

Chapter 8: Language Acquisition

May 20, 2019

- 1 Introduction
- 2 Theories of language acquisition
- 3 Practice

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What is language acquisition?

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- Starting to speak for the first time
- Picking up a new language in college

What is language acquisition?

- Starting to speak for the first time
 - Referred to as **first-language acquisition**
- Picking up a new language in college
 - Referred to as **second-language acquisition (SLA)** or second-language learning

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What must children acquire?

- Words
 - Can potentially learn through memorization
- Rules of the grammar
 - Includes phonology, morphology, and syntax
 - *Cannot* simply be memorized

What must children acquire?

- Words
 - Can potentially learn through memorization
- Rules of the grammar
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Example

What sort of words can the prefix *un-* attach to? How did you learn this?

Some theories

- The innateness hypothesis
- Imitation theory
- Reinforcement theory
- Active construction of a grammar theory
- Connectionist theories
- Social interaction theory

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The innateness hypothesis

Definition

The idea that humans are genetically predisposed to acquire and use language

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- Babies are born knowing that languages have patterns (and possibly features).
- Babies are born with the ability to seek out those patterns (and possibly features).
- The collection of all possible patterns together is known as **universal grammar**.

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Example

All languages might have nouns and verbs.

The innateness hypothesis

What are some innate behaviors?

What are some learned behaviors?

The innateness hypothesis

What are some innate behaviors?

- Walking
- Eating

What are some learned behaviors?

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- Walking
- Eating

What are some learned behaviors?

- Playing piano
- Riding a bike

The innateness hypothesis

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- Walking
- Eating

What are some learned behaviors?

- Playing piano
- Riding a bike

Is talking like walking and eating or is it like playing the piano and riding a bike?

The innateness hypothesis

Eric Lenneberg's characteristics of innate behaviors can help us answer this question:

- 1 The behavior emerges before it is necessary

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- 5 The behavior develops through identifiable and ordered stages

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- 4 Direct teaching and intensive practice have *relatively* little effect
- 5 The behavior develops through identifiable and ordered stages
- 6 There is likely a **critical period** for acquiring the behavior

The innateness hypothesis

Does direct teaching really have little effect?

Example

Child: Want other one spoon, Daddy.

Father: You mean, you want the other spoon.

Child: Yes, I want other one spoon, please Daddy.

Father: Can you say “the other spoon”?

Child: Other . . . one . . . spoon.

Father: Say “other.”

Child: Other.

Father: “Spoon.”

Child: Spoon.

Father: “Other spoon.”

Child: Other . . . spoon. Now give me other one spoon.

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Definition of a **critical period**

A period of time during which a behavior must be acquired.

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How did we figure out when the critical period for language acquisition is?

- Neglected children and **feral children**

The innateness hypothesis

Example

Genie and Isabelle:

- Genie was kept in isolation from the age of 20 months until the age of 13
- Isabelle was kept in isolation until the age of 6

The innateness hypothesis

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Genie and Isabelle:

- Genie was kept in isolation from the age of 20 months until the age of 13
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- Isabelle was kept in isolation until the age of 6
 - Language skills caught up to those of other children her age after 2 years of lessons

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What might be some issues with this evidence for the critical period?

- Genie was abused and traumatized
- Isabelle used a rudimentary **homesign** gestures with her deaf mother

The innateness hypothesis

Definition of homesign gestures

Gestures that represent common actions and objects (e.g., 'eat' or 'house') but that do not involve grammatical rules

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What do these have to do with evidence for the innateness of language?

The innateness hypothesis

Example

In the 1980s, a school for the deaf was established in Nicaragua:

- Both young and old students arrived knowing only homesign gestures
 - Students standardized their homesign gestures
 - Later, young students developed a full-blown sign language through their exposure

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In the 1980s, a school for the deaf was established in Nicaragua:

- Both young and old students arrived knowing only homesign gestures
 - Students standardized their homesign gestures
 - Later, young students developed a full-blown sign language through their exposure

Older students in the first generation never moved beyond homesign gestures.

