

## Week 3: Language Acquisition & General Features

### Solutions

- (1) Consider the following exchange taken from Braine (1971:161). Discuss the effectiveness of the father's strategy in teaching the child.

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.

#### **Solution**

The father is trying to directly correct the child. This strategy is not effective because language acquisition isn't really affected by correction. To the child "other one spoon" is correct. The father's objective is to teach the child how to say "the other spoon" correctly, but the child's objective is to get the spoon, not to be grammatically correct. The child cares about communication, whereas the father cares about grammar. Notice that the child does successfully communicate what they want: the father knows that the child wants the other spoon.

- (2) You are part of a research group investigating the Kikuyu language in Kenya. Your team has confirmed adult Kikuyu speakers cannot distinguish between /ba/ and /pa/, a contrast not present in Kikuyu. You want to know whether Kikuyu-learning babies can distinguish these sounds.

- (a) How could you determine whether Kikuyu-learning babies hear the difference between /ba/ and /pa/? Describe your research method.  
(b) What results would you predict for 6 month old babies? Justify your answer.  
(c) What results would you predict for 12 month old babies? Justify your answer.

#### **Solution**

- (a) You could use the **conditioned head turn procedure** to find out if babies hear the difference. This method teaches babies to turn their head whenever they hear a sound change. If they turn their head when /ba/ changes to /pa/, we know they can tell the difference.  
(b) The 6 month olds would be able to tell the difference. The Werker & Tees study found that babies under 10 months have not yet lost the ability to hear sound

distinctions in any language.

- (c) The 12 month olds would not be able to tell the difference. Werker & Tees found that by a year, babies could only detect contrasts in their own language.

*Note: you need not mention the study by name if a similar question were on the exam.*

- (3) For each pair of sentences, which of the two would an adult most likely say to a young child? Justify your answer.

- a. Timmy, see the bird?  
Do you see the bird?
- b. You are taking a bath now.  
Timmy is taking a bath now.
- c. Look, the girl is eating. And now she is playing with the ball.  
Look, the girl is eating. And now the girl is playing with the ball.
- d. That's a birdie.  
That's a robin.
- e. No, that's a kitty, not a doggy.  
No, say went, not goed.

**Solution**

- (a) *Timmy, see the bird?* In child-directed speech (CDS), adults often change their language in ways intended to get the child's attention (like using their name).
- (b) *Timmy is taking a bath now.* In CDS, adults tend to simplify their language by avoiding complex language (here using proper nouns instead of pronouns).
- (c) *Look, the girl is eating. And now the girl is playing with the ball.* In CDS, adults tend to avoid complex language and to repeat themselves.
- (d) *That's a birdie.* Because adults will often choose words a child is more likely to know (more useful for the child).
- (e) *No, that's a kitty, not a doggy.* Because when adults correct children, they usually correct the truth of the statement, not the grammar.

- (4) Considering children's tendency to overgeneralize morphological rules, what might we expect a young child to use in the place of the following adult words?

- (a) fish (plural)
- (b) went
- (c) mice
- (d) ate
- (e) has
- (f) geese
- (g) brought
- (h) hit (past tense)
- (i) himself
- (j) women

**Solution**

- (a) fishes (b) goed (c) mouses (d) eated (e) have or haves (f) geoses (g) bringed (h) hitted (i) hisself (j) womans

*Tip for solving: Children acquire and apply productive rules, so the way to go about this question is to figure out what the underlying rule is (which the child then overgeneralizes). One strategy is to think of a new word in the same category and ask yourself what rule would apply to it (wug-test yourself!). For plural for example, "this is a wug, now there are two of them, there are two \_\_\_", you can see that the answer is wugs, which means the plural rule is something like 'add -s'.*

- (5) Consider the following utterances (a-n) from a child named Krista. Krista uses the past tense twice — do you think this is evidence she has acquired the English past tense rule? Why or why not? Do you think she has acquired possessive -'s? Why or why not?

