LSci 51/CogS 56L
Fall 2025

Review Questions:
Lexical & morphological acquisition

1. **Terms/concepts to know**: morpheme, bound morpheme, free morpheme, lexicon, lexical gap, tense, aspect, mapping problem, overextension, underextension, fast mapping, whole-object assumption, mutual exclusivity assumption, shape bias, size bias, texture bias, noun bias, morphologically rich, morphologically poor, syntactic bootstrapping hypothesis, word spurt, vocabulary spurt, decontextualized speech, socio-economic status (SES)

2. Does English have a rich morphological system compared to other languages? (Hint: Think about languages like Hungarian and Turkish.) What does it mean to have a rich morphological system?

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

4. 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.

5. 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)? Do they realize how the words are semantically related, or are they just individual items that are equally alike/unalike?

6. Is there evidence that children who haven't yet said their first word can still understand multiword utterances? (For example, can a preverbal child around 11 months understand "clap your hands"?)

7. 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.) How does the mapping problem relate to the poverty of the stimulus?

8. How can fast mapping help children learn what unfamiliar words mean? Is fast mapping unique to humans?

9. Give explicit examples for how the whole-object assumption and the mutual-exclusivity assumption would help with the mapping problem.

10. 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?

11. 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.

12. How do we know that social cues like eye gaze and pointing are important for overriding the mutual exclusivity assumption?

13. 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?)

14. How can temporal cues make word meaning visually salient? (Hint: Think about highly informative environments, and how causation is a clear visual signature.)

15. What evidence is there that children's visual experience impacts their ability to learn the meaning of object words? (Hint: How does visual experience relate to children's first words? Are concrete items easier or harder to see than abstract items? What about how early children learn words for things that are often visually salient? Also, do children attend to as many objects as adults do?)

16. Do humans and border collies differ in how they extend word meanings? How is a border collie likely to generalize words? What about humans?

17. 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?

18. 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?

19. What factors are known to affect when children acquire different pieces of morphology in their language? What makes it harder? What makes it easier?

20. What does it mean for a language's morphology system to be predictable? Does having a predictable system mean a language is likely to be easier to learn? Does it seem to matter how rich the morphological system of the language is? (Hint: Think what matters more – having more morphology to learn or having predictable morphology to learn.)

21. 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?

22. 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: What about verbs like "crying"? Does children's performance differ if adjectives like "hungry" are used instead?)

23. Is there any evidence that the number of verbs children under age two know is related to their ability to learn new nouns?

24. Is there any evidence that children under the age of two are able to use function words (ex: determiners like "the") to learn new words? If so, which kind of new words? How young does the sensitivity seem to be present?

25. Is there any evidence that two-year-olds rely more on linguistic cues than social cues like eye gaze when figuring out the referent of a noun?

26. 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.")

27. Take a look at the examples below. What kind of word is each of the bolded words (determiner like "a" or "some", adjective like "happy", adverb like "slowly", verb "like" or "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.)

    (a) Lily bought **sev** purple dresses.

    (b) Ron carelessly **briff**ed over the table.

    (c) Draco wrote some real **perkep** in that essay.

    (d) Give it to that **plimm**ish wizard standing over in the shade.

    (e) I'd rather have **fi** ginger cookie.

    (f) Fleur should **skrid** to Charlie.

    (g) The **flumm**est girl in the room always gets **blurf**ed.

    (h) Minerva wanted a bit of **krim**.

28. Is there any evidence that syntactic bootstrapping could be useful for explaining why children seem to have an early noun bias? (Hint: If we consider nouns and verbs, which relevant linguistic contexts are learned earlier by children?)

29. What sorts of variation are known to reliably occur in early lexical acquisition across languages? (Hint: Does gender matter? Does birth order matter? Does number of siblings matter? Is production affected differently than comprehension? Does background noise affect children's acquisition?)

30. Does every child have a word spurt? How can you tell if a child has a word spurt?

31. What are some likely causes of a word spurt? (Hint: Think about how many words children are learning simultaneously and the relative difficulty of different words. Also, do developing processing

abilities have anything to do with it? Does syntactic bootstrapping have anything do with it? Do children learn any helpful biases?)

32. Why might decontextualized speech (involving displaced contexts) be helpful for lexical acquisition? (Hint: What properties does it tend to have?)

33. What are some properties of high-quality input?

34. Can the sheer quantity of child-directed input can help word learning? How does this potentially relate to the '30 million word gap'?

35. Why might socio-economic status (SES) of a child's mother affect the child's lexical acquisition? What evidence do we have? Does it matter if the mother is the main caretaker vs. someone else? (Hint: What happens if the child receives nonmaternal care for some portion of the day?)

36. Does the amount of child-directed speech a child hears influenced by SES? What about the amount of all speech (child-directed or otherwise)?

37. How does the amount of child-directed speech vs. non-child-directed speech a child hears vary by language and culture?

38. Is there evidence that aspects of lexical development besides vocabulary size are impacted by SES? (Hint: Are there processing differences? Are there differences in syntactic bootstrapping ability?)

39. Is there evidence that the quality of child-directed speech varies by SES class? Is there evidence for variation within SES classes? (Hint: Think about whether low-SES children always have the same vocabulary development. What's the impact of complex language like *wh*-questions? What about interactive input like conversational turn-taking?)

40. What evidence is there that children under two years old can learn language from someone who's not physically present? (Hint: Think about "screen time". Does it help to have a friend to learn with? Why might that be, even for infants? Does it matter if the children are autistic?)

41. Is there any evidence that tracking probabilities between things helps word learning? Is this a domain-general or domain-specific ability? Does it matter if a child comes from a low-SES background? (Hint: Think about whether having strong statistical learning abilities is helpful to a child from a low-SES background.)