The Real Story of Child Language Acquisition

Day 12

Please read the previous "some feedbacks to Qs" handout so that you are not going to ask the same or very similar questions. After reading my previous comments and you have further questions, you are welcome to ask more questions!

0.   Questions

- Japanese *zibun* was used as a reflexive pronoun in class, but I think it is not. *Zibun* can be a subject in a sentence like *Zibun-wa kore-ga suki* "I like this", while in English *herself/himself* cannot be a subject. Is *zibun* really a reflexive pronoun? ▮▮▮▮▮

- Some grammatical ways are too difficult or are used too rarely, and so it is difficult understand them simply through the PLD or even with grammar classes even for native speakers. The more people use it wrong, the more the PLD has "bad examples" so new learners will be more likely to get it wrong too. Does these kinds of mistakes change significantly the language? (For instance, in French, making mistake with some conditional structure is getting officially more and more accepted). ▮▮▮

- You said that human languages are the same in deep part. Is it true? Are there any differences if we learn as a foreign language? ▮▮▮
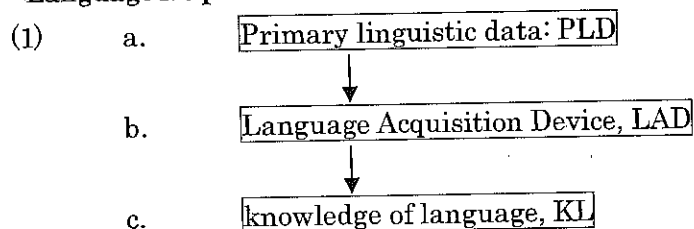
HW Review: Good examples

