

Psych56L/ Ling51

Winter 2010

Homework 1: Introduction & Biological Bases of Language Acquisition

Or “The Language Adventures of Sigmund von Hacklestein, part 1”

**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.**

(43 points total)

(1) Sigmund von Hacklestein hasn't been as good about attending class as you have, and he doesn't remember the difference between prescriptive and descriptive grammar. All he remembers about grammar is that his English teachers have chastised him for “splitting infinitives” (infinitive = *to VERB*, ex: to see), even though he does this in normal conversation all the time. Consider the interaction below:

Sigmund: “Why can't I write ‘*to boldly solve the Labyrinth*’ in my essay?”

Sigmund's Teacher: “Never split infinitives – here, you've split ‘to solve’ up with ‘boldly’.”

Sigmund: “But I want to clearly emphasize how bold she is! And I do this splitting infinitive thing all the time when I speak. So does *Star Trek*! – ‘to boldly go where no one has gone before’.”

Sigmund's Teacher: “I care about how *you* write, not how you speak. And I especially don't care about how the writers of *Star Trek* write.”

(a) Briefly define prescriptive grammar. [1 pt]

(b) Briefly define descriptive grammar. [1 pt]

(c) Is Sigmund's teacher advocating a descriptive or prescriptive rule of English? How do you know? [3 pts]

(2) Sigmund really liked the idea that learning language is motivated by wanting to communicate with other people. After all, that's what he uses language for.

(a) Which view – nativist, constructionist, or social interactionist - advocates this position? [1 pt]

(b) Would an autistic child with very good language development support this view? Why or why not? [3 pts]

(3) Sigmund was asleep the day domain-general and domain-specific knowledge were discussed in class.

(a) What is the difference between these two knowledge types? [2 pts]

(b) Children have been shown to be able to statistically learn information from language data. Is statistical learning a domain-general ability or a domain-specific one? Explain why. [3 pts]

(4) Sigmund has been examining the CHILDES database for nouns. He has not found any child speech samples containing the noun “unicorn”.

(a) Can he conclude that the children in the database do not know the word “unicorn”? Why or why not? [3 pts]

(b) What might be a better way for him to test when children know the word “unicorn”? [2 pts]

(5) On the island of the Guins, several immigrants from different language and cultural backgrounds have come to live and work together. Sigmund was hanging out around the new settlements and noticed that there was now a common language comprised of lots of other language parts, and this common language was spoken by all of the adult immigrants. Meanwhile, a different (though related) one was spoken by the children of the immigrants.

(a) Which language (that of the adults or that of the children) would be termed a pidgin? Why? [2 pts]

(b) Which one would be termed a creole? Why? [2 pts]

(c) Whose language (that of the adults or that of the children) would you expect to be more grammatically complex? Why? [2 pts]

(7) Sigmund was amazed by split-brain patients, and wants to know more about what they can tell us about language in the brain.

(a) What is a split brain patient? [1 pt]

(b) If a split brain patient sees a cat in her right visual field, will she be able to say “cat” out loud to identify what she saw? Why or why not? [3 pts]

(c) What about if a split patient sees a cat in her left visual field? Will she be able to say “cat” out loud to identify what she saw? Why or why not? [3 pts]

(d) Given the test results from (b) and (c), what would we conclude about where language is located in the brain of most adult speakers? Why? [3 pts]

(8) Sigmund is interested in what support there is for a critical or sensitive period of language acquisition. He remembers that testing second-language speakers can be useful, but can't exactly remember why.

(a) Second-language speakers often vary on when they first started learning the second language. Why is this useful when looking for a critical or sensitive period of language acquisition? [3 pts]

(b) Sigmund found three second-language speakers of English with very similar backgrounds, who all spoke the same native language, and who have all now spoken English for 20 years. However, they all started learning English at different ages. Aethelric started learning when he was 5 years old. Remus started learning when he was 10 years old. Attia started learning when she was 15 years old.

(1) If a critical or sensitive period for language acquisition exists up to age 6, who should have the best language ability in English? Why? [2 pts]

(2) If a critical period for language acquisition exists up to age 6, should Aethelric's language usage be very different from Remus's? What about Aethelric's usage compared to Attia's? What about Remus's compared to Attia's? [3 pts]