<i>Intended meaning</i>	<i>Krista's utterance</i>
(a) My name is Krista.	Mine name Krista.
(b) My last name is Pegit.	Last name Pegit.
(c) The tape is right there.	Tape right there.
(d) Daddy's book.	Daddy book.
(e) I've got a book.	I'm got a book.
(f) Read me a story.	Read me story.
(g) I'll do it.	I'm do it.
(h) He went outside.	He went outside.
(i) Open the gate please.	Open a gate, please.
(j) Gramma's house.	Gramma's house.
(k) Smell the flowers.	Smell flowers.
(l) Shoes on	Shoes on
(m) The wee boy fell down.	Wee boy fell down.
(n) That's my ball.	That's mines ball.

**Solution**

Krista probably does not have the past tense rule, or if she does, we don't have any evidence of her using it in this sample. She uses 'went' and 'fell' correctly, but those are exceptions to the past-tense rule, not the rule itself.

Krista may or may not have possessive -'s, so either answer could be correct if argued properly. She seems to overgeneralize possessive -'s in (n) *That's mines ball*, which suggests she has acquired the productive rule. However, she fails to apply it in (d) *Daddy book* which could be used to argue that she has not yet acquired the rule.

*Note: Here we want to know if you know that you can see evidence for rule formation in a child's overgeneralizations (a second source of evidence is doing a wug test).*

- (6) Twenty undergraduates were shown the picture to the right and heard the word *mawg*. When asked what *mawg* means, all 20 said 'lion'. What do you think would happen if you conducted this same experiment with a group of 3 year-olds? What would they think *mawg* means? Explain why.

**Solution**

The 3 year-olds would also think *mawg* means 'lion' due to the whole object assumption. Children are biased to assume a word applies to whole objects and not their parts (fur, paws, mouth, etc).

- (7) Linguist Derek Bickerton studied a pidgin language that developed in Hawaii at the turn of the century. The pidgin lacked many of the grammatical structures of a full language, but combined with context, speakers could often be understood. Some children then learned the pidgin as their native language. Describe how learning a pidgin would impact (1) a child's language acquisition process and (2) the language itself.

**Solution**

Learning a pidgin would not impede a child's language acquisition process. We saw many examples of cases in which children were exposed to languages without fully developed grammar. In all cases, the children actually changed (or improved!) such languages, turning them into more regular, structured grammatical systems. Thus, the language would likely become a creole with a more fully fleshed out grammatical system.

- (8) Rebecca is an 8 year-old child who was born deaf. Her parents are native speakers of English but began learning American Sign Language (ASL) when Rebecca was born. No one else in their family or neighborhood knows ASL, so Rebecca's only language input is from her parents. Rebecca's parents have had a hard time mastering ASL movement morphemes. Her Dad uses the correct morpheme 65% of the time and her Papa only 55% of the time. In comparison, adult native signers almost never make mistakes (94% correct) and children acquiring ASL from native signers are also quite good (81% correct).

Given her limited input, how often do you think Rebecca uses the correct movement morphemes? Do you think her performance most closely matches her Dad, her Papa, adult native signers or Deaf children learning from native adults? Justify your answer.

**Solution**

Rebecca's performance would most closely match Deaf children learning from native adults.

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We saw in the study with Simon that children learning under these circumstances often surpass their language models, becoming much better signers than their parents and even as good as children who learned from native signers. We don't have any reason to expect an 8-year old to be on par with adult native signers, as language acquisition is still underway.

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- (9) In the *Language Instinct*, Pinker points out that the Cherokee pronoun system “distinguishes among ‘you and I’, ‘another person and I’, ‘several other people and I’, and ‘you, one or another persons and I’, which English crudely collapses into the all-purpose pronoun *we*.” Does this suggest that Cherokee is a more complex language than English? Why or why not?

**Solution**

No, Cherokee is not a more complex language than English. As we learned in class, all languages exhibit comparable structural complexity, they just vary in how much complexity is present at each level. Cherokee might have a more complex pronoun system than English, but English is probably more complex in places where Cherokee is simpler.