Second Language Acquisition

SeBEN09z12

Thomas Wagner

week 3 – chapter 3

repetition

repetition

What is the difference between multilingualism and plurilingualism according to the CEFR?

- CEFR: plurilingualism = linguistic competence of an individual

- CEFR: multilingualism = linguistic diversity of geographical regions

repetition

What is the mythical bilingual?

> “ do everything perfectly in two languages and who can pass undetected among monolingual speakers of each of these two languages. “
>
> Valdés 2001:40

repetition

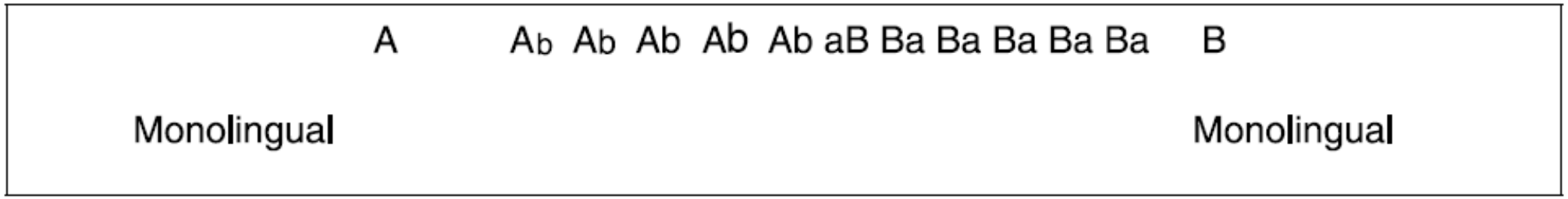
What is a heritage language?

“ which was first for an individual with respect to the order of acquisition but has not been completely acquired because of the switch to another dominant language. An individual may use the heritage language under certain conditions and understand it, but his/her primary language is a different one. ”

Polinsky 2008:1

repetition

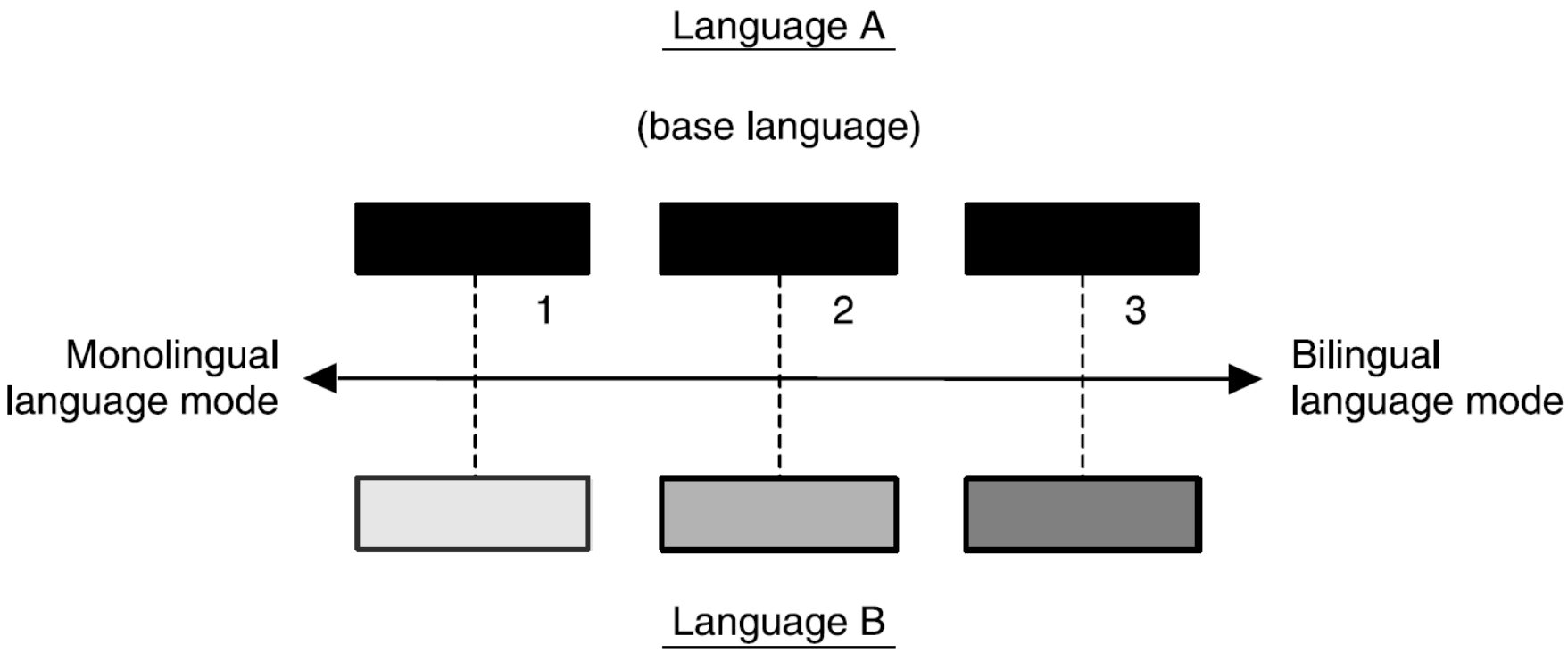
Explain the following model of bilingualism:



Valdes 2001

repetition

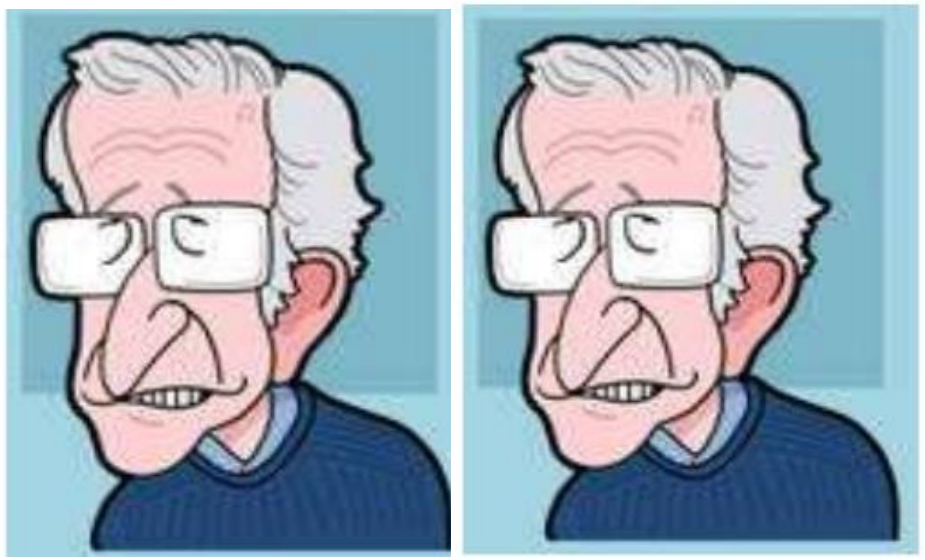
Explain the following model of a bilingual's language mode:



repetition

What is Chomsky's LAD?

Noam Chomsky



- Innatist Theory
- The Language Acquisition Device (LAD)
- Children have an innate knowledge of the basic grammatical structure that is the basis to all languages
- The Universal Grammar (UG)
- The Critical Period – essential for first language acquisition

repetition

Explain the following cartoon:

Chapter 3
Second and foreign language data

reading homework 1

- questions about homework 3 ?

Section 3.1 – Data analysis

- types of data
- types of data elicitation

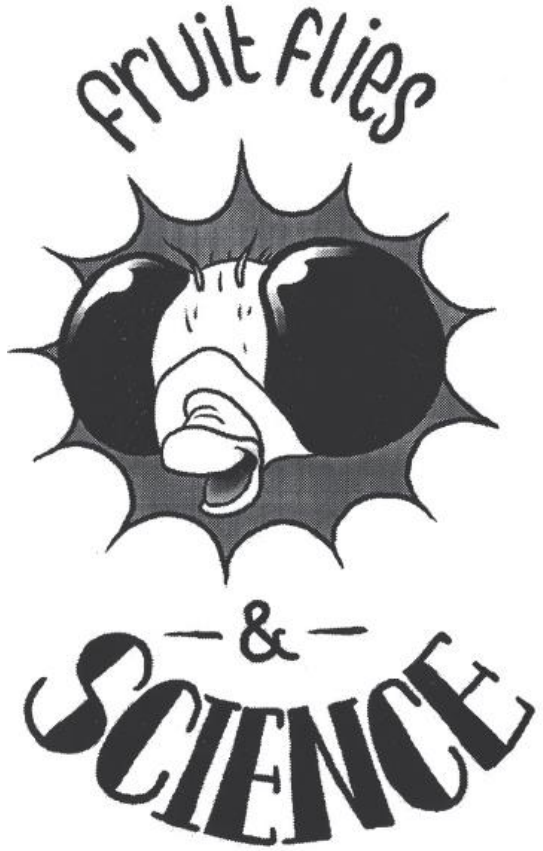
- SLA data often do not prompt one correct answer or interpretation

- *past tense* – debate !

