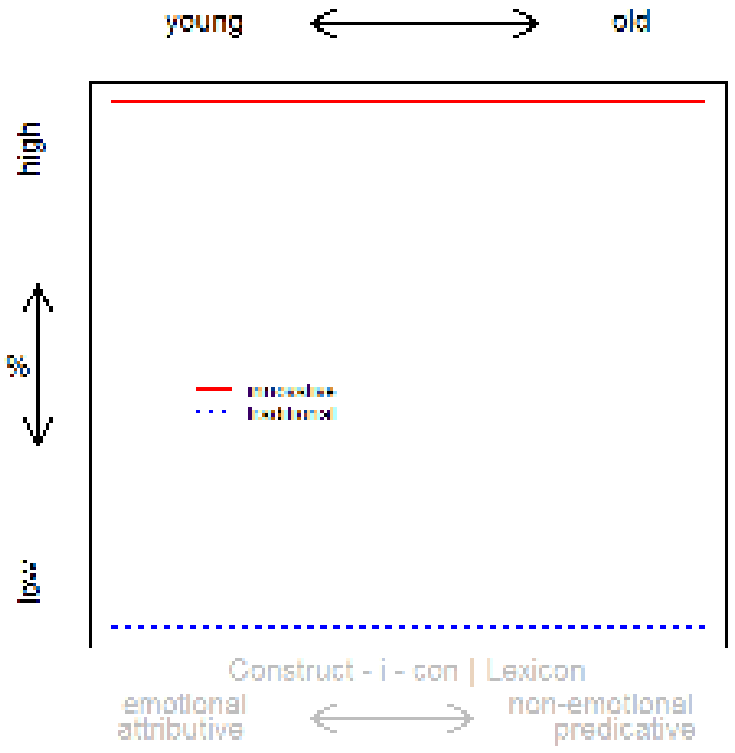




Q_6

Why is *very* replaced by *really* and not by any other variant (e.g. *so*, *quite*, *pretty*)?

→ What mechanisms underlie lexical replacement?

Scenario 1 (Broadening)

Really associate with many (but infrequent) adj. types

(Mair 2004: "delayed increase of discourse frequency" hypothesis)

Argument

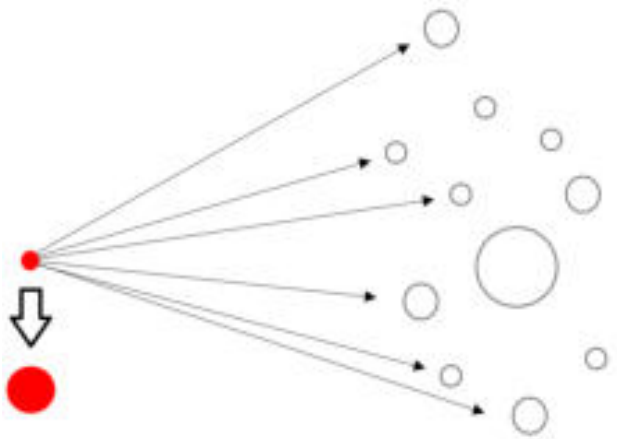
→ co-occurrence with many different adj. types

→ frequent use

→ deeper cognitive entrenchment

→ easier retrieval from memory

→ dominance within the amplifier system.



Prediction

Co-occurrence with many different adjective types

→ high lexical diversity

→ weak coll. attraction with specific adj. types

Scenario 2 (Specialization)

Really associate with few but frequent adj. types (HFAs)

(Lorenz 2002: 144; Méndez-Naya 2003: 375; Tagliamonte and Roberts 2005: 285)

