



# **Explaining second language learning: Three perspectives**

Foreign Language Acquisition & Communication I  
Class 2 ②

# **Pre-class questions**

1. What difficulties have you experienced while learning other languages? → Are they grammar-related? Vocabulary? Phonology? Or pragmatics?
2. What factors do you think make your L2 learning challenging?

# Major theoretical frameworks for SLA




Linguistic  
perspective

Cognitive  
perspective

Sociocultural  
perspective

# What do researchers investigate in the SLA studies?

- What linguistic knowledge do L2 learners have?
- How does L2 learner grammatical knowledge differ from native speakers?
- How does the L2 learners' previous knowledge influence their process of L2 acquisition?
- What acquisition process do L2 learners go through?
- How does interaction enhance L2 acquisition?
- How do social factors influence the L2 acquisition process?



Linguistics  
perspective



Cognitive  
perspective



Sociocultural  
Perspective

# LINGUISTIC APPROACH

*Focusing on the L2  
linguistic knowledge (what  
grammatical knowledge do  
L2 learners internalize in  
their mind?)*

# **Behaviorism (psychological perspectives) vs. Innatism**

# **Behaviorist Theory of Second Language Acquisition**

<https://www.youtube.com/watch?v=VvOIbDI2fro>

# Behaviorism (Psychology)

- 1950s to 1960s in North America
- Behavioral psychology
- Skinner
- Stimulus → Response → Reinforcement (award) → Response becomes habit
- Learning including language acquisition essentially involves habit through imitation and practice.
- The old habit (L1) would interfere with the new habit (L2) ⇒ Contrastive Analysis Hypothesis
- Correct imitation = correct habit formation
- Errors must be corrected right away to prevent bad habit formation.



# Contrastive Analysis Hypothesis (CAH)

- Structural/formal linguistics
- Behaviorism → Pattern practice for habit formation [Audiolingual Method]
  - Ex. John runs. [walk · eat · smile · speak]
- The errors made by L2 learners are caused by L1 transfer due to linguistic differences between L1 and L2.
- Similarities → easy to learn [positive transfer]
- Differences → difficult to learn [negative transfer]
- Audiolingual Method: pattern practice and memorization of dialogues and sentence structures

# Shortcomings of CA

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Learners do not always make errors predicted.

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Some errors are observed across learners regardless of their L1.  
(Ex. "No understand," "Yesterday I meet my friends.")

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Developmental stages

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Errors: evidence of development

# DOES ANALOGY WORK?

- When did the boy say he hurt himself?  
A1: When climbing up the tree/falling off from the tree.  
A2: When he was taking a bath. In the bath tab.
- When did the boy say how he hurt himself?  
A: In the bath tab.
- What do you think Cookie Monster eats?
- I painted the red barn. → I painted a blue barn.  
→ I painted a barn red.
- I saw a red barn → I saw a barn red. (Noooooop!)
- John ate. → John must have eaten something like sandwiches, but not a shoe.
- John grows tomatoes. → John grow.



# Unexplainable child language use

- Criticism: not all children imitate and practice the language they have heard.
- Patterns in language: So he can *doc* my little bump? (doctor)
- Unfamiliar formulas: I'd like to propose *a piece of bread*. (to propose a toast)
- Question formation: *Are* dogs can wiggle their tails?
- Children are very creative in making up some sentences which are not necessarily deviate from their L1 linguistic rules.
- Children have acquired the language for such a short period of time (so fast). → by 5 yrs. old

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## Logical problem: Poverty of Stimuli

Fact 1: Children come to know more about the structure of their language than they could reasonably be expected to learn on the basis of the samples of language they hear. + •

Fact 2: The language children are exposed to includes false starts, incomplete sentences, and slips of the tongue, and yet they learn to distinguish between grammatical and ungrammatical sentences. ○

Fact 3: No negative input is available in language input they get. (Negative input = Input which indicates that some utterances are grammatically inappropriate.)

⇒ In order to account for such facts .....

<https://www.youtube.com/watch?v=7Cgpfw4z8cw>

## Revolution by Chomsky! Universal Grammar

### *Universal Grammar*

At a deep level, all languages share the same properties.

***The innatist perspective:*** Human beings are born with the ability to learn language (LAD: language acquisition device, UG).

## Acquisition process of linguistic knowledge (based on Chomsky, 1966)

- primary linguistic data of a language  
(language input)



- *Language Acquisition Device (UG)*



- Linguistic knowledge of the language (L1)

## Availability of UG in SLA

- UG relates to SLA: Since a logical problem exists for SLA as well as L1 acquisition, the complex linguistic knowledge that L2 learners eventually attain cannot be derived only from the input or instruction (e.g., Lydia White).
- Full: UG works in the same way for L1 and L2.
- Partial: only the principles that are available for L1 are available for L2 acquisition.
- No access: Many learners do not obtain a very complex level of L2. → UG is no longer available after a critical period so they rely on **the general learning systems** (e.g., Bley-Vroman, Schacher).

Controversial



# COGNITIVE APPROACH

*Focusing on the SLA  
processes (How does  
SLA progress?)*

# Sentence Processing

- ① John kicked a ball.  $\Leftrightarrow$  A ball kicked John.
- ② A mouse bit an elephant.  $\Leftrightarrow$  An elephant bit a mouse.
- ③ A piece of cheese ate Robert.  $\Leftrightarrow$  Robert ate a piece of cheese.

What criteria did you rely on to evaluate the sentences?

