The Real Story of Child Language Acquisition

Day 4

Homework tips:

      Read the instruction carefully.

      Write the number of words at the end of each question.

0.   Questions

These are all good and relevant questions. Try to speak up and ask during the class!
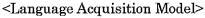
- Are there any other ways (than what we saw in the text) to create new words? ███████

- Are there any examples of words that children originally created and are now in use? ███████

- Do people who learn English as a second language note the stress patterns in English? ██████

████████████████████████████

HW Review

Good examples

<Language Acquisition Model>

(1)   a. | Primary linguistic data: PLD |

↓

    b. | Language Acquisition Device, LAD |

↓

    c. | knowledge of language, KL |

(2)   Children acquire:

    a.   words

    b.   <u>meaning of words</u>

    c.   how to build a sentence (using words they know)

    d.   how to compute the meaning of a sentence

    e.   speech sounds

Today's topic: (2b) How Children Acquire the Correct Meaning of Words

- We have seen that children are very good at picking words out of streams of speech sounds.

- We have seen that children are very good creating new words (using the small set of lexical items they already have) so that they develop their mental lexicon.

How do children assign to the words the meaning which are the same as (or at least close enough to) the meaning adults have assigned?

2

1. Connecting form and meaning: a first step (pp.40 – 44)

(3) Nouns come first.

(4) 31 words out of first 43 are nouns. (19-month-old "Tad") (See chart pp.41-42)[1]

(5) Non-nouns among first 50 are[2]

words to comment on:

disappearance/absence	success/failure of an action
denial/rejection	calls for attention
vertical motion	containment/attachment (p.42)

(6) Why nouns? (Review of HW3 (D)) = three possible accounts:

   a. the way parents talk to children   ← Primary Linguistic Data (PLD)

      encourage the use of nouns; *What's that?*[3]

   b. meaning of nouns easier than those of verbs   ← PLD

     (verbs' semantic structure is complex: intransitive, transitive, ditransitive)[4]

   c. because of children's perceptual system ← Language Acquisition Device

     (attuned to noticing objects)[5]   (LAD)

(7) Four Conditions for objects to be perceptually salient. (p.43)

   a.   Cohesion

   b.   Continuity

   c.   Solidity

   d.   Contact

(8) "I want to know the names for the people and things I see everyday around me." ← LAD

(9) Children's types ("noun-lovers" and "noun-leavers")   → HW 4 (A)

2. Semantic Coverage:

Sometimes Falling Short, Sometimes Too Much (pp.44 – 50)

(10) Suppose that the child seems to know that "doggie" and "animal" are words: How does she acquire the "semantic coverage" of each of them?

- small children sometimes miss the target

(11) Overextension

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[1] Gentner, Dedre. 1982. Why nouns are learned before verbs: Linguistic relativity vs. natural partitioning. In S. Kuczaj (ed.) *Language development.* Vol. II: *Language, cognition and culture.* Erlbaum, 301-34.

[2] Clark, Eve. 1993. *The Lexicon in Acquisition.* Cambridge University Press.

[3] Goldfield, Beverly. 2000. Nouns before verbs in comprehension versus production: The view from pragmatics. *Journal of Child Language* 7, 501-20.

[4] Sandhofer, Catherline, Linda Smith and Jun Juo. 2000. Counting nouns and verbs in the input: Differential frequencies, different kinds of learning. *Journal of Child Language* 7, 561-85.

"dog" = {dogs, cows, cats, horse}   See Chart on p.46

Overextension is very common:

1 – 2 year-old children: 30% of their words are used with overextended meaning some of the time.[6] (p.46)

(12)   Underextension

"animal" = {cats, horses, dogs, cows}, turtles, lizards

(13)   Over- and underextension of *alive*.[7]

"alive" = {people, animal, clouds}, plants

(14)   Class Work 4-1

Note that underextensions are less frequently noticed than overextensions. Why? (Hint: Suppose that you are playing with a small child. In what situation will you notice the child's overextention use of a noun? In what situation will you notice the child's underextention use of a noun?)

(15)   You need a "professional" method

In order to examine what children actually know about their language, the researchers must be very carefully when they conduct experiments on children.

Watch the video very carefully. This is not a very good way of examining what children know. What is wrong with the way of this experiment?

(16)   Overextension issue is rather delicate.   (p.49)

Overextension errors in comprehension are much less than in production.[8] (Recall "goed – went" issue on page 23.)

(17)   Adult: What is this?

→ The child may overextend.

(18)   Adult: Give me the horse?

→ The same child picks the right object.

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[5] Bloom, Paul. 2002. *How children learn the meanings of words.* MIT Press.

[6] Rescorla, Leslie. 1980. Overextension in early language development. *Journal of Child Language* 7, 321-35.

Clark, Eve. 1993. *The Lexicon in Acquisition.* Cambridge University Press.