Argument

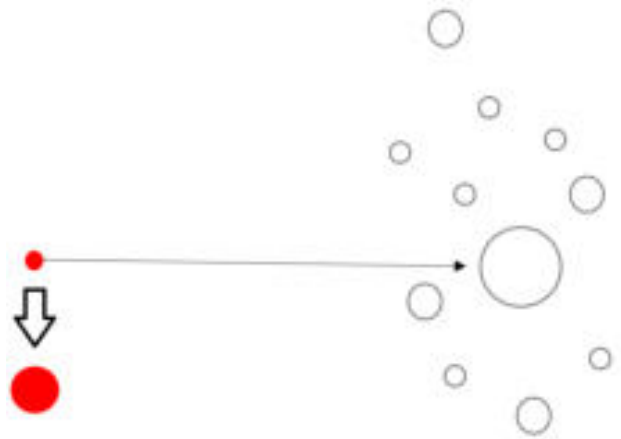
→ co-occurrence with high-freq. adj. types

→ frequent use

→ deeper cognitive entrenchment

→ easier retrieval from memory

→ dominance within the amplifier system.



Prediction

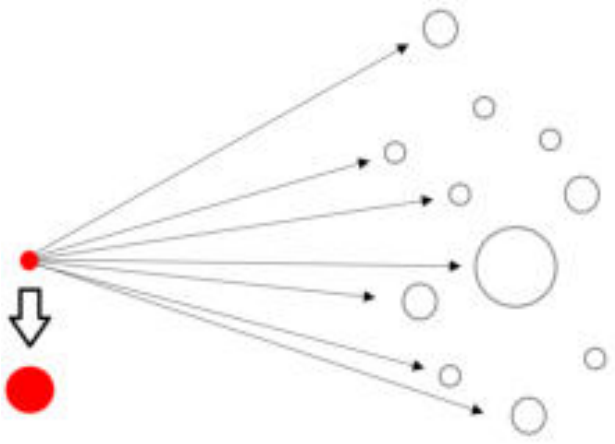
Co-occurrence with few high frequency adjectives

→ low lexical diversity

→ strong coll. attraction with high-freq. adj. types

Scenario 3 (Randomness)

Really associate with random adj. types
→ We cannot predict which variants become successful based on their coll. profile.



H_1

If *really* is successful because of specialization on HFAs

$\rightarrow$ sig. pos. correlation with adjective frequency

If broadening $\rightarrow$ neg. correlation with adj. freq.
If random $\rightarrow$ no correlation with adj. freq.

Data and Methodology

International Corpus of English (ICE)

- Australian, British, Canadian, Irish, and New Zealand ICE components
- Shared design (allows meaningful comparisons between varieties of English)
- One million words (600,000 spoken and 400,000 written) from diverse spoken and written text types (cf. next slide) with each file containing app. 2,000 words.
- Accompanied by metadata and biodata of speaker (extremely interesting resource for variationist analyses)

Data Processing

- As described before (but only private dialogues)
- Sentiment Analysis of adjective types (Jockers 2017)
- Determined if the same amplifier type had occurred within a span of three adjective slots previously ($\rightarrow$ priming)
- Token freq. of adjective type by age group (Tagliamonte and Roberts 2005)
- Semantic classification of adjective (simplified version of Dixon (1977), cf. also D'Arcy (2015); Tagliamonte (2008))
- Manual cross–evaluation of automated classification
- Addition of demographic info. about speakers

Variable Coding

Dependent Variable(s)				
really	nominal	yes/no occurrence of pre-adjectival *really*		
Independent Variable(s)				
Age	ordinal	min. young | middle-aged | old	extra linguistic	
AudienceSize	nominal	Dyad | MultipleInterlocutors		
ConversationType	nominal	MixedSex | SameSex		
Gender	nominal	Female | Male		
(Education)	nominal	College | NoCollege		
Priming	nominal	prime | noprime		
Emotionality	categorical	negative | nonemotional | positive	intra linguistic	
Function	nominal	attributive | predicative		
SemanticCategory	categorical	semantic category of adj.		
Gradability	nominal	gradable | nongradable		
Adjective	categorical	bad | funny | good | interesting | nice | other		
Frequency	numeric	Frequency of adj. by age group		

Statistical Analysis

Mixed-Effects Binomial Logistic Regression

(Baayen 2008; Faraway 2016)

- Standard models for multivariate analyses
- Can handle nested/grouped data structure
- Easy multicollinearity detection
- Problems of MEBLoR
  - Cannot handle small data sets (well)
  - Extremely high β-error rate (Johnson 2009)
    - if sig. effect: ✓
    - if no sig. effect: ???