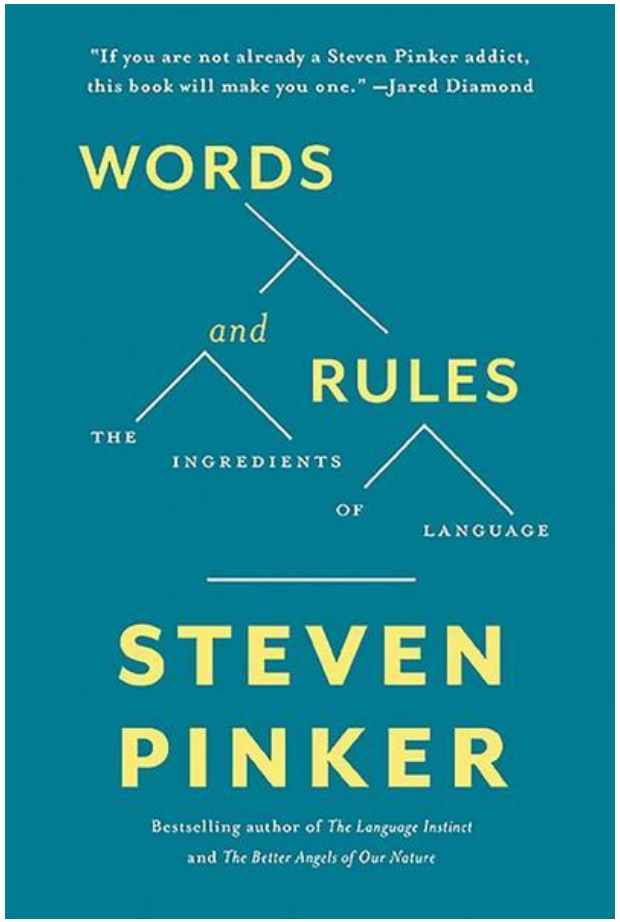
Section 3.1 – Data analysis

- Drosophila melanogaster
- perhaps most important model organisms in scientific research

- irregular verbs are the fruit flies of linguistics



Section 3.1 – Data analysis



Section 3.1 – Data analysis

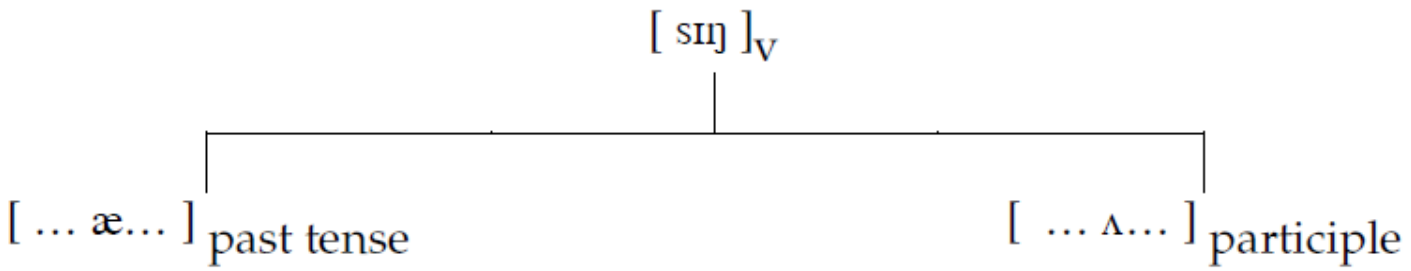
patterns	vowel changes	infinitive	past tense	participle
English				
a-b-a	[ʌ] - [eɪ] - [ʌ]	*come*	*came*	*come*
a-b-b	[iː] - [ɛ] - [ɛ]	*meet*	*met*	*met*
a-b-b + *-en*	[iː] - [əʊ] - [əʊ]	*speak*	*spoke*	*spoken*
a-b-c	[ɪ] - [æ] - [ʌ]	*sing*	*sang*	*sung*
no-change	[ʌ] - [ʌ] - [ʌ]	*cut*	*cut*	*cut*
no-change + *-en*	[iː] - [iː] - [iː]	*beat*	*beat*	*beaten*
dental suffix	[ɜ] - [ɜ] - [ɜ]	*burn*	*burnt*	*burnt*
suppletion	[əʊ] - [ɛ] - [ɒ]	*go*	*went*	*gone*
German				
a-b-a	[a] - [iː] - [a]	*fallen*	*fiel*	*gefallen*
a-b-b	[aɪ] - [iː] - [iː]	*bleiben*	*blieb*	*geblieben*
a-b-c	[ɪ] - [a] - [ʊ]	*singen*	*sang*	*gesungen*
mixed verbs	[ɛ] - [ʌ] - [ʌ]	*brennen*	*brannte*	*gebrannt*
suppletion	[aɪ] - [aː] - [eː]	*sein*	*war*	*gewesen*

Section 3.1 – Data analysis

(1)

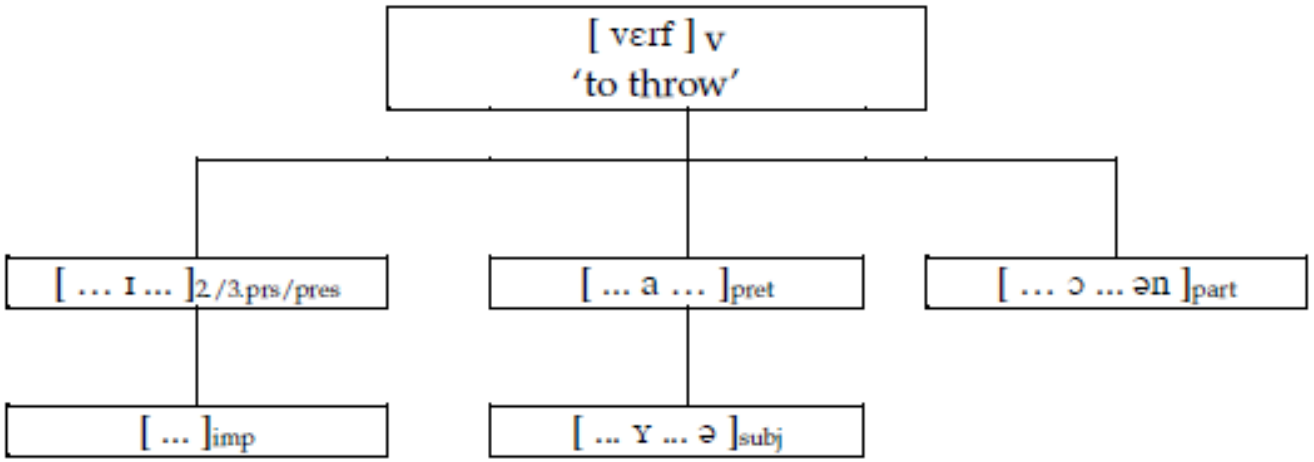
$$[\ s \begin{bmatrix} ɪ \\ æ \\ ʌ \end{bmatrix} ŋ\ ]$$

(2)



(16) Ø → i → a → u → u

(3)