1
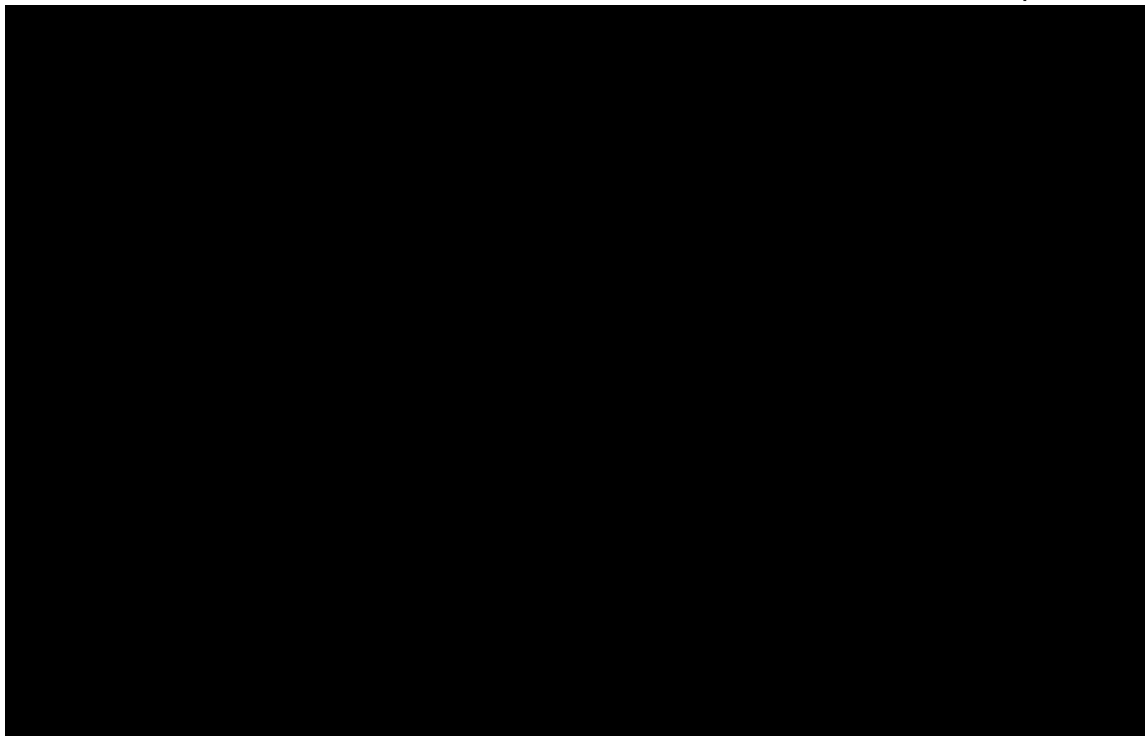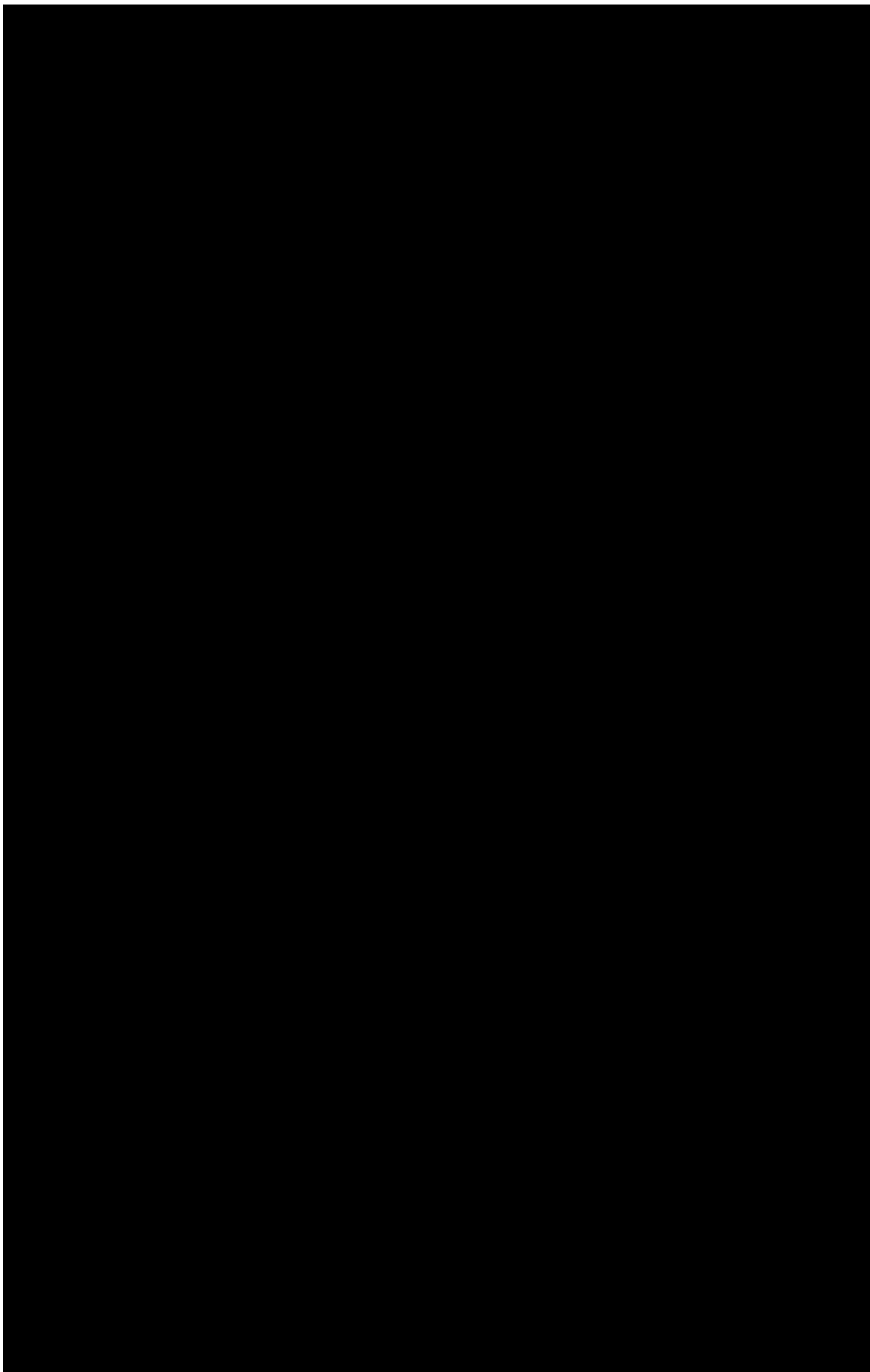
Class Work 12-1

Ethics of using "nonce words" in child language experiments

Is it ok to use (or teach) to children some "words" that do not exist in their community language?

a. problematic? Why?

or

b. ok if ...