Statistical Analysis

Boruta Analysis (Kursa et al. 2010)

- Alternative to regressions that can handle small data sets
- Variable selection procedure
- Extension/improvement of random forest analysis
- Hundreds of forests are grown → distribution of parameters rather than singe values (higher reliability)
- Problems of Boruta
  - Ignores multicollinearity(!)
  - Does not model nested/grouped data structure

Results

Results AusE: Observed, Boruta, and MEBLoR

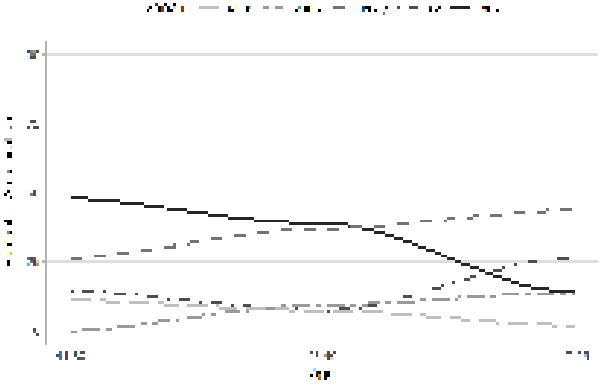


Figure 22: % Variants in AusE.

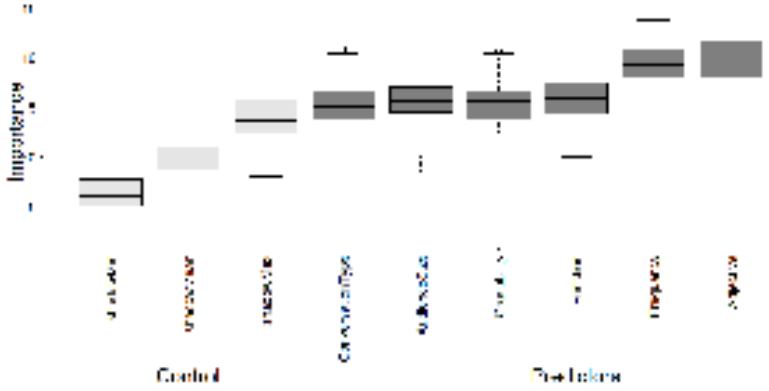


Figure 23: Boruta results for really in AusE.

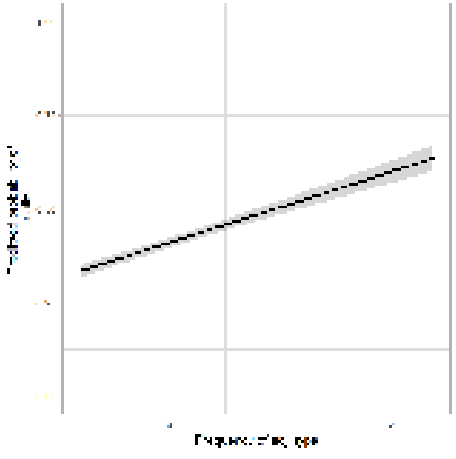


Figure 24: Prob. really in AusE by adj. freq.

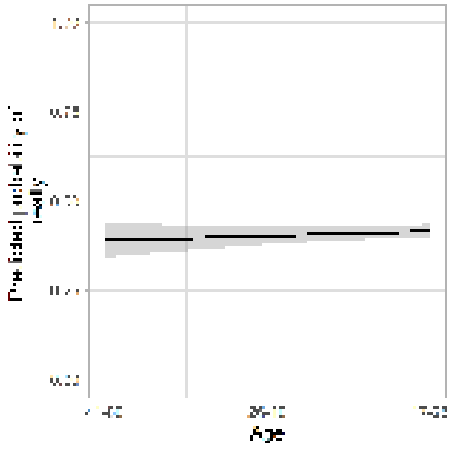


Figure 25: Prob. really in AusE across age.