Section 3.1 – Data analysis

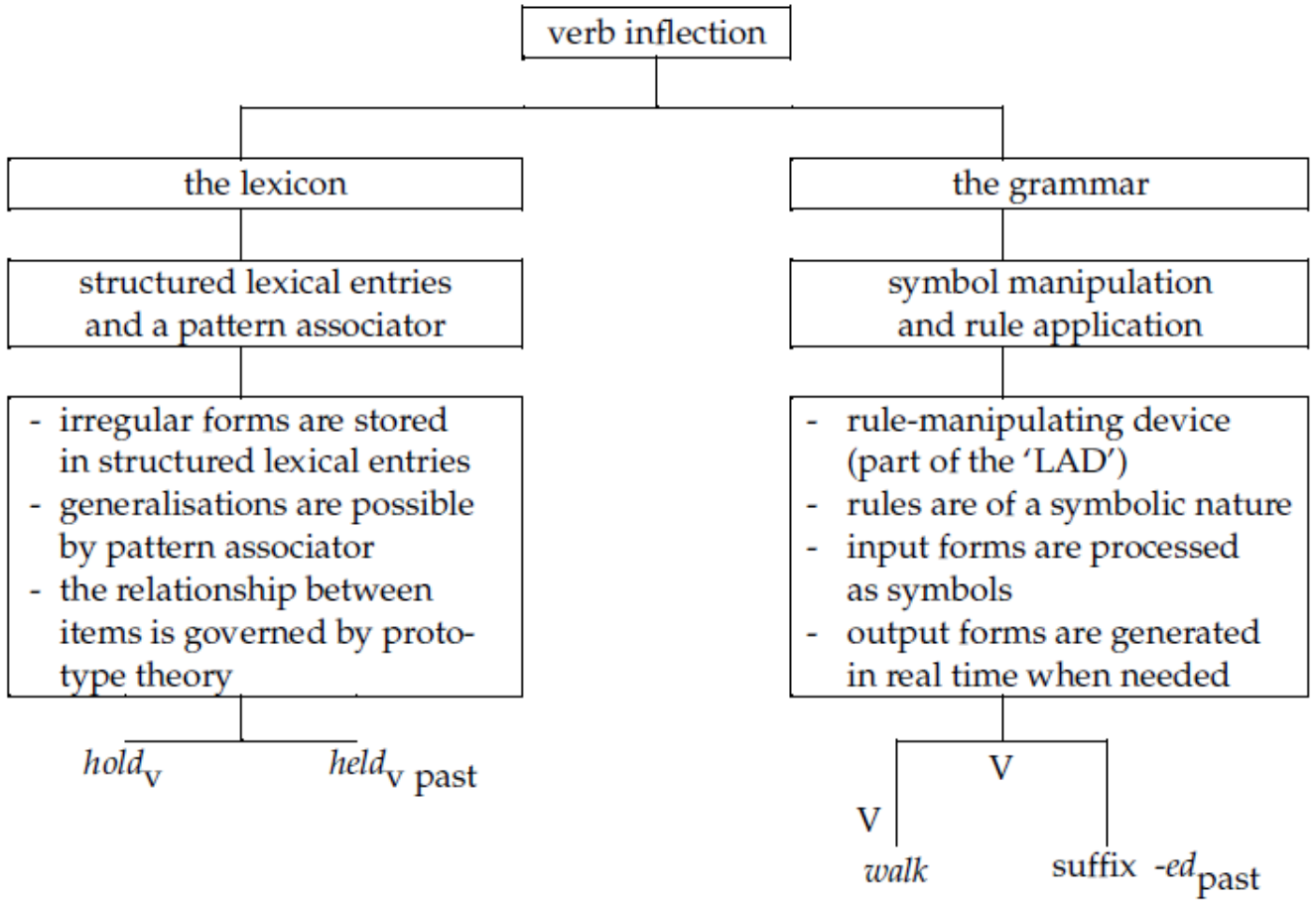


Figure 1: The dual-route model for verb inflection

Section 3.1 – Data analysis

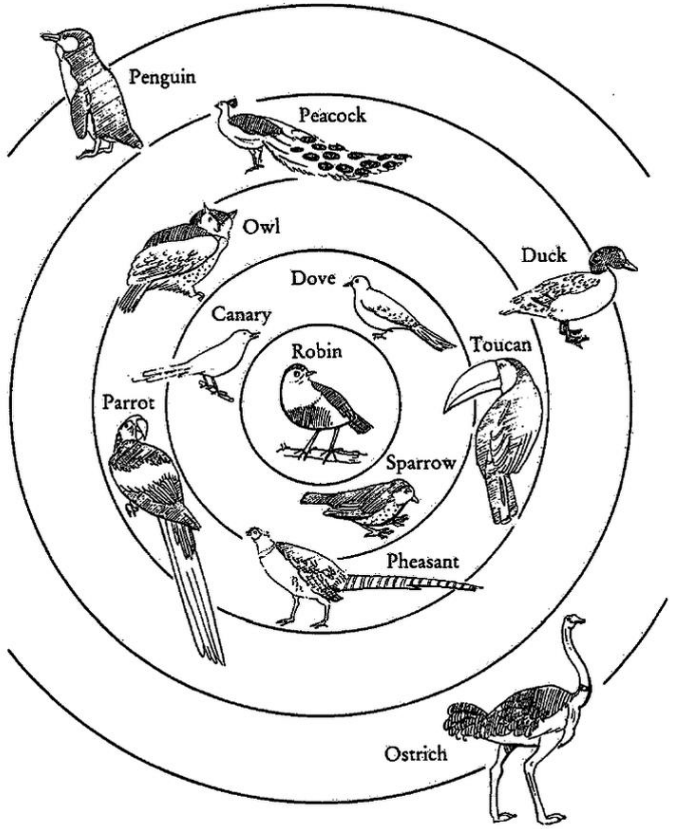
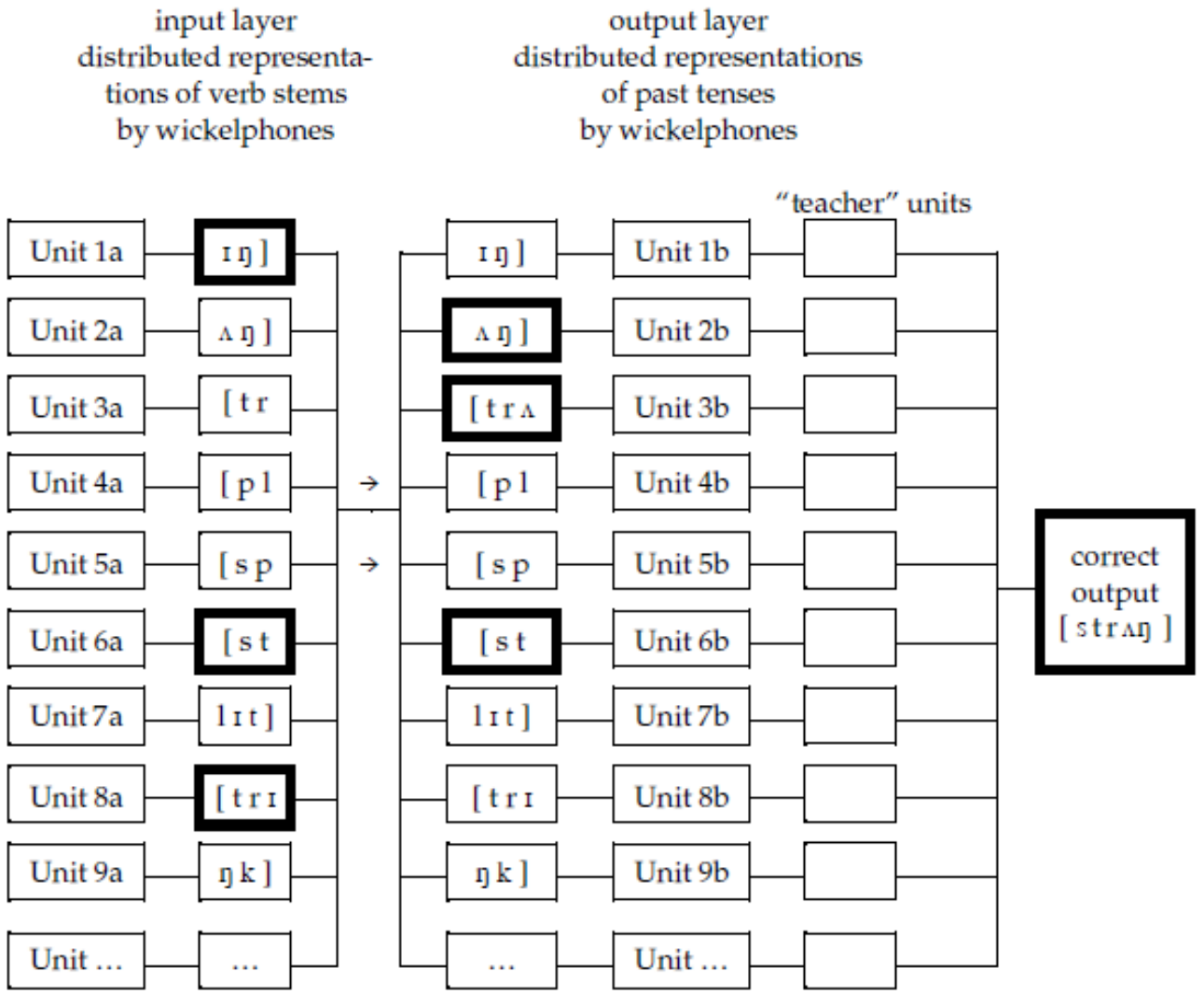


Figure . 1 Birdiness rankings

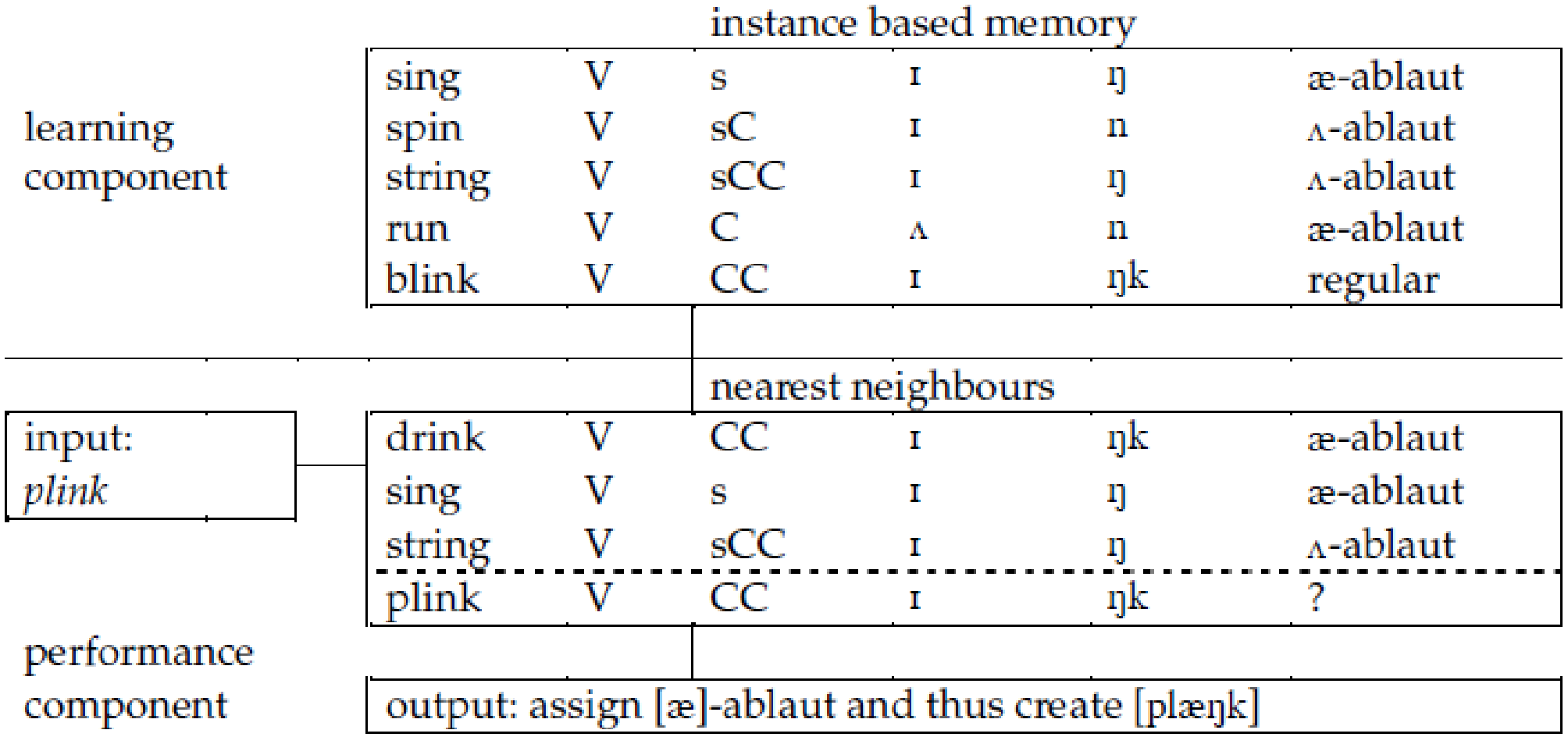
(7) prototypical stem vowels
(a) [iː, ɪ]
(b) [eː, ɛ]
(c) [aɪ]

prototypical schemas
(d) [# _ aɪ _ p/b]
(e) [# _ aɪ _ d/t]
(f) [# _ aɪ _ f/v]
(g) [# _ i _ ŋ(k)]