Cues

# Underlying theoretical assumptions

- No need to hypothesize that humans have language-specific module in the brain or that acquisition and learning are distinct mental processes.
- Innate: General theories of learning  $\Rightarrow$  Language learning is a part of general learning process
- L1 and L2 acquisition develop through the same processes of perception, memory, categorization, and generalization.  $\Rightarrow$  Cognitive level
- $\Leftrightarrow$  L2 differs from L1: what the learners already know about language and how that prior knowledge shapes their perception of the new language



# The process of developing *interlanguage*

An L2 learner notices something new (L2 learner has never heard) in input.



Individuals make their own rules as a hypothesis.



They test their hypothesis in a new situation by applying their rules (i.e., actual use or output).



They internalize their rules as part of the L2 knowledge (possible further reconstruction).



They constantly reconstruct their interlanguage through more interaction.



They receive feedback from the interlocutor →  
Positive response: confirming her/his own rule  
Negative response: must revise it.

# Information processing

- DeKeyser, Schmidt
- Human beings have limited cognitive resources to process information at one time; we cannot pay attention to everything.
- The initial stage of SLA: paying attention to more local items (e.g., individual letters, words). [Novice learners pay their limited attention to smaller units.]
- The later stage of SLA: Paying attention to macro-level items (e.g., discourse).
- Controlled processing [attention & efforts] → practice → Automatic processing
- Gaining automaticity through practice (actual use)
- Declarative knowledge  $\Rightarrow$  procedural knowledge

# Connectionism

- Nick Ellis
- Frequency: *Usage-based learning*
- The more frequently specific linguistic features appear together in the input, the more strongly learners associate them and features and the contexts in which they occur.
- When some words frequently appear together in input, learners perceive and use them as a chunk: e.g., take a look at, a piece of ..
- *I say... He says....* : not by a rule, but a situational feature, that is, the subject pronoun activates the correct verb form (3<sup>rd</sup> person singular present).

# Cues: *Competition Model*

- Elizabeth Bates and Brian MacWhinney
- What is available in input?  $\Rightarrow$  Multiple cues available to process language input [animacy, sentence position, tense, postposition etc. ]
- Strong cues depending on a language: Word order works as a strong cue in English, but less in Japanese.
- The probabilities with which input forms (e.g., preverbal positioning, verb agreement morphology, sentence initial positioning, nominative case-marking, etc.) are associated with specific meanings (e.g., subject)
  - English: noun appears in a preverbal positioning  $\Rightarrow$  could be a sentence subject, but... John kicked a ball.  $\Leftrightarrow$  A ball kicked John. [The verb *kick* limits the semantically appropriate noun due to animacy.]

# Processability theory

- Manfred Pienemann (1998)
- Originally developed to account for a learning process of German as L2
- Certain syntactic and morphological features follow the developmental stages.
- Same order regardless of L2 learners' L1
- Teachability Hypothesis: L2 “learners can learn what they are psychologically ready to learn” (p. 116).



# Interlanguage: Developmental stages for question formation

(adapted from Pienemann, Johnson, and Brindley, 1988)

S1	<b>Single words, formulae, or sentence fragments</b>	<p>‘Four children?’</p> <p>‘A dog?’</p>	article + noun
S2	<b>Declarative word order</b> No inversion, no fronting	<p>‘It’s a monster in the right corner?’</p> <p>‘The boys throw the shoes?’</p>	affirmative sentence
S3	<b>Fronting:</b> <i>wh</i> -fronting, no inversion:  <i>do</i> -fronting:  other-fronting:	<p>‘Where the little children are?’</p> <p>‘What the dog are playing?’</p> <p>‘Do you have a shoes on your picture?’</p> <p>‘Does in this picture there is four astronauts?’</p> <p>‘Is the picture has two planets on top?’</p>	start moving a component

## Developmental stages for question formation (Cont.)

S4	<b>Inversion in <i>wh</i>- + copula and 'yes/no' questions</b> <i>wh</i> - + copula: auxiliary other than 'do' in 'Yes/no' questions:	'Where is the sun?' 'Is there a fish in the water?'
S5	<b>Inversion in <i>wh</i>-questions</b> inverted <i>wh</i> -questions with 'do': inverted <i>wh</i> -questions with auxiliaries other than 'do':	'How do you say [...]?' 'What's the boy doing?'
S6	<b>Complex questions</b> question tag: negative question: embedded question:	'It's better, isn't it?' 'Why can't you go?' 'Can you tell me what the date is today?'

# Role of conversational interaction in L2 learning

- Interaction Hypothesis (Long, 1996): negotiated interaction
- [L2 learner] Incomprehensible input → trigger meaning negotiation/ receiving feedback
- [Interlocutor] Incomprehensible (L2 learner's) output → trigger meaning negotiation/ providing feedback
- Meaning negotiation through
  - Clarification requests: What? What did you say?
  - Comprehension checks: Did you understand?
  - Confirmation checks: Is this what you mean?
- Meaning negotiation brings learners' attention to particular aspects of target language system
- With realizing that
  - their production does not conform to the standards of the target language → **Pushed/modified output (reformulating their utterances to make their message comprehensible)**
  - Their current grammar system is not adequate → **Reconstructing interlanguage (L2 development)**

# SOCIOCULTURAL APPROACH

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*Focusing on social factors: How do social settings influence L2 development?*

# Assumptions of sociocultural approaches

- Language learning through general learning mechanisms
- Learning is a social activity: constructing knowledge through interaction that should occur in a socially accepted manner.
- Vygotsky's Zone of Proximal Development (ZPD): Scaffolding = Children can make more progress with assistance from more capable peers or adults.  $\Rightarrow$  Interaction
- Power relations  $\Rightarrow$  Identity (Norton Peirce, 1995; Norton, 2000, 2013)
- Interaction may not automatically occur; it could be impeded by power relations.  $\leftarrow$  Language attitudes
- Ideology in textbooks