Psych56L/ Ling51 Fall 2008

Homework 3: Syntactic & Morphological Development + Language & Cognition Or "The Language Adventures of Sigmund von Hacklestein, part 3"

Remember to write your full name and University ID number on your assignment. If you collaborate with other students in the class, please make sure to indicate who you worked with.

(40 points total)

(1) Sigmund has been studying the language of the Guins, and has discovered that when the syllable "pen" is added to the beginning of nouns, it indicates that that noun is unique in the conversation.

Ex: "margon" = "goblin"
"penmargon" = unique goblin that is being discussed in the conversation

Moreover, "pen" is unable to appear by itself in a sentence – it must occur with (and attached to) another word in the sentence that is a noun, such as "margon" which means "goblin".

Sigmund is trying to decide whether "pen" is a morpheme in the Guin language, and if it is a morpheme, what kind of morpheme it is. Help him decide, making sure to indicate why you think it either is or isn't a morpheme. You may find it helpful to refer to the definition of a morpheme, as well as the definition of different kinds of morphemes.

[3 pts]

- (2) In the Guin language, Sigmund has also discovered the morpheme (-artur). It is added onto verbs, and indicates that the action happened in the past. For example: "brigg" = "hop on one foot", "briggartur" = "hopped on one foot". Is "artur" an example of inflectional or derivational morphology? Make sure to justify your answer. [2 pts]
- (3) Sigmund has heard that sometimes children may use world knowledge to help them interpret sentences.
- (a) Would this strategy work for the sentence, "The dog chased the cat"? Why or why not? [3 pts]
- (b) If you think this strategy will work for the sentence in (a), give an example where the strategy will not work and explain why it won't work for that example. If you think this strategy won't work for the sentence in (a), give an example where the strategy will work and explain why it will work for that example. [3 pts]
- (4) Sigmund thinks it's quite reasonable to believe that children's grammatical comprehension is always ahead of their production. Give Sigmund one example that shows this is not the case, making sure to explain how your example shows this. [3 pts]

- (5) Sigmund was very impressed by how helpful motherese seems to be for children's language acquisition. However, there are some aspects of language that motherese probably is not very informative about. Give Sigmund one example of something that would be difficult to learn from motherese alone, and explain why it would be difficult. [4 pts]
- (6) Sigmund fell asleep during part of the lecture on language and cognition, and can't remember what it means for language to allow someone to combine cues from different areas of cognition. Give an example of this, making sure to explain how your example shows a combination of cues from different areas of cognition. [4 pts]
- (7) Sigmund has heard of using verbal shadowing in experiments that test language's influence on cognition. What is verbal shadowing, and why is it useful if experimenters are trying to negate the effect of language on solving some particular task? [6 pts]
- (8) Sigmund has been exploring the words for number in the language of the Ervee, who live near the Guins. To his surprise, he has discovered that the Ervee have words only for "one", "two", "three", and "a lot". Should he expect Ervee speakers to succeed at calculating 7-5? Why or why not? Your answer should make reference to the two core number systems, and what language can accomplish with respect to these two systems. [6 pts]
- (9) Sigmund has heard that sentential complements are somehow related to acquisition of theory of mind.
- (a) Remind Sigmund what a sentential complement is by giving him an example of one. [2 pts]
- (b) What kind of experimental task is often used to gauge theory of mind? [1 pt]
- (c) Is knowledge of sentential complements required to succeed on the task you named in (b)? Give evidence to support your answer, making sure to explain how it supports your answer. [3 pts]