Section 3.1 – Data analysis



Section 3.1 – Data analysis



Section 3.1 – Data analysis

(10) (a) $\emptyset \rightarrow d \;/\; [saɪn\ \_\_\ ]_{[+past]}$ word-specific rule for *sign*

$\emptyset \rightarrow d \;/\; [kənsaɪn\ \_\_\ ]_{[+past]}$ word-specific rule *consign*

↓

$\emptyset \rightarrow d \;/\; [\,X \begin{vmatrix} +\text{ strident} \\ +\text{ continuant} \\ -\text{ voice} \end{vmatrix}]_{[+past]}$ general rule

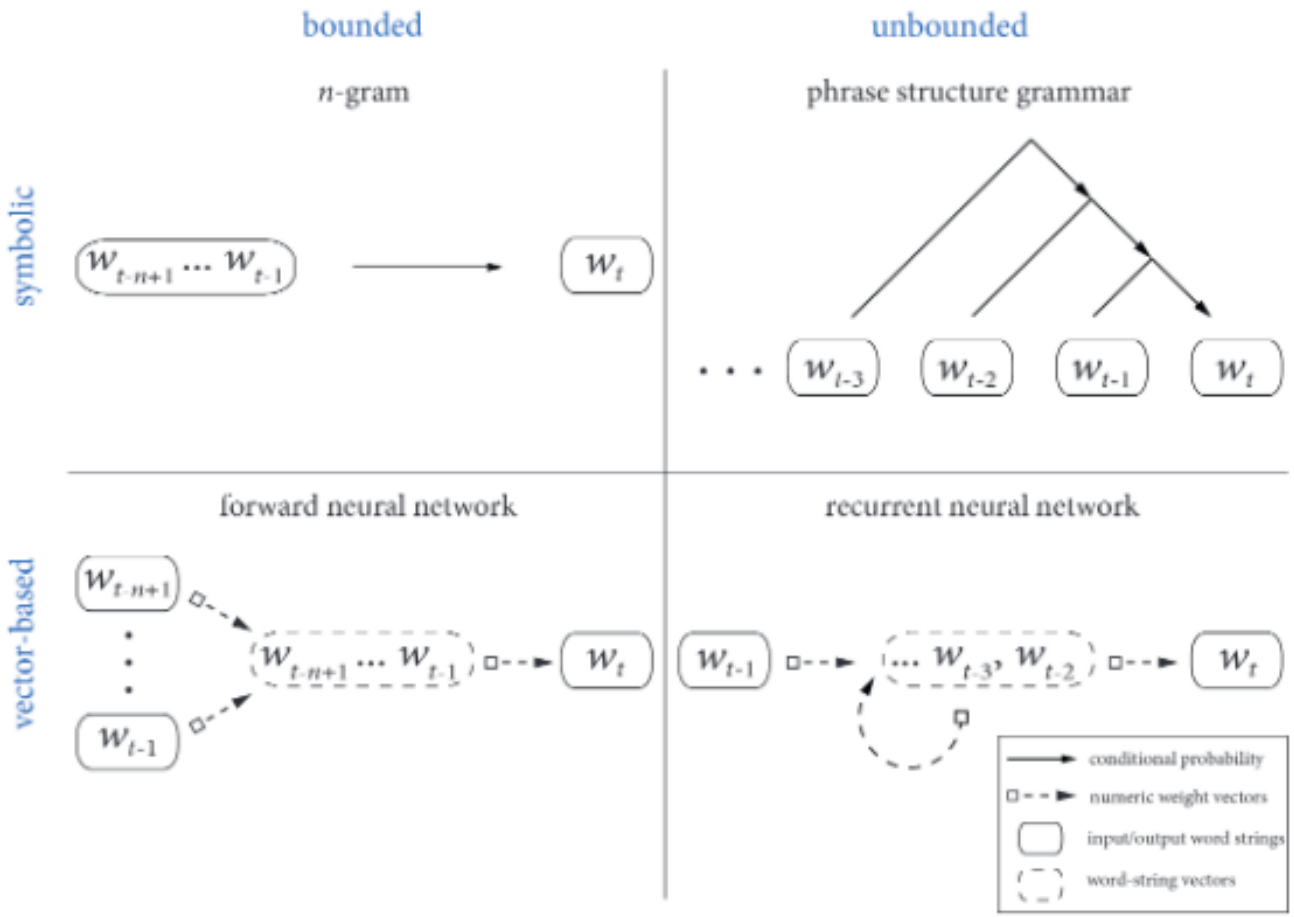
(b) $\emptyset \rightarrow əd \;/\; [vəʊt\ \_\_\ ]_{[+past]}$ word-specific rule for *vote*

$\emptyset \rightarrow əd \;/\; [niːd\ \_\_\ ]_{[+past]}$ word-specific rule for *need*

↓

$\emptyset \rightarrow d \;/\; [\,X \begin{vmatrix} +\text{ coronal} \\ +\text{ anterior} \\ -\text{ nasal} \\ -\text{ continuant} \end{vmatrix}]_{[+past]}$ general rule

Section 3.1 – Data analysis



Section 3.1 – Data analysis

After almost 40 years we don‘t know how regular and irregular verbs are organised in our mental lexicon !

Section 3.1 – Data analysis

(1) Data from 3 adult Arabic learners of English (intermediate – advanced).

a) I bought **a couple of towel**.
b) There is **many kind of way** you make baklawa.
c) I go to university **four days** a week.
d) Just **a few month** he will finish from his studies.
e) Egypt shares **its boundaries** with the Mediterranean.
f) There is **a lot of mosquito**.
g) He can spend **100 years** here in America.
h) There are about **one and half-million inhabitant** in Jeddah.
i) **How many month or years** have been in his mind?

Section 3.1 – Data analysis

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Section 3.1 – Data analysis

- how can you describe the plural acquisition in these speakers?
- which sentences illustrate mastered grammar ?

Table 3.3 Possible categorization of plurals in Arabic–English IL

English-like	*Non-English-like*	*Ambiguous*
3-1. two deserts	3-2. a couple of towel	3-14. how many month or years
3-5. the streets, the avenues	3-3. how many ticket	

Section 3.1 – Data analysis

(1) How many month or years have been in his mind?

- just wrong ?

- analysis using target categories on second language data
- comparative fallacy

Bley-Vroman 1983

Section 3.1 – Data analysis

- the role of quantifiers
- interlanguage algorithm ?

- noun → $noun^{pl}$ / [__] _____ #
- noun → noun / [quant] _____ #

- what data would you for further testing ?

Section 3.1 – Data analysis

this is how research works

Adam: observation → curiosity → research question → hypothesis → data collection → analysis & interpretation → theory → publication → limits & further research

Bob: limits & further research → new data collection → new analysis & interpretation → theory refinement or new model → publication → limits & further research

Claire: limits & further research → new data collection → ……

Section 3.1 – Data analysis

- what data would you collect for further testing

- written vs spoken data
- natural (spontaneous) vs elicited data
- experimental versus field research
- competence versus performance
- case studies versus pooled data
- large samples
- […]

Section 3.1 – Data analysis

(2) Natural data from 1 adult Arabic learner of English (beginner).

a)	He's sleeping.	
b)	She's sleeping.	
c)	It's raining.	
d)	He's eating.	
e)	Hani's sleeping.	
f)	The dog eating.	(The dog is eating.)
g)	Hani **watch** TV.	(Hani is watching TV.)
h)	**Watch** TV.	(He is watching TV.)
i)	**Read** the paper.	(He is reading the paper.)
j)	**Drink** the coffee.	(He is drinking coffee.)

how could you describe the learner's algorithm for progressive use in English?

Section 3.1 – Data analysis

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Section 3.1 – Data analysis

- verb → verb$^{progr.}$ / ___#

- restricts use of -*ing* in sentence final position

Section 3.1 – Data analysis

(2) Natural data from 1 adult Arabic learner of English (beginner).

a)	He’s sleeping.	$V^{intr.}$	
b)	She’s sleeping.	$V^{intr.}$	
c)	It’s raining.	$V^{intr.}$	
d)	He’s eating.		
e)	Hani’s sleeping.	$V^{intr.}$	
f)	The dog eating.		(The dog is eating.)
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h)	Watch TV.		(He is watching TV.)
i)	Read the paper.		(He is reading the paper.)
j)	Drink the coffee.		(He is drinking coffee.)

Section 3.1 – Data analysis

- $\texttt{verb}^{\texttt{intrans.}}$ → $\texttt{verb}^{\texttt{progr.}}$

- progressive is only used with intransitive verbs

Section 3.1 – Data analysis

(3) Natural data from 1 adult Arabic learner of English (beginner).

a)	You can find it from Morocco **til** Saudi Arabia.	from Morocco to Saudi Arabia
b)	There is many **kind of way** you make baklawa.	There are many ways
c)	It's **some kind of** different.	It is quite different
d)	I don't like to buy a car **from** Ann Arbor.	in Ann Arbor
e)	**Since** long time, I'm buying B. F. Goodrich.	for a long time
f)	He finished his studies **before one month**.	a month ago
g)	He will finish **from** his studies.	finish his studies
h)	They are many kinds of reptiles which live **at** this planet.	on this planet
i)	I never help my mom **in** the housework.	with the housework

Section 3.1 – Data analysis

- how can you characterise the acquisition of preposition?

Questions ?