Summary AusE Results

	Boruta		
Variety	**Age**	**Frequency**	**H_1?**
AusE	✗	✓	✓

Results BrE: Observed, Boruta, and MEBLoR

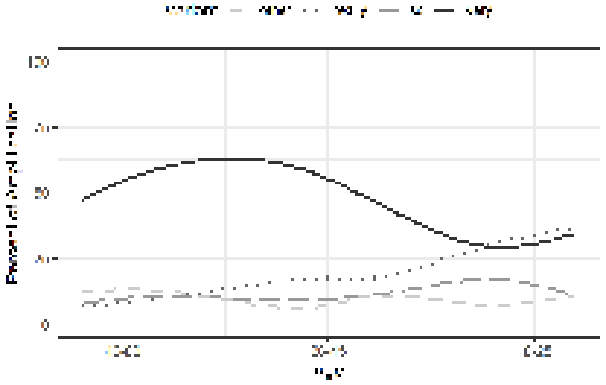


Figure 26: % Variants in BrE.

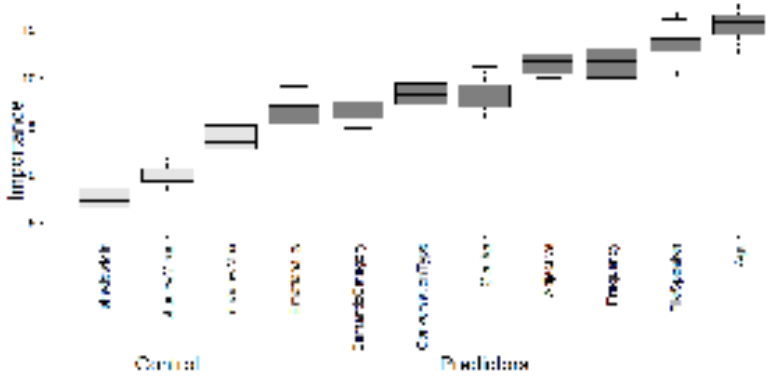


Figure 27: Boruta results for really in BrE.

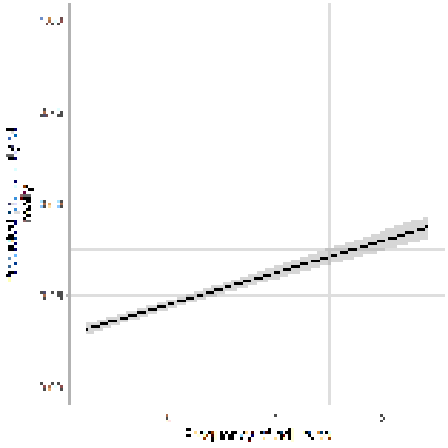


Figure 28: Prob. really in BrE by adj. freq.

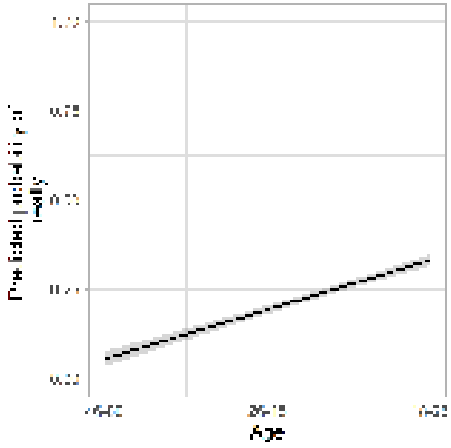


Figure 29: Prob. really in BrE across age.