[7] Piaget, Jean. 1972. *The child's conception of the world.* Adams & Co.

[8] Thompson, J. and R. Chapman. 1977. Who is "Daddy" revisited: The status of two-year-olds' over-extended words in use and comprehension. *Journal of Child Language* 4, 359-75.

(19) Child acquisition of word meaning vs. adult acquisition of word meaning
Children are in a harder situation than adult language learners.

(20) If the semantic coverage of the target foreign word is nearly identical to the semantic coverage of the corresponding word, this fact helps a lot.
When you learn that a chair is called "isu" in the target language, you would expect that a table would have a different name in the target language because they have different names in your native language.
Recall again that children learning their first language do not have access to this kind of "native language" information.

(21) A naïve learner of a foreign language presumes that the semantic coverage of a foreign word and the semantic coverage of the "corresponding" native word are exactly the same. But in almost all cases, this is not true.
e.g. (i) "isu" vs. chair / stool.
e.g. (ii) "hon" vs. book
"Let me write it down in my book so that I won't forget"

Class Work 4-2:
Discuss your experience of learning foreign languages, in which a word you learned has a broader semantic coverage than you had expected (or a narrower semantic coverage than you had expected), because of the mismatch between the semantic coverage of the word you learned in the foreign language and the semantic coverage of the "corresponding" word in your native language.

(22) An intelligent learner of a foreign language realizes the fact that there is no identical one-to-one correspondence in similar words between languages, and thus is always cautious when learning a new foreign word.

3. Rapid Learning (pp.50-52)
(23) Children learn things (including meaning of a word) rapidly.
Sometimes, one or two experiences seem to suffice.
= fast mapping
(24) Experiment 1 (p.51) ➔ HW4 (B)
(25) Experiment 2 (p.52)
Children (3 to 4 years old) remember a new name "koba" after a month, even though they hear the word once or twice in the experiment.[9]

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[9] Markson, Lori and Paul Bloom. 1997. Evidence against a dedicated system for word

(26)   Why does the experimenter use a non-English word such as "koba" in this experiment?

(27)   The environment would help[10]

   a.   Sometimes, a parent gives a direct definition/explanation of a new word.

          "Cramps are when your stomach ..." (p.52)

   .b.   But very often parental explanation of a word meaning is indirect.

          "Don't do that. That's rude."

(28)   How children can identify the exact meaning of a word with the partial information that the situations provide?   => topic for next week

(29)   Class Work 4-3: "Gavagai" problem

          Suppose that a person next to you (you don't know what language the person speaks) said "Gavagai" when he saw a rabbit.   What do you think "Gavagai" could mean?   There are many possibilities.

          Try to give as many possible meanings as you can.

4.   Summary

(30)   How do children acquire the meaning of words?

(31)   Nouns come first.

          Due to PLD   (parents invite the child to use nouns)

          Due to LAD   (people/objects are easy to perceive

                         And "I want to know the names of them!")

(32)   Since experience are very limited for small children

          => overextension

          => underextension   mismatch of the real meaning

(33)   How children overcome this mismatch?

(34)   a.   Direct explanation/definition by parents?   (not always)

          b.   examples in specific situations (indirect suggestion)

(35)   We will see some of children's innate strategies (LAD) to reach the real meaning of each word in next two weeks.

· HW4 (Special deadline: May 7th (Wed) 12:30

· Post-Class Work

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learning in children. *Nature* 385, 813-15.

[10] Beals, Diane. 1997. Sources of support for learning words in conversation: Evidence from mealtimes. *Journal of Child Language* 24, 673-94.

Homework Assignment 4

1. Turn in by **Wednesday 12:30** (special deadline this week)
        via Email (MSWord file attached to email)
        Make the name of the file as [ID_your name_hw4]

         ■■■■■■■■■■■■■■■■

         ■■■■■■■■■■■■■■■■■■■■■■

        *If you have trouble sending your files attached via Email, let me know.
2. Write as <u>concisely</u> as possible. Write the number of words at the end of each Q.
3. Restrict yourself to A4 paper one page long.

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*Note: In summary exercise, do not cut and paste the text sentences. Use your own sentences.

A.   Read the section "Noun-lovers and noun-leavers" in the text (pp.43-44), and summarize the point (use around 120 words). Be concise. Write the number of the word at the end.

B.   Read the fourth paragraph ("A variety of experiment ...) and fifth paragraph ("A few minutes later ...) on page 51, and summarize the point. [80 words]

C.   Read from p.55 to the first half of p.56 of the text: Four experiments are introduced which help illustrate children's ability to understand other people's mind. Discuss which one of the four you find most interesting and why. [80 words]
Start your paragraph with "I found experiment ____ most interesting" (put 1, 2 ,3 or 4 in ____), and the give your reason ("This is because ...").

D.   Any comments/questions on the previous class and/or this homework assignment.

E.   Read the text up to page 67.