Language Learning: Methods and Media

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Seventh lecture (11.04.2016)

- Deductive / inductive
  - rule > example / example > rule
- Intentional / incidental (accidential)
  - with/without the purpose of learning the item at hand
- Explicit / implicit
  - knowing, being aware, telling / not knowing, being unaware
- Abstract (rules) / concrete (material)

Learning and teaching: some contrastive (dichotomous?) concepts

mä olen ‘I am’ *mä en ole* ‘I am not’

mä menen ‘I go’ *mä en tule* ‘I don’t come’

sä tulet ‘you (sg.) come’ *sä et tule* ‘you don’t come’

sä menet ‘you go’ *sä et tiedä* ‘you don’t know’

mä tiedän ‘I know’ *mä en osa* ‘I can’t’

me olemme ‘we are’ *me emme ole* ‘we are not’

te tulette ‘you (pl.) come’ *te ette tule* ‘you don’t come’

? *mä en mene, sä tiedät, me menemme*

? I can, I don’t know; we know?

Let's learn a bit of (a kind of) Finnish!

- What did you learn?
- How did you learn it?
- How is negation formed in Finnish?
- Of how many letters do pronouns consist?

talossa	'in a house'	*tunnissa*	‘in an hour’
kirjeessä	‘in a letter’	*kielessä*	'in a language'
autossa	'in a car'	*unessa*	‘in a dream’
järvessä	'in a lake'	*jäässä*	‘in ice’
perheessä	'in a family'	*maassa*	‘in a land’
vuodessa	‘in a year’	*metsässä*	‘in a wood’

kuu ’month’ – ‘in a month?’
juna ’train’ – ‘in a train?’
pää ’head’ – ’in a/the head?’

Is (completely) implicit learning possible? Another bit of Finnish

talossa 'in a house' *autossa* 'in a car' *tunnissa* ‘in an hour’ *vuodessa* ‘in a year’ *unessa* ‘in a dream’ *maassa* ‘in a land’	*kirjeessä* ‘in a letter’ *järvessä* 'in a lake' *perheessä* 'in a family' *kielessä* 'in a language' *jäässä* ‘in ice’ *metsässä* ‘in a wood’
SSA	SSÄ

Teaching may be...

- explicit and intentional:
  the teacher informs the students about what s/he intends them to learn
- implicit and intentional:
  the teacher does not inform the students about what s/he intends them to learn
- implicit and incidental:
  students learn something from the teacher (from his/her examples) that the teacher did not intend them to learn

Examples

Explicite & intentional: German cases

Der Mann füttert **den** Hund.
The man feeds the dog.

Die Frau füttert **die** Katze.
The woman feeds the cat.

Das Kind füttert **das** Kaninchen.
The child feeds the rabbit.

Implicite and intentional: gender, articles

Implicite and incidental (and misleading): Word order S V O

Der Mann *füttert* ***den Hund*** *fast jeden Tag.*

The man feeds the dog almost every day.

Aber heute füttert ***die Frau*** ***den Hund****.*

But today (it is) the woman (who) feeds the dog.

Das Kaninchen *füttert* ***der Mann*** *nie.*

The man never feeds the rabbit.

Das Kaninchen *füttert immer* ***das Kind****.*

(It is) the child (who) always feeds the rabbit.

More varied examples help avoid wrong incidental learning

Learning

- Processing of (new) information
- Storage in memory
- Result: knowledge / skill

OR (a different approach):

“Learning should be seen as a qualitative change in a person’s way of seeing, experiencing, understanding, conceptualizing something in the real world.”

(Marton & Ramsden 1988, cited after Benson & Lor 1999)

- Cognitive psychology, cognitive science: general model of memory; current version: ACT-R
- 1980s as theory of learning discussed in SLA,

basic idea: "Learning a language is similar to any other skill learning and involves transforming declarative knowledge into procedural knowledge which enables efficient language use."
(Trawiński 2005: 74)

John Robert Anderson: ACT Model
(Adaptive Control of Thought)

- Two kinds of knowledge, acquired and stored differently (two kinds of memory):