Section 3.3 – Data collection

- various methods

  - Ellis & Barkhuizen 2005
  - Gass & Mackey 2007
  - Dörnyei 2003
  - Duff 2008
  - Markee 2000

Section 3.3 – Data collection

methods to gain language data

Section 3.3 – Data collection

- method depends on the research question asked
- methods depend on the hypotheses and their operationalising
- methods depend on the attempt to generalise
  - instructed vs naturalistic data *performance*
  - observational versus elicited (controlled, manipulated)
  - longitudinal versus cross-sectional data
  - case studies versus samples (pooled data)
  - experimental data (control group design)
  - quantitative versus qualitative data
  - verbal reports - recalls & thinking-aloud-protocols *competence*

Section 3.3 – Data collection

(5) A learner of Spanish working on a crossword puzzle

Vertical now . . . 2 down, OK I have an *o* here but I don't know why because in 1 across I have *se morio* but I guess it has to be ***murio*** because 2 down has to be *un* [changes o to *u*] . . . OK I have to but it must be *tu* so it means that 7 across for the past tense of *dormirse* must be ***durmio*** instead of *dormio* [changes o to u] . . . OK third person plural form of the verb *pedir* they asked for, 5 down . . . *pedieron* [pause] OK I am wondering whether because I have ***pidieron*** [spells out] and I am thinking it should be *pe-* but that would make it *dormeo* with an *e* instead of *i*, . . . I guess I will see how the other ones go and take a look at that one again . . .

Section 3.3 – Data collection

- classical approaches
  - recorded speech samples
  - recorded language tasks
  - written questionnaires
  - interviews and diaries
  - written language tasks
  - rating and judging experiments (intuitional data)

Section 3.3 – Data collection

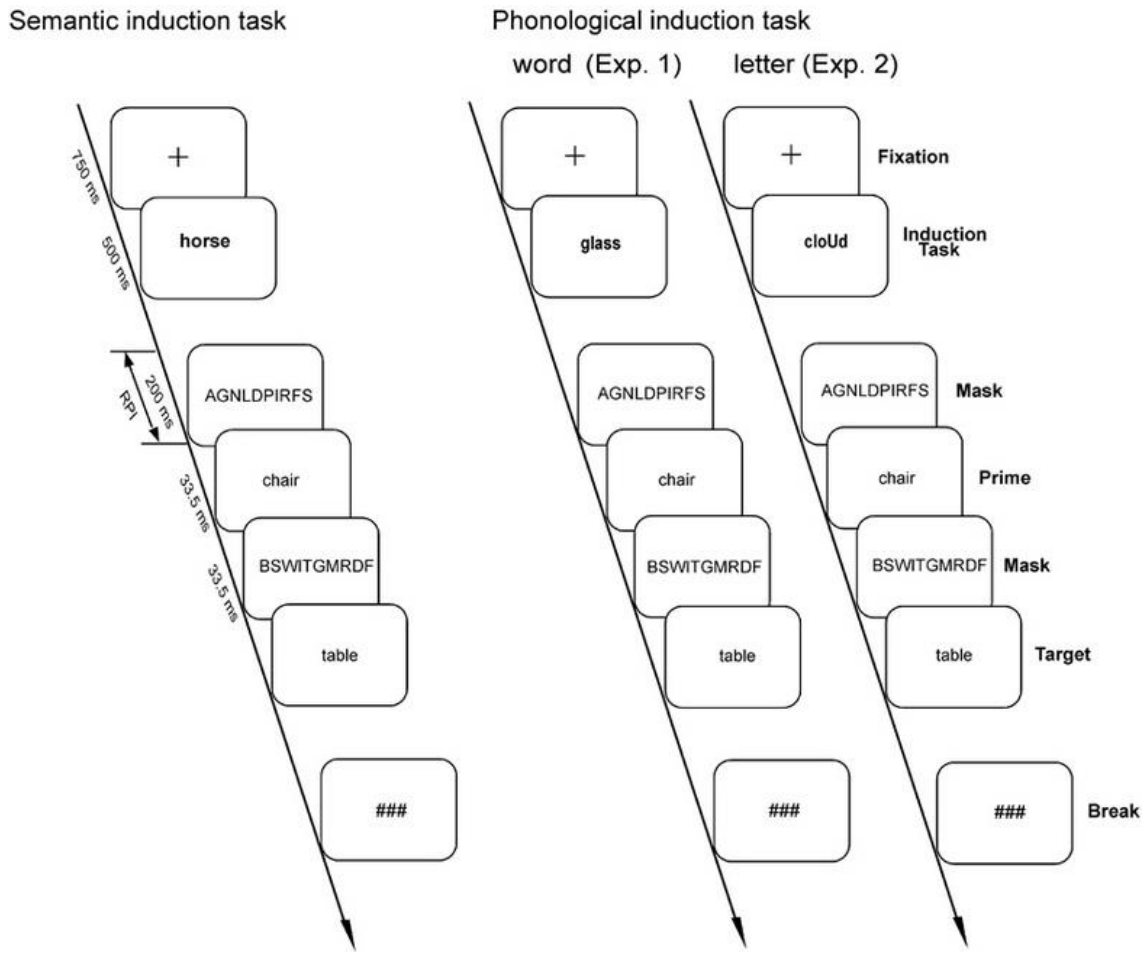
- recent approaches
  - reaction time experiments, lexical decision
  - eye-tracking experiments
  - priming experiments
  - brain imaging (fMRI)
  - EEG (electroencephalogram)
  - computer modelling

Section 3.3 – Data collection

- Eye tracking

Section 3.3 – Data collection

- priming

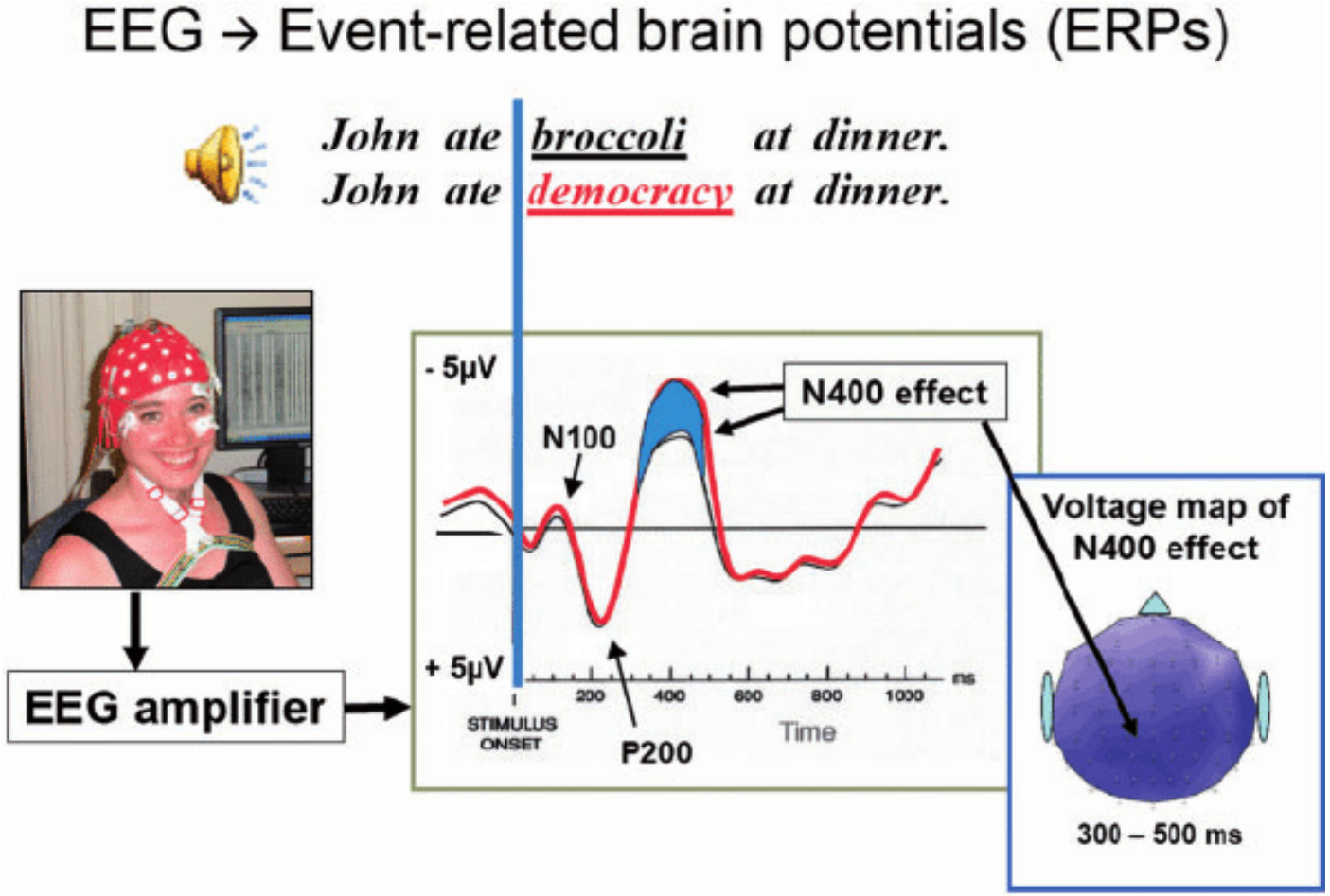


Section 3.3 – Data collection

- priming

- Participants had to decide as fast and as accurately as possible (a) in the phonological word induction task, whether the word began or ended with a vowel or started and ended with a consonant, and (b) in the semantic induction task, whether the word named a living or non-living object. As soon as the response to the induction task was given, a random letter string (forward mask) consisting of 10 capital letters was presented for 200 ms (response prime interval, RPI). The random letter string was followed by the prime word, which was shown for 33.5 ms. After prime presentation, another random letter string was presented for 33.5 ms, which served as a backward mask. Thereafter, the target stimulus that either formed a real word or a pronounceable pseudoword was displayed. Participants had to decide as fast and as accurately as possible whether or not the target was a real word

