

Ling51/Psych56L

Fall 2016

Review Questions: Lexical Development

(1) Terms/concepts to know: lexicon, referential, semantic features, compositional semantics, prototype theory, graded membership, lexical gap, tense, aspect, context-bound, noun bias, manner of motion verb, direction of motion verb, overextension, underextension, word spurt, production vocabulary, comprehension vocabulary, mapping problem, fast mapping, shape bias, size bias, texture bias, whole-object assumption, mutual-exclusivity assumption, syntactic bootstrapping hypothesis

(2) What does it mean for words to be referential? Is it true that all words in language are referential? Why or why not?

(3) What are some issues with the idea that a word's meaning is simply whatever it refers to in the real world?

(4) What is the classical theory of meaning as definition? (Hint: Semantic features play a role.) How are new meanings created, given this theory? Is it always easy to come up with the set of necessary and sufficient features? If you knew the set of necessary and sufficient features, would you still sometimes run into trouble when forming the meanings of new phrases? (Hint: Look at the example phrases in the lecture notes.)

(5) Is any single feature necessary in order to be a member of a category, under a graded category membership approach?

(6) How do you know that languages can use words to make different conceptually available distinctions? Give an example that shows variation between languages.

(7) Sigmund learned about two conceptual distinctions that languages sometimes use words or parts of words to distinguish: tense and aspect. To make sure he really understands what these are, help Sigmund identify whether the following sentences differ in tense, aspect, both, or neither. You may find it useful to identify what tense and aspect each sentence has.

- (a) He is hugging her.
He was hugging her.
- (b) He hugged her.
He was hugging her.
- (c) He will be hugging her.
He isn't hugging her.
- (d) He hugged her.
He will have hugged her.
- (e) He will be hugging her.
He won't have hugged her.
- (f) He hugged her.
He did hug her.

- (g) He hugs her.
He is hugging her.
- (h) He was hugging her.
He will have hugged her.

(8) What kinds of word do infants between the ages of 6 and 9 months tend to recognize (even if they can't say them yet)?

(9) Why might it be more difficult to learn a word's meaning if the referent has different visual properties (e.g., a father shaving his beard)? What about if a word is pronounced in a different accent?

(10) English children often have a noun bias in their early vocabularies. What does that mean? Is it true only for English children? Is there any variation in how strong the noun bias is?

(11) One idea why children have a noun bias in their early vocabularies is that the meaning of nouns is easier to learn from observation than the meaning of verbs. What evidence do we have that this might be true?

(12) One of the reasons verbs may be more difficult to learn than nouns has to do with the kinds of concepts that get packaged together in verbs. What are two different types of verbs that languages tend to use? Which does English tend to use? Which does Spanish tend to use?

(13) Snedeker & Gleitman (2002) explored three different kinds of information children might use to learn verb meaning. What were the three information kinds? When these information types were used individually, which was most effective at indicating verb meaning? Was there any benefit from using these multiple information sources together?

(14) Does every child have a word spurt? How can you tell if a child has a word spurt?

(15) Are children's production vocabularies smaller than their comprehension vocabularies? Why might this be?

(16) What evidence do we have prosodic cues might be helpful during novel word learning for children between the ages of 1 and 2 years old? (Hint: Does motherese help?)

(17) What evidence do we have that the repetitious nature of motherese might be helpful for lexical development?

(18) Can the sheer quantity of motherese input can help word learning?

(19) Can the quality of motherese impact word learning? (Hint: Think about the impact of using more word types, rare words, and decontextualized speech.)

- (20) Is there evidence that the quantity of motherese varies by socio-economic status (SES)? What about the quality? Is there evidence for variation within SES classes?
- (21) Briefly describe the mapping problem children face when learning the meaning of words, and give an example of a mapping problem scenario. (Hint: Think about what Quine said.)
- (22) How can fast mapping help children learn what unfamiliar words mean? Is fast mapping unique to humans?
- (23) Do humans and border collies differ in how they extend word meanings? How is a border collie likely to generalize words? What about humans?
- (24) Give explicit examples for how the whole-object assumption and the mutual-exclusivity assumption would help with the mapping problem.
- (25) How do social cues help with the mapping problem? Give an example of a social cue that helps children solve the mapping problem, and an example of that social cue actually helping a child solve a particular mapping problem.
- (26) How do we know that social cues like eye gaze and pointing are important for overriding the mutual exclusivity assumption?
- (27) Sigmund remembers hearing about different strategies children use to help them learn words, such as the whole-object assumption and the mutual-exclusivity assumption.
- (a) Sigmund then observed a child named Remus trying to learn the word “beak”. His mother picked up a stuffed penguin toy and said, “Look at the beak!” Remus subsequently started calling all his stuffed toys “beak”. What assumption does Remus seem to have used to map the word “beak” to a meaning? Explain why you think so.
- (b) Remus’s mother realized what had happened and so picked up the stuffed penguin toy again to try to correct Remus’s understanding. She said, “No, honey, this is your toy. This is your penguin.” When she later asked him to pick up his penguin, Remus didn’t seem to know what the word “penguin” referred to. Why might Remus have had trouble learning what the word “penguin” meant given what his mother said? That is, what assumption does he seem to have used and why did that lead to him not learning what penguin referred to in this situation?
- (28) Is there any benefit to children when their caretakers make it easy to infer what a word refers to (usually using visual or social cues)? How does this relate to the idea about talking about the “here and now”? (Hint: Is it easier or harder for visual and social cues to be present when the speaker is talking about the here and now?)
- (29) Can young children under the age of two use known words to help them figure out what unknown words in an utterance refer to, even if they don’t understand syntax yet?

(Hint: Think about aspects of meaning that may help, like whether an action requires an animate agent.)

(30) How can syntactic structure help a child figure out a word's meaning? Give an example of this. (Hint: What's the difference in meaning for DIV in these utterances? "Look, a DIV!" "He's DIVing!" "That's a DIV kitty.")

(31) Take a look at these examples from Sedivy's web activity 5.5 at <http://sites.sinauer.com/languageinmind/wa05.05.html>

What kind of word is each of the **bolded** words (determiner like *a* or *some*, adjective like *happy*, adverb like *slowly*, verb like *run*, noun like *penguin* or *ice*)? How do you know? (Hint: Think about what words you know that you could substitute in and what linguistic clues there are.)

1. Juleta bought **mib** red dresses.
2. Hendrik carelessly **fobbed** over the lawn.
3. Kimmy wrote some real **vadup** in that article.
4. Give it to that **berlish** man standing over there.
5. I'd rather have **fep** cookie.
6. Peter should **slind** to Charlie.
7. The **neebest** girl in the class always gets picked.
8. Adolfo wanted a bit of **smed**.

(32) What evidence do we have that 18-month-olds are able to use some form of syntactic bootstrapping?

(33) Is there any evidence that syntactic bootstrapping may be more useful for learning the meaning of verbs than it is for learning the meaning of nouns? If so, what is it?

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Extra Material (you're not responsible for knowing these)

(E1) What is phonological memory? How might it help learning new words?

(E2) What evidence do we have that social cues are helpful for word learning even when children are less than a year old? (Hint: Is gaze following useful? What about pointing?) At 36 months, do children rely more on social cues or linguistic cues when learning new words?

(E3) Is there any evidence that tracking probabilities between things helps word learning? Is this a domain-general or domain-specific ability?