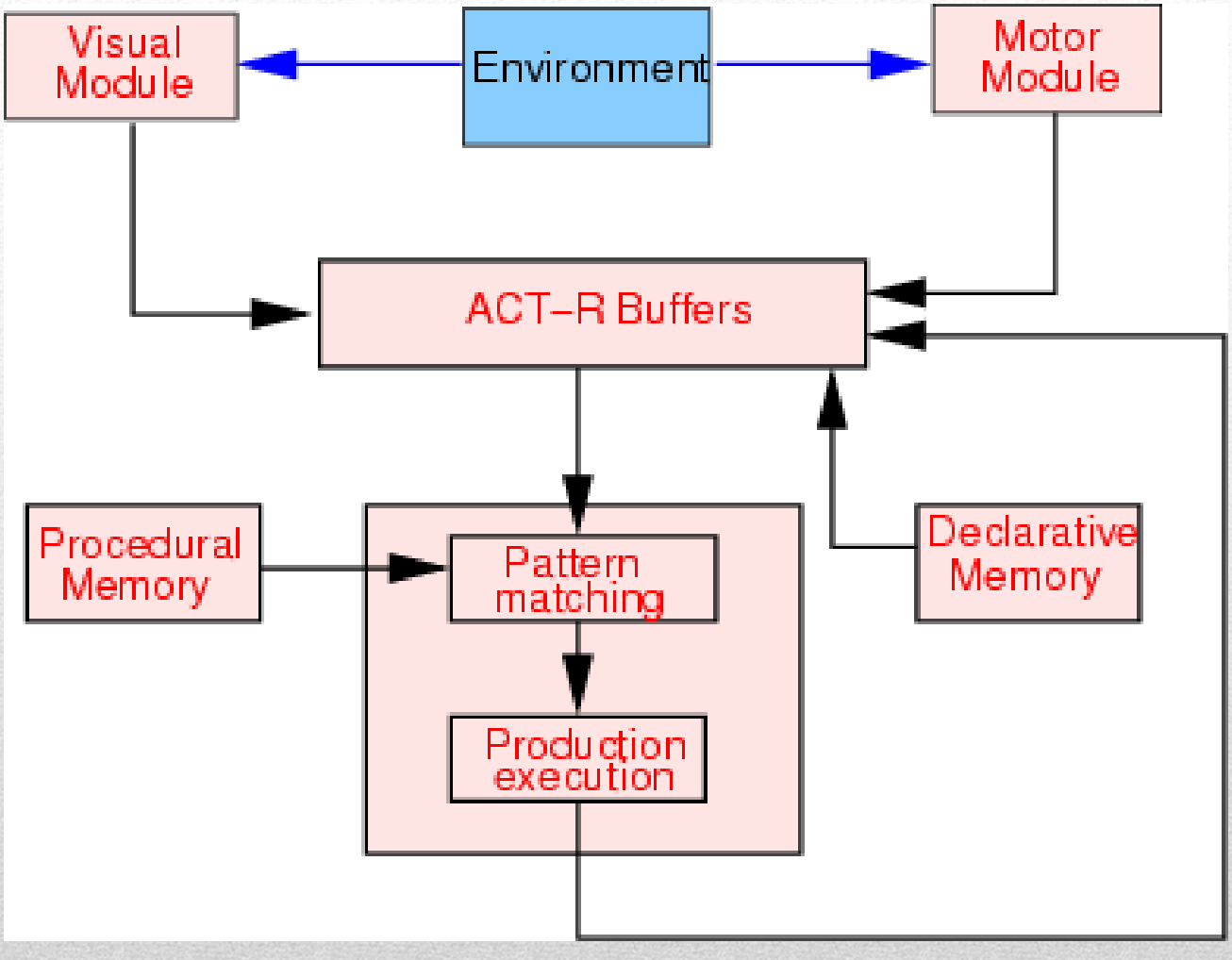
  declarative knowledge (knowing that)

  procedural knowledge (knowing how to)
- In the course of learning, declarative knowledge can (and must) become procedural knowledge

J. R. Anderson: ACT Model: Three Stages

- Cognitive stage: learning about, learning a description of the procedure
- Associative stage: forming procedures, applying rules to examples, connecting separate items
- Autonomous stage: procedures become automatic

"When we learn a foreign language in classroom situation, we are aware of the rules of the language, especially just after a lesson that spells them out. One might argue that our knowledge of the language at that time is declarative. We speak the learned language by using general rule-following procedures applied to the rules we have learned, rather than speaking directly, as we do in our native language. […] Eventually, if we are lucky, we can come to know a foreign language as well as we know our native language. At that point, we often forget the rules of the foreign language. It is as if the class-taught declarative knowledge had been transformed into a procedural form." (Anderson 1980, cited after Mitchel&Miles 1998)



The ACT-R model (http://act-r.psy.cmu.edu/)

Key words:

- Constructivism (overall approach)
- Constructions, chunks
- Connectionism (one specific type of constructivism)

(see Ellis 2003; Elman 2001; http://plato.stanford.edu/entries/connectionism/)

Another approach to language acquisition/learning

Critical questions

- Where does knowledge come from?
- What comes first – (abstract) rules or (concrete) data?
- Do we need complex rules for language?
- Can learning be completely implicit?

"Constructivist views of language acquisition hold that **simple learning mechanisms** operating in and across human systems for perception, motor action, and cognition while exposed to language data in a communicatively rich human social environment navigated by an organism eager to exploit the functionality of language **are sufficient to drive the emergence of complex language representations**."

Constructivisms and (first) language acquisition (N. Ellis 2003: 63)

"Our language does not expect us to build everything starting with lumber, nails and blueprint, but provides us with an incredibly large number of prefabs, which have the magical property of persisting even when we knock some of them apart and put them together in unpredictable ways."
Bolinger 1976, cited after N. Ellis 2003, 79

Constructions and chunks in native speakers' language

Constructions: Examples

- Concrete, lexical: *the book; my favourite book; the book I bought; is reading*
- Abstract: ARTICLE + NOUN;
- Mixed: *my* NOUN; *is* V-*ing*

Familiar constructions, regular sequences are called *chunks.*

"A chunk is a unit of memory organization, formed by bringing together a set of already formed elements […] in memory and welding them together into a larger unit. […]

Chunking appears to be a ubiquitous feature of human memory."