Section 3.3 – Data collection

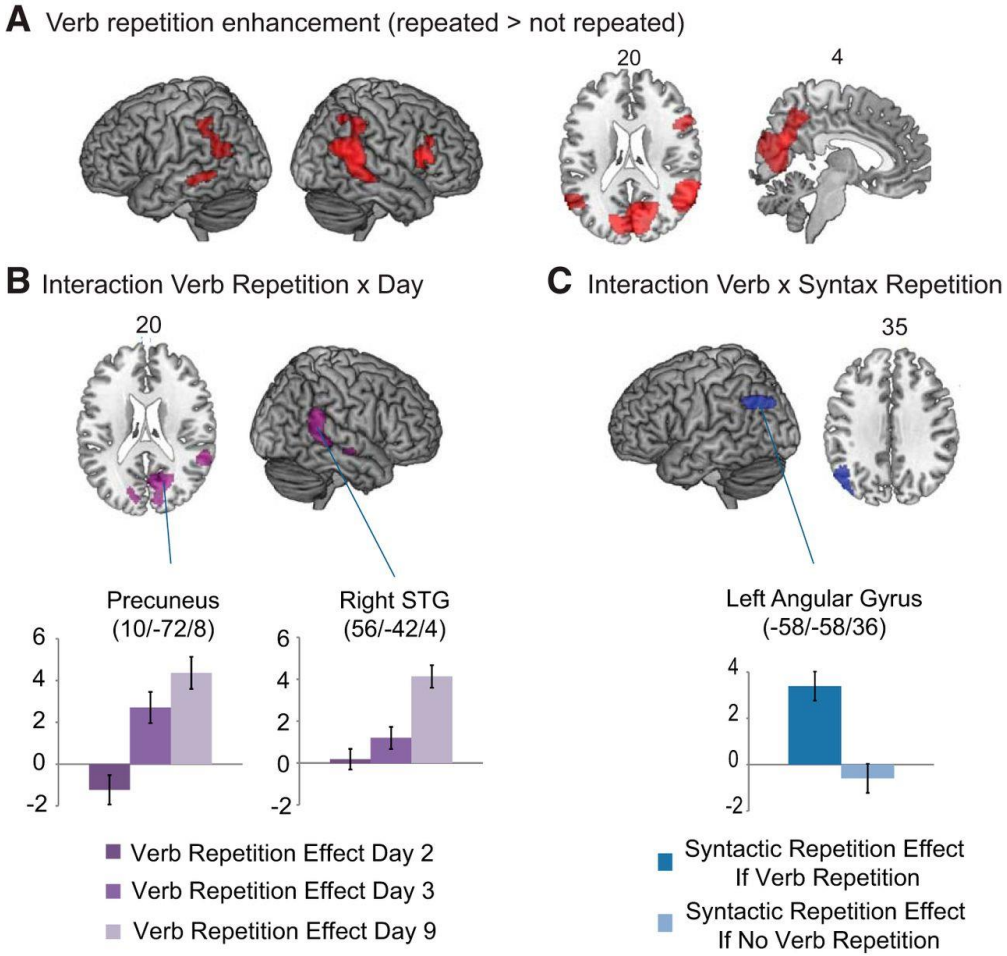


N400 is a response to semantically unexpected words

P600 is a response to grammatical violations

Section 3.3 – Data collection

- fMRI



Section 3.3 – Data collection

- Experiment 1
- Say the following word out loud:

SILK

Section 3.3 – Data collection

- No say it quickly 5 times:

SILK SILK SILK SILK SILK

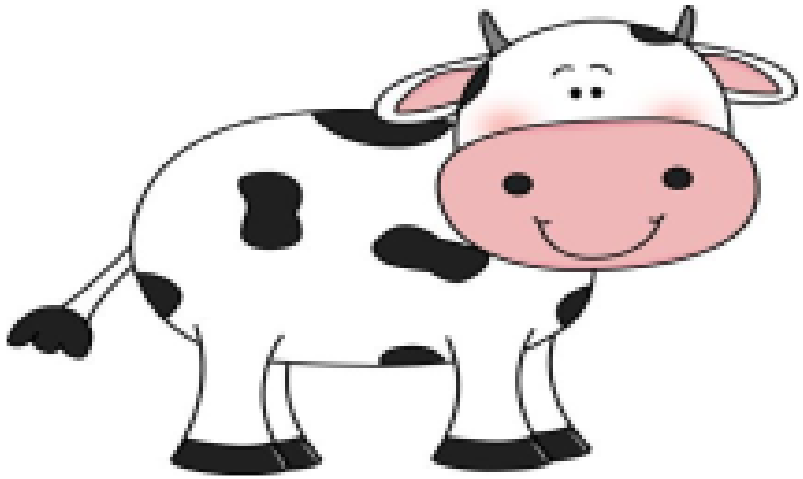
Section 3.3 – Data collection

- No say it quickly 5 more times:

SILK SILK SILK SILK SILK

Section 3.3 – Data collection

- What does the cow drink?



- Did anybody say *milk* ?

- if *silk* primes *milk*, what does this suggest about the mental lexicon ?

Section 3.3 – Data collection

- Experiment 2

X

man

dog

cat

dog

Section 3.3 – Data collection

- Experiment 2
- what does this say about the mental lexicon ?
- are reaction times shorter for words that are semantically related?
- how about bilinguals ?
- how about collocations ?

Section 3.3 – Data collection

(5) Acceptability judgements from 139 L2 learners (Gass & Ard 1984).

a) John is traveling to New York tomorrow.
b) John is seeing better now.

a) The ship sailed to Miami tomorrow.
b) The ship is sailing to Miami tomorrow.
c) The ship will sail to Miami tomorrow.
d) The ship sails to Miami tomorrow.
e) The ship has sailed to Miami tomorrow.

Section 3.3 – Data collection

- acceptability ranking of English progressive use in L2
  - present — *John is smoking American cigarettes now*
  - futurity — *John is traveling to New York tomorrow*
  - verbs of perception — *Dan is seeing better now*
  - other verbs — *The new bridge is connecting …*
  - copula — **Mary is being in Chicago now*

Section 3.3 – Data collection

methods to gain non-linguistic data

Section 3.3 – Data collection

- Individual differences – cognitive & affective
  - language aptitude
  - motivation
  - attitude
  - anxiety
  - willingness to communicate
  - age(s)
  - sex
  - working memory
  - personality
  - learning styles
  - learning strategies
  - *big five* human personality traits

Section 3.3 – Data collection

standardised language testing

Section 3.3 – Data collection

- TOEFL (Test of English as a Foreign Language)
- Cambridge Tests
- Oxford English Placement Test
- […]
- Matura Neu
- Bildungsstandards E4 & E8

Section 3.5 – Data analysis

Data analysis

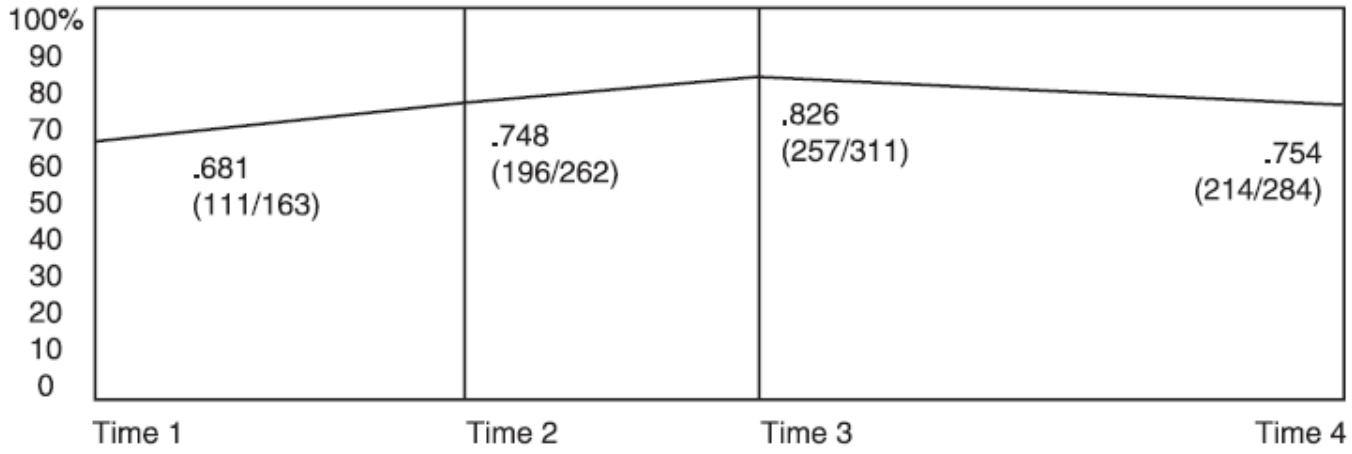
Section 3.5 – Data analysis

- how can we measure acquisition ?
- is it all about counting mistakes ?
- are there scales to measure SLA increase ?
- how can we generalise if ILs are unique creations ?
- how can we measure without a common starting point ?
- what is actually progress in the four skills ?

- what do we do with conflicting results?
- […]

Section 3.5 – Data analysis

(6) Natural data from a Laos learner of English for the acquisition of the article (Huebner 1979).



- What does the graph tell us ?
- What does the graph not tell us ?

Section 3.5 – Data analysis

- when is grammar (a morpheme) acquired ?

(6) She is dancing

• correct form	=	2	*she's dancing*
• morpheme malformation	=	1	*she's dances*
• lack of morpheme	=	0	*she dance*

Section 3.5 – Data analysis

$$\frac{\text{number of correct suppliance} \times 2 + \text{number of misformations}}{\text{total obligatory contexts} \times 2}$$

$$\frac{\text{number of correct suppliance in obligatory contexts}}{\text{number of obligatory contexts} + \text{number of suppliance in nonobligatory contexts}}$$

	Instruction only			*Naturalistic*			*Mixed*		
Morpheme	*SOC*	*TLU*	*Diff.*	*SOC*	*TLU*	*Diff.*	*SOC*	*TLU*	*Diff.*
Progressive *-ing*	97	69	–28	94	87	–7	98	74	–24
Plural *-s*	93	85	–8	74	72	–2	74	71	–3
Singular copular	95	89	–6	92	88	–4	97	94	–3
Progressive auxiliary	85	59	–26	76	71	–5	66	52	–14
Past irregular	75	66	–9	68	65	–3	73	64	–9
Past regular	51	47	–4	58	58	0	44	44	0
Third person singular	63	52	–11	25	22	–3	22	19	–3

Section 3.5 – Data analysis

- when is grammar (a morpheme) acquired?