Summary BrE Results

	Boruta		
Variety	**Age**	**Frequency**	**H_1?**
AusE	✗	✓	✓
BrE	✓	✓	✓

Results IrE: Observed, Boruta, and MEBLoR

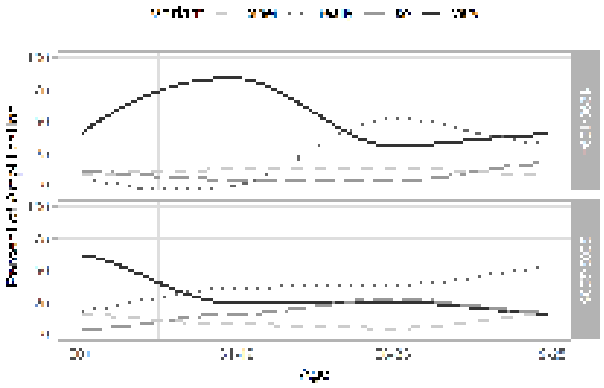


Figure 30: % Variants in IrE.

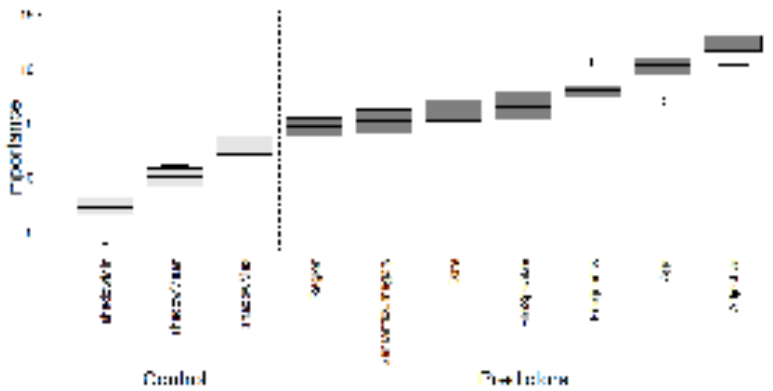


Figure 31: Boruta results for really in IrE.

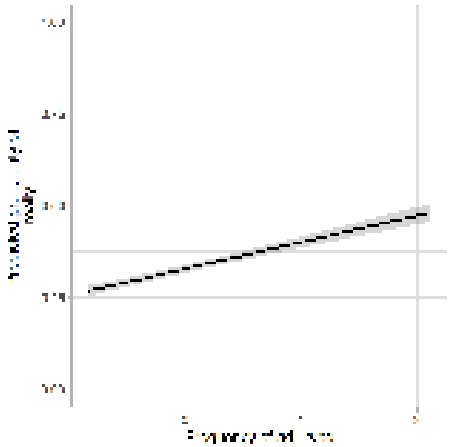


Figure 32: Prob. really in IrE by adj. freq.

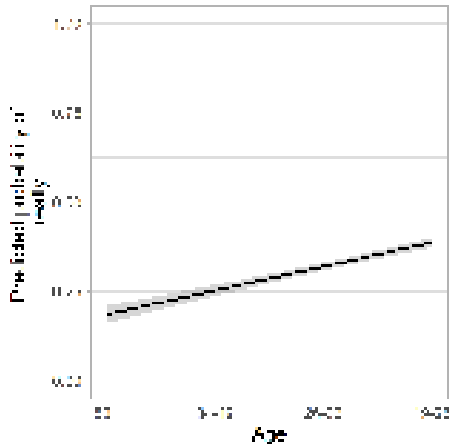


Figure 33: Prob. really in IrE across age.

Summary IrE Results

	Boruta		
Variety	**Age**	**Frequency**	**H_1?**
AusE	✗	✓	✓
BrE	✓	✓	✓
IrE	✓	✓	✓

Results NZE: Observed, Boruta, and MEBLoR

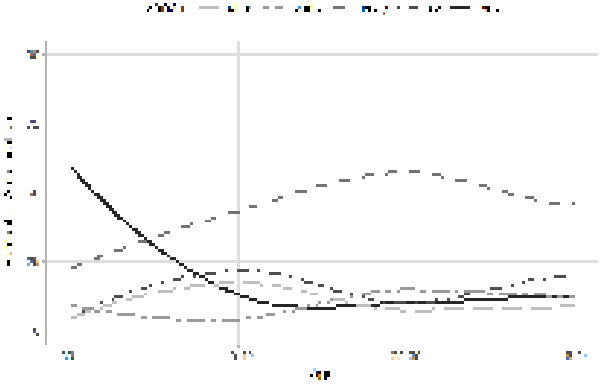


Figure 34: % Variants in NZE.