Newell 1990, cited after N. Ellis 2003

"The **store of familiar collocations** of the native language speaker is very large indeed. The sheer number of words and their patterns variously explains why language learning takes so long, why it requires exposure to authentic sources […]"

"we process faster and most easily language which accords with the **expectations** that have come from our **unconscious analysis** of the serial probabilities in our lifelong history of input" (Nick Ellis)

- classroom instruction may not provide sufficient input for successful chunking
- adults have already stored lots of constructions and chunks in at least one language (is this good or bad for SLA?)
- adults already have abstract rules and categories, ready generalizations about language structures (is this good or bad?)
- adults have more ways of learning (they may use „short cuts”)
- adults can consciously use learning strategies, they can influence their learning

Why adult L2 learners differ from children acquiring a first language

Phonemic coding ability	The ability to identify and memorize new sounds
Grammatical Sensitivity	The ability to understand the function of particular words in sentences
Inductive language learning ability	The ability to figure out grammatical rules from language samples
Associative memory	Memory for new words

(Definitions from Lightbown & Spada 1999)

Language (learning) aptitude: 4 components (introduced by Caroll in the 1950s)

MLAT Modern Language Aptitude Test

(Example may easily be found on the Internet)

http://lltf.net/aptitude-tests/what-is-language-aptitude/

How does it work? Example

PART I. NUMBER LEARNING

(listen and follow the instructions)

1. bot but bok buk
2. bok buk bov bof
3. geet gut beet but
4. beek beev but buv
5. geeb geet buf but

MLAT PART II. PHONETIC SCRIPT

1. kloz

A. attire B. nearby C. stick D. giant E. relatives

2. restrnt

A. food B. self-control C. sleep
D. space explorer E. drug

3. prezns

A. kings B. explanations
C. dates D. gifts E. forecasts

4. grbj

A. carport B. seize C. boat
D. boast E. waste

MLAT PART III. SPELLING CUES

1. A **kloz** is a disguised spelling of **clothes**, which corresponds in meaning to **attire**
2. B **restrnt** is a disguised spelling of **restraint**, which corresponds in meaning to **self-control**
3. D **prezns** is a disguised spelling of **presents**, which corresponds in meaning to **gifts**
4. E **grbj** is a disguised spelling of **garbage**, which corresponds in meaning to **waste**

ANSWERS FOR PART III SAMPLE QUESTIONS

Find the word that matches the model.

Look at the following sample question:

Sample: JOHN took a long walk in the woods.

Children in blue jeans were singing and

A B C

dancing in the park.

D E

You would select “A.” because the key sentence is about “John” and the second sentence is about “children.”

PART IV. WORDS IN SENTENCES

1. MARY is happy.

From the look on your face, I can tell

A B C

that you must have had a bad day.

D E

2. We wanted to go out, BUT we were too tired.

Because of our extensive training, we were

A B

confident when we were out sailing, yet we were always

C D

aware of the potential dangers of being on the lake.

E

1. Yesterday, Mary caught a FISH at the lake.

Cindy cut a cake with a knife.

☐ ☐ ☐ ☐ ☐

2. Amy SANG a pretty song to her class.

James throws big rocks into the lake.

☐ ☐ ☐ ☐ ☐

3. Peter got an ORANGE cat for his birthday.

My sister ate a big apple on Wednesday.

……..☐ ☐ ☐ ☐ ☐

4. The furry DOG barked at us as we walked by.

Did John go to the store to get bread?

☐ ☐ ☐ ☐ ☐

PART V. PAIRED ASSOCIATES
Memorize these words (40 seconds):

Maya	English
c?on	gun
si?	wood
k?ab	hand
kab	juice
bat	ax
pal	son

1. bat

A. animal B. stick C. jump D. ax E. stone

2. kab

A. juice B. cart C. corn D. tool E. run

3. c?on

A. story B. gun C. eat D. mix E. bird

4. k?ab

A. road B. tree C. yell D. fish E. hand

5. si?

A. look B. yes C. forgive D. cook E. wood

6. pal

A. chief B. son C. friend D. gold E. boat

Can such a talent be measured effectively?

- Tests such as MLAT can predict success in language classes.
- Critique: they may measure only success with (a certain kind of) instruction, not real language talent.

Language aptitude: some questions and tentative answers (after Dörnyei & Skehan 2003: 590-591)

Is such a talent undifferentiated, or does it have sub-components?

- There seem to be at least two components: memory and analytic skills.
- Possible third component: sensitivity for sound distinctions.
- The components seem to be independent: some people have good memory, others good analytic skills, others both (or neither ☹)

Is foreign language aptitude a distinct ability, or does it relate to more general abilities, such as intelligence?

- ? (A good memory and/or analytic skills also lead to good results in IQ tests - but is this intelligence?)

Is such a talent innate? Is it relatively fixed or is it amenable to training?

- ?

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