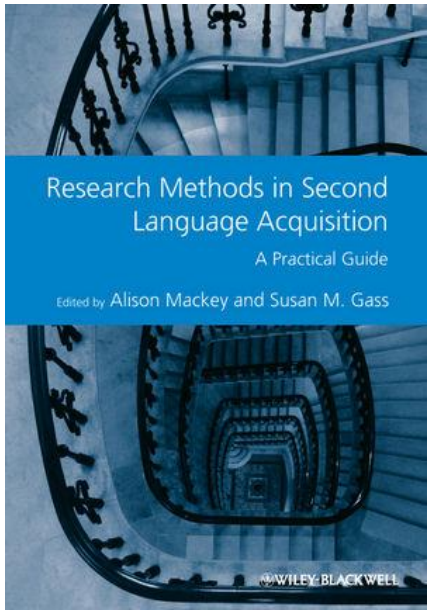
- Pienemann & Keßler 2006
- Profilanalyse

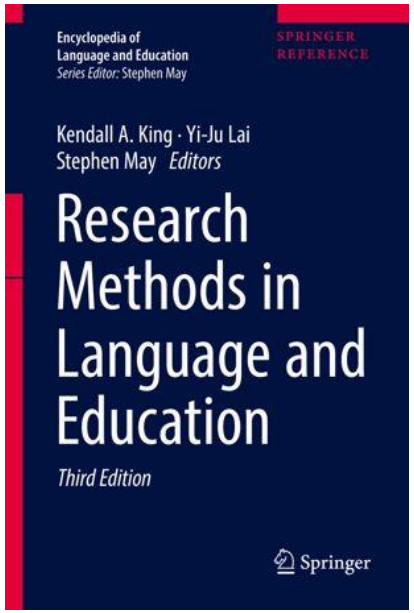
Section 3.5 – Data analysis

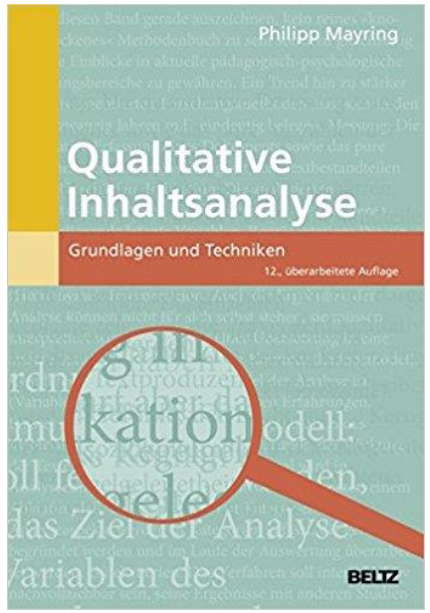
- how are data analysed ?
  - qualitative methods
  - quantitative methods

Section 3.5 – Data analysis

- qualitative methods



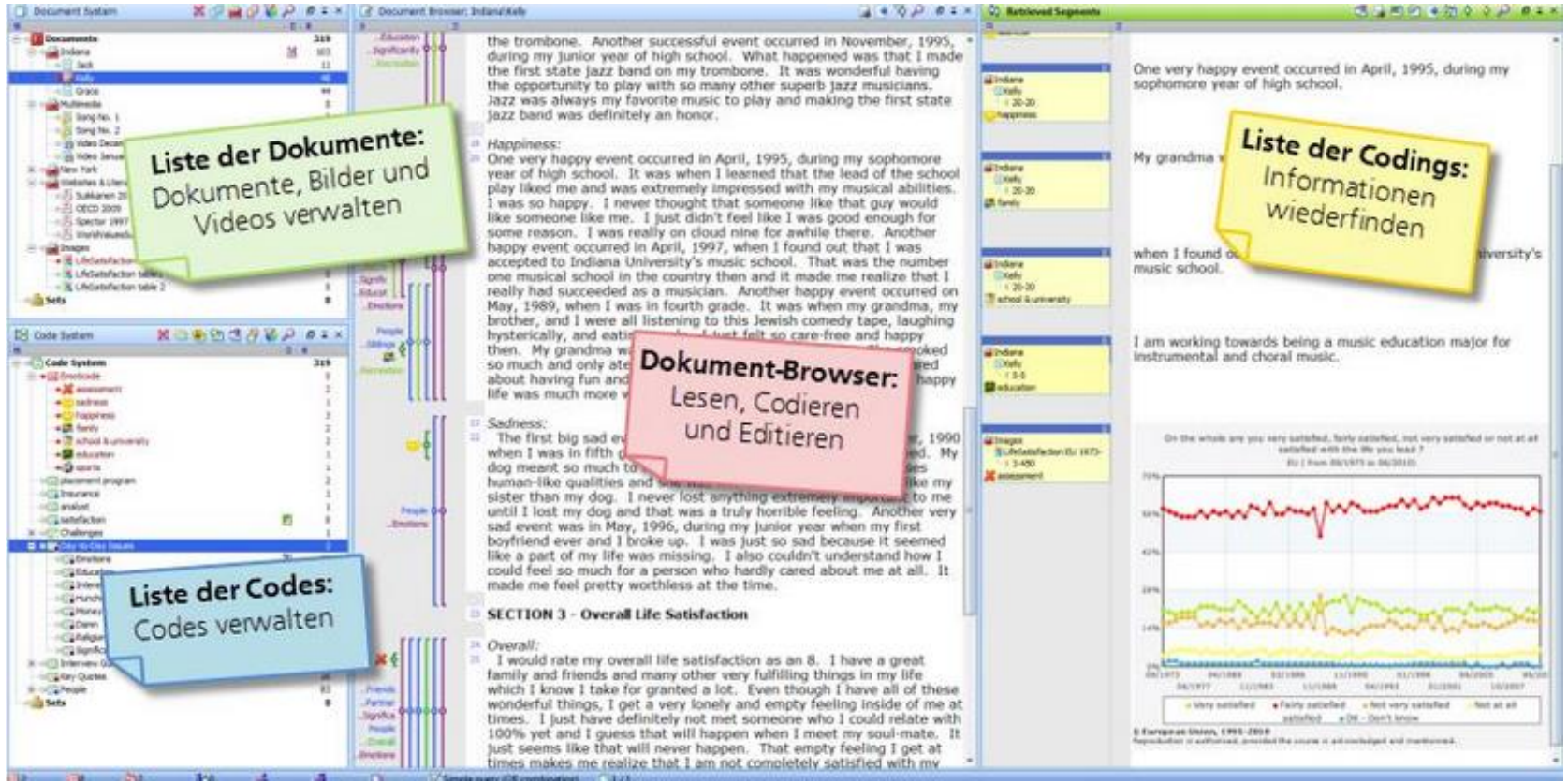




- Philip Mayring
- Professor für Pädagogische Psychologie an der PH Ludwigsburg
- Professor für angewandte Psychologie und Methodenforschung in Klagenfurt