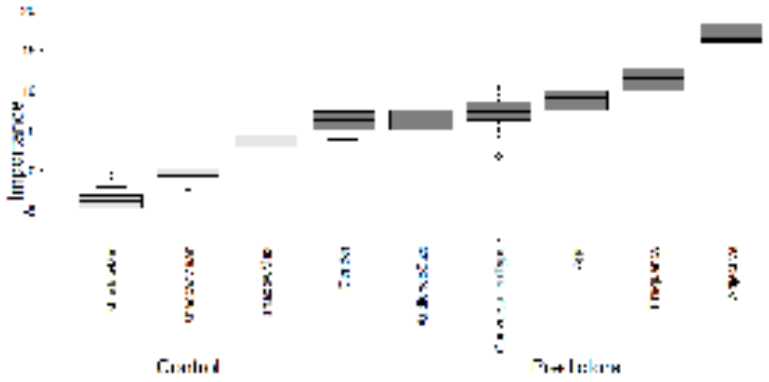


Figure 35: Boruta results for really in NZE.

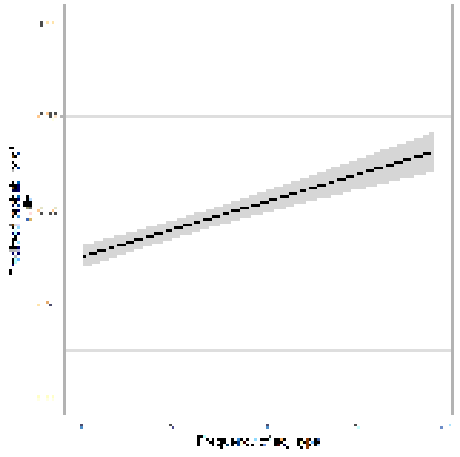


Figure 36: Prob. really in NZE by adj. freq.

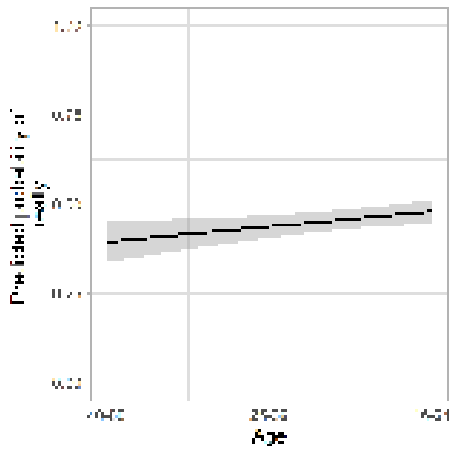


Figure 37: Prob. really in NZE across age.

Summary NZE Results

Variety	Boruta		H_1?
	Age	Frequency	
AusE	✗	✓	✓
BrE	✓	✓	✓
IrE	✓	✓	✓
NZE	✓	✓	✓

Results CanE: Observed, Boruta, and MEBLoR

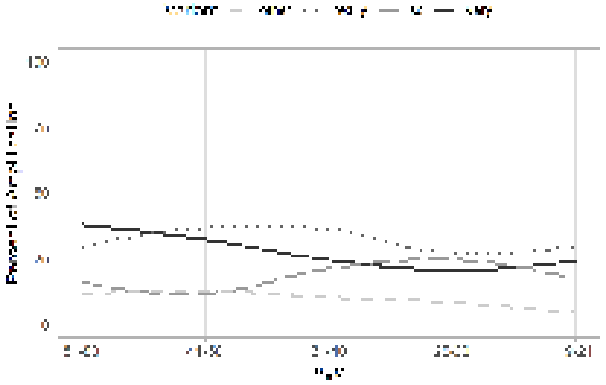


Figure 38: % Variants in CanE.