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- Child second language learners *regularly* learn a new language perfectly

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Second-language acquisition presents both evidence for and against the critical period:

- Adult second language learners *rarely* learn a new language perfectly
- Child second language learners *regularly* learn a new language perfectly
 - *BUT*
- Some adults *can* learn a new language perfectly
- Factors such as teaching methods, motivation, and identity are difficult to control for

The innateness hypothesis

Different parts of the grammar also work differently:

- Feral children can learn vocabulary but not syntax
- Second language learners can learn vocabulary and syntax but not phonology

Therefore, perhaps only certain parts of language are innate

Imitation theory

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Definition of imitation theory

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Does this sound reasonable?

Imitation theory

The truths of this theory:

- The connection between words and their meaning is arbitrary
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- The connection between words and their meaning is arbitrary
 - Must be learned through imitation
- Children learn languages in their environment, not those that are absent
 - On some level, they are attempting to imitate what they hear

Imitation theory

But still...

Example

Child: Want other one spoon, Daddy.

Father: You mean, you want the other spoon.

Child: Yes, I want other one spoon, please Daddy.

Father: Can you say "the other spoon"?

Child: Other . . . one . . . spoon.

Father: Say "other."

Child: Other.

Father: "Spoon."

Child: Spoon.

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Imitation theory

But still... this child is producing something they've never heard and is refusing to imitate what they do hear.

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Reinforcement theory

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The idea that children learn language by being rewarded when using correct forms and being corrected when using incorrect forms

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Example

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|---------------------------|---|
| (4) Child: | Nobody don't like me. |
| Mother: | No, say "nobody likes me." |
| Child: | Nobody don't like me.
(repeated 8 times) |
| Mother (now exasperated): | Now listen carefully! Say, "Nobody likes me." |
| Child: | Oh! Nobody don't likes me. |

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- Most corrections are for the truth value
- Corrections aren't always heeded

Active construction of a grammar theory

Definition

The idea that language acquisition is innate, and children hypothesize about rules for patterns they hear, eventually inventing their own grammar

This differs from the innateness hypothesis in that the patterns themselves *are not* innate.

Active construction of a grammar theory

Example

[playing with a toy lawnmower] “I’m lawning.”
[pretending to be Superman] “I’m supermanning.”
[realizing his father was teasing] “Daddy, you joked me.”
[of food on his plate] “I’m gonna fork this.”

Active construction of a grammar theory

Example

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[pretending to be Superman] “I’m supermanning.”
[realizing his father was teasing] “Daddy, you joked me.”
[of food on his plate] “I’m gonna fork this.”

These mistakes are non-random; they stem from the child’s own, invented, unrefined rules.

Connectionist theories

Definition

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Example

Circumstance: a child hearing the word 'milk' while drinking from a bottle

Association: 'milk' to the sound of the word

Association: 'milk' to the image of a bottle

Association: 'milk' to drinking

Connectionist theories

These theories differ from active construction of a grammar theory:

- Active construction of a grammar suggests that children create categorical, abstract rules
- Constructionist theories suggest that children exploit statistics and probability to guess what form to use

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Children do not always use *-ed* to create the past tense of nonsense words like 'fring'.

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- Active construction of a grammar suggests that children create categorical, abstract rules
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Example

Children do not always use *-ed* to create the past tense of nonsense words like ‘fring’.

- Active construction of a grammar theory can't explain this
- Constructionist theories explain this by saying that forms like ‘frang’ are more likely here because of ‘sing’, ‘ring’, and ‘bring’

Social interaction theory

Definition

The idea that children cue adults for the sort of language input they require in order to develop grammatical rules

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Example

Children are much more likely to hear (5) than (6):

(5) See the birdie? Look at the birdie! What a pretty birdie!

(6) Has it come to your attention that one of our better-looking feathered friends is perched upon the windowsill?

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This theory is not necessarily in opposition to other theories.

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How do these theories apply here?

- <https://youtu.be/22aMls0Cg-A?t=2>
- <https://youtu.be/2uaBTKes00k>
- <https://youtu.be/u0pXNhNqGJw>
- <https://youtu.be/UrRKLHq25UA?t=135>