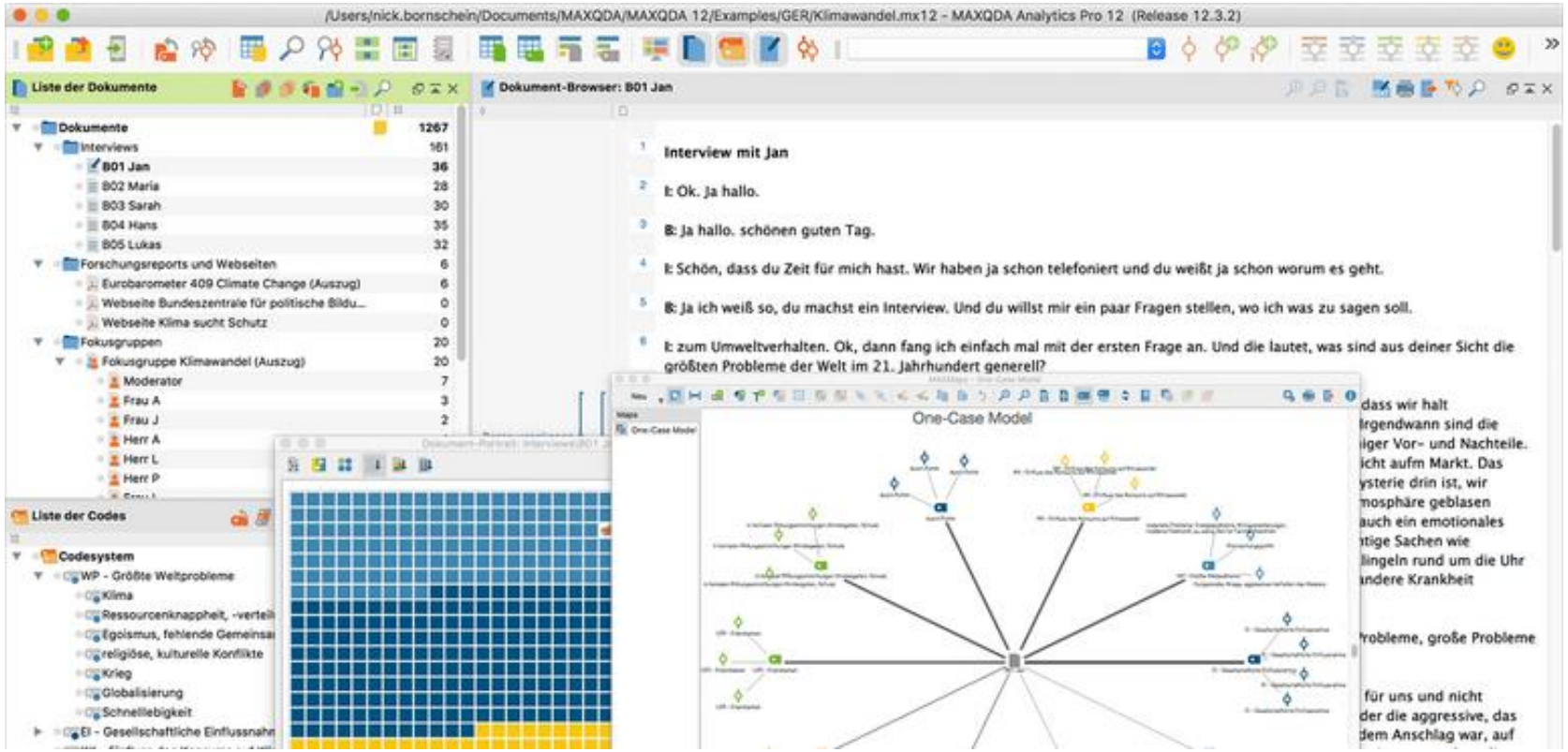
Section 3.5 – Data analysis

- qualitative methods



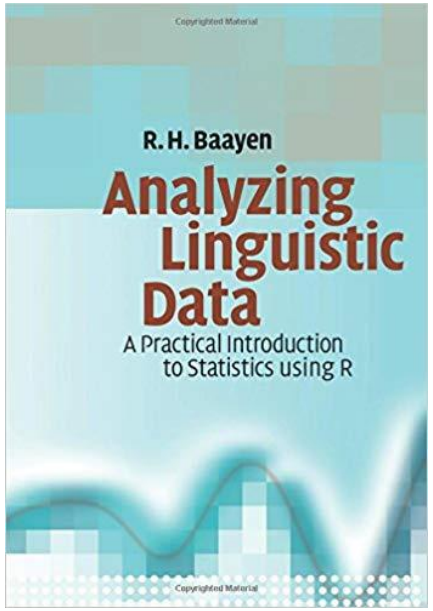
Section 3.5 – Data analysis

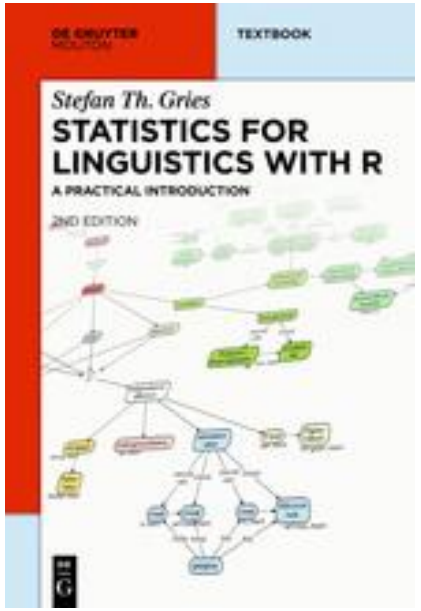
- qualitative methods

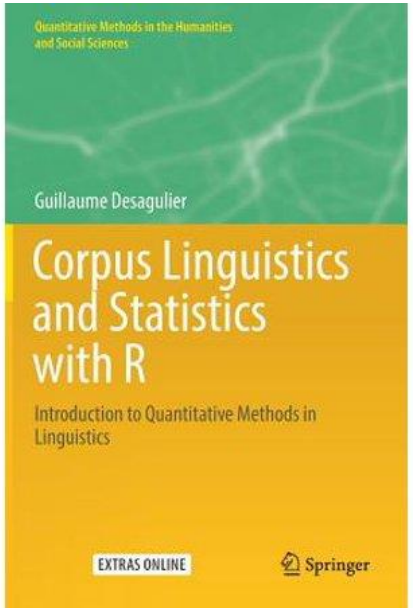


Section 3.5 – Data analysis

- quantitative methods







Section 3.5 – Data analysis

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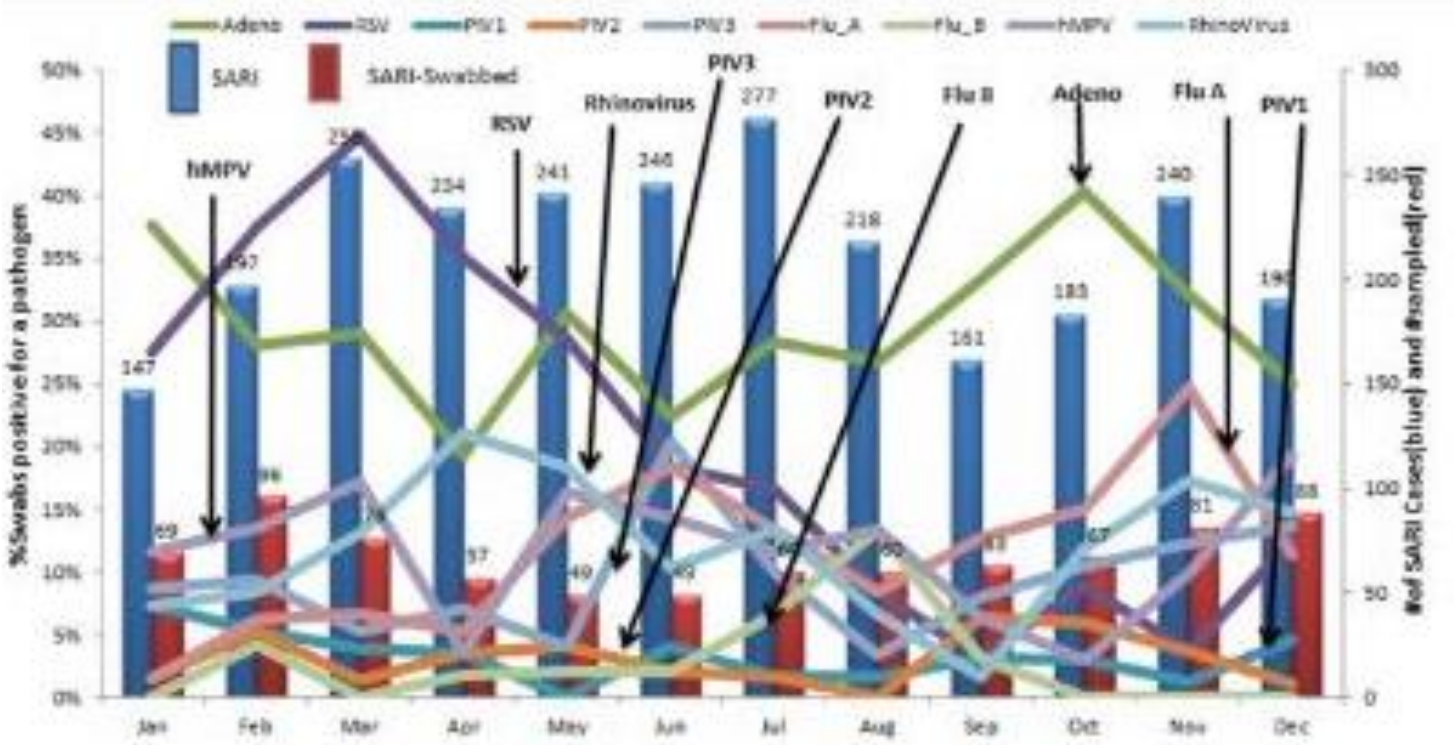

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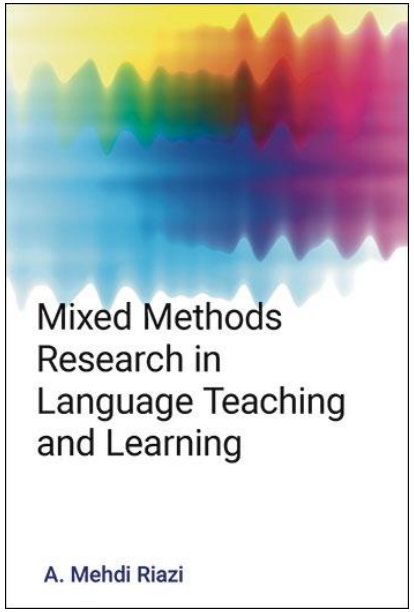
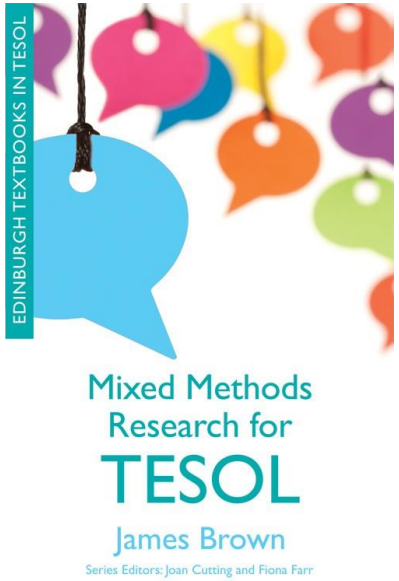
Section 3.5 – Data analysis

- Mixed methods





Section 3.5 – Data analysis

- Mixed methods

Research Project

VARIATE 2|3

A Study into the Potential of
Variation Theory in **EFL** Teaching and Learning
at **Secondary** and **Tertiary** Level

TIMEFRAME
October 2015 – September 2018

PRINCIPAL INVESTIGATOR

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Harald Spann	*Variation Theory* and foreign language teaching and learning at tertiary level
	Variation Theory and the teaching of English-language literature
Thomas Wagner	*Variation Theory* and competence-oriented teaching in English at secondary level

Questions ?

practice tasks

- discuss pros and cons of longitudinal and cross-sectional studies
- discuss the relationship between research question and methodology

- devise a project in which you want to examine the 3rd person *–s* acquisition in Austrian post-primary school second graders
- devise a project in which you want to examine the dative alternation L1 and L2 English speakers at C1 level

final exam topics

Chapter 3 – *Second and foreign language data*

- comparative fallacy
- types of data
- methods of data collection
- classical and recent approaches
- individual differences (cognitive & affective)

homework 3

- read chapter 4 & 5, pp. 89-155

- try to understand ….
  - the role of behaviourism
  - the Contrastive Analysis Hypothesis
  - the role of error analysis
  - the role of the morpheme order studies
  - interlanguage transfer