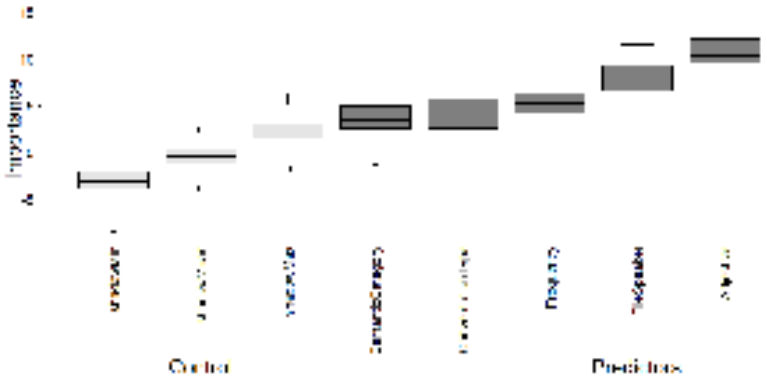


Figure 39: Boruta results for really in CanE.

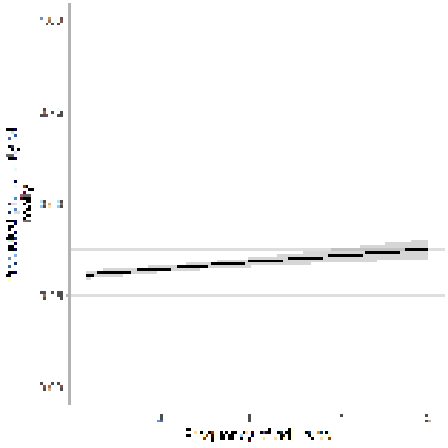


Figure 40: Prob. really in CanE by adj. freq.

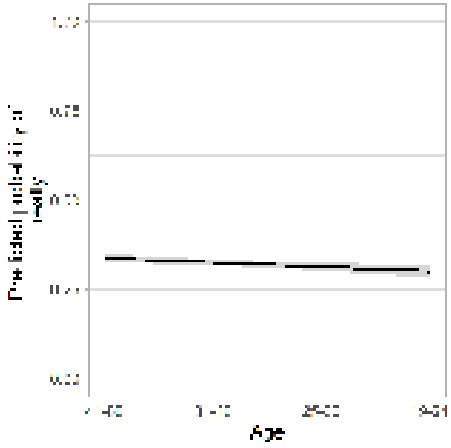


Figure 41: Prob. really in CanE across age.

Summary CanE Results

	Boruta		
Variety	**Age**	**Frequency**	**H_1?**
AusE	✗	✓	✓
BrE	✓	✓	✓
IrE	✓	✓	✓
NZE	✓	✓	✓
CanE	✗	✓	✓

Summary Results

Variety	Boruta		H_1?
	Age	Frequency	
AusE	✗	✓	✓
BrE	✓	✓	✓
IrE	✓	✓	✓
NZE	✓	✓	✓
CanE	✗	✓	✓

Discussion & Outlook

Summary

Results . . .

- confirm that *really* correlates with adj. freq. (positive correlation between the use of *really* and adjective frequency)
- suggest that lexical replacement is accompanied by (functional) re-organization in addition to diffusion through the speech community (absence of age effects)
  (see D'Arcy 2015)
- show that complementing mixed-modeling with Boruta is useful to avoid overlooking significant effects (avoidance of β-errors)

Discussion

- *Really* successfully replaced the dominant form *very* because it collocated with HFAs.
- No signs that *really* of broadening before taking over the system.
- Broadening once dominant (substantiates Tagliamonte and Denis 2014)

Argument

1. The co-occurrence with HFAs lead to the innovative variant being used as a more expressive variant to amplify certain HFAs.
2. The frequency of the innovative form increased because it piggybacked on the frequency of the HFA.
3. Increase in use $\rightarrow$ more deeply entrenched.
4. Deeper entrenchment $\rightarrow$ increased ease of retrieval.
5. Higher ease of retrieval $\rightarrow$ advantage over rival variants.
6. Innovative variant broadens because it increasingly co-occurs with more adj. types.

Discussion

Lexical replacement from a usage-based CxG perspective

- A default Cx loses its default status and is being replaced with a new default Cx.

Stage 1 Traditional stage (*very* dominant)	**Stage 2** Rivaling stage (no variant dominant)	**Stage 3** New stage (*really* dominant)
very good	really good	really good
very nice	very nice	really nice
very new	pretty new	really new
[very $X_{Adjective}$]	[$Y_{Intensifier}$] + [$X_{Adjective}$]	[really $X_{Adjective}$]

Interim outlook

Could this be a universal mechanism?

Test if the mechanisms. . .

- can be shown to have worked in analogous changes in English, e.g.
  3^{rd} p. sg. ind. morpheme: <eth> → <(e)s>
- can be shown to have worked in analogous changes in languages other than English

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my colleagues at UQ

for comments and their feedback on earlier versions of this talk

Absolutely fantastic! Adjective amplification in English

Dr. Martin Schweinberger

slides available at

www.martinschweinberger.de

R code upon request

The University Of Queensland

Mixed-Effects Binomial Logistic Regression

(Baayen 2008; Faraway 2016)

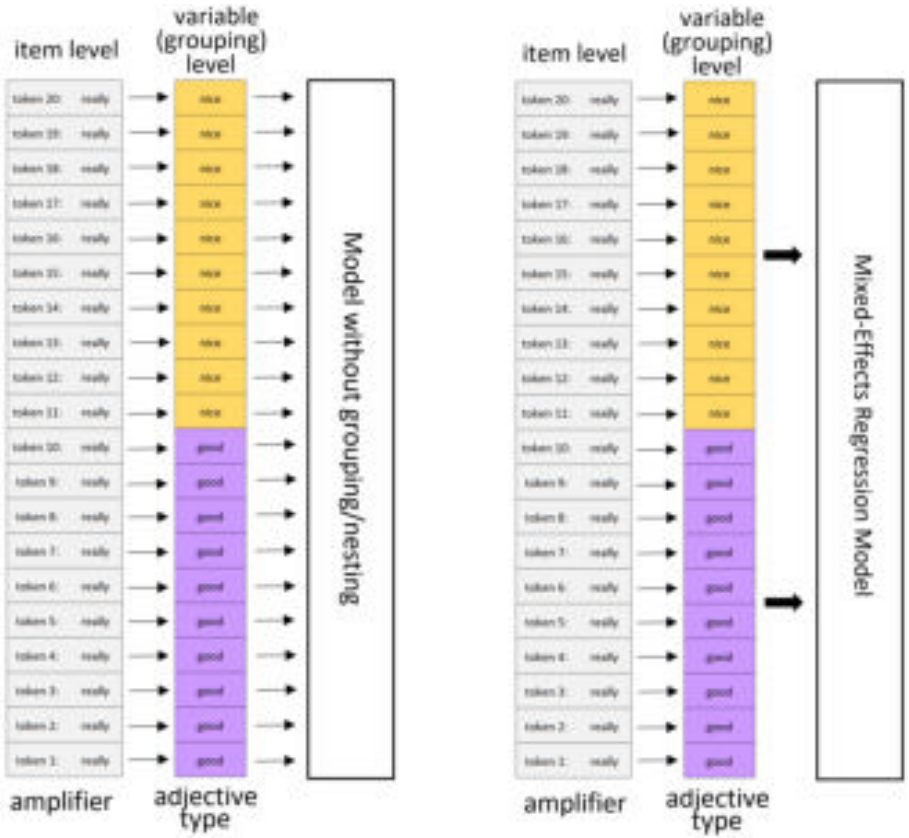

Figure 42: Difference between models without grouping/nesting and mixed-effects models (with grouping/nesting).