<Language Acquisition Model>

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

$\downarrow$

b. | Language Acquisition Device, LAD |

$\downarrow$

c. | knowledge of language, KL |

(2) Children acquire:

a. words

b. meaning of words

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: (2e) How children acquire speech sounds

(3) a. cooing (ca. 2 – 3 months old)

b. babbling (ca. 3 – 6 months old)

c. first real words (ca. 10 – 12 months old)   See Chart on p. 143[1]

1. Infants are very sensitive to human language speech sounds   (pp.143 - 163)

(4) Infant preference[2, 3]

a. human language sounds > other sounds

b. mother's voice > others' voice

c. sounds of their parent's language > sound of other languages

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[1] Oller, D.K. 1980. The emergence of the sounds of speech in infancy. In G. Yeni-Komshian. J. Kavanaugh, and C. Ferguson (eds.), *Child Phonology*. Vol. I. *Production*. Academic Press, 93-102.

[2] DeCasper, A. J. and W. P. Fifer. 1980. On human bonding: Newborns prefer their mothers' voices. *Science* 208, 1174-76.

[3] Mehler, Jacques, Emmanuel Dupoux, Thierry Nazzi, and Ghislaine Dehaene-Lambertz. 1996. Coping with linguistic diversity: The infant's viewpoint. In J. Morgan and K. Demuth (eds.), *Signal to syntax*. Erlbaum, 101-16.

(5)   Infant speech sound perception

Eimas: categorical perception[4]

(heart rate and/or sucking rate)

    a.   difference between pair of consonants   (1 – 4 months)

            (e.g., "p" vs. "b")

    b.   even the contrasts which are not found their native language

            (up until 8 months; but 10 months and older lose that ability)

(6)   Japanese infants: "l" vs. "r" (up until 10 – 12 months)[5]

(7)   "learning by forgetting"

(8)   consonant distinction to semantic distinction[6]

    a.   show me the coat.   [k]

    b.   show me the goat.   [g]

(9)   I said "fis," not "fis".

"kutu" vs. "kuchu"   (shoe(s))

(10) Children's "phonetic" transcription

OPN for "open", PESL for "pencil", KITN for "kitten."

2.   **Babbling (pp.148 – 151)**

(11) 4 – 6 months old

(12) Babbling is not crucial for the later development of real speech.

    a.   Forced no babbling => no problem for later development

    b.   deaf children babble

(13) Common sounds across languages: see Chart on p.150[7]

(14) Influence on the pattern of babbling by the input language

→ HW12 (A)

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[4] Eimas, Peter. 1975. Speech perception in early infancy. In L. Cohen and P. Salapatek (eds.), *Infant perception: From sensation to cognition.* Vol. II: *Perception of space, speech, and sound,* 193-231, Academic Press.

[5] Jacques Mehler and Emmanuel Dupoux (translated by Patsy Southgate) 1994. *What infants know: the new cognitive science of early development* (Blackwell) Chapter 5, Section 4. メレール、デュプー『赤ちゃんは知っている』(藤原書店) 第5章、第4節「赤ちゃんはどのようにして言語に到達するのか」

[6] Ingram, David. 1989. *First language acquisition: Method, description and explanation.* Cambridge University Press.

3.   Vowels and Consonants (pp.151 – 153)

(15)   Two reasons for difficulties in recording children's speech transcription.

      a.   poor articulation[8]

      b.   inconsistency[9]   (see p.151)

(16)   General tendency

(17)   Five basic vowels first:[10]

      a.   bee   cf. 「い」

      b.   top   「あ」

      c.   moo   「う」

      d.   low   「お」

      e.   nut   「え」

(18)   Consonants at age 2: p.152

      (occasional drop of consonants at the end of a syllable)

(19)   Consonants at age 4: p.153

      Almost all sounds (including all the vowels) are acquired, except for "th".

(20)   Class Work 12-2

For some small children, the sound contrast between [s] "fiss" and [ʃ] "fish" is very difficult to pronounce.

International students:

      Which Japanese sound contrast is the most difficult for you?

      Which Japanese sound contrast is the easiest for you?

Japanese students:

      Which English (or other foreign language you learn) sound contrast is the most difficult for you?

      Which English (or other foreign language you learn) sound contrast is the easiest for you?

Exchange the information, and try to discuss why some contrast is easy to acquire and some contrast is difficult in foreign language learning.

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[7] Locke, John. 1983. *Phonological acquisition and change.* Academic Press.

[8] Peters, Anne and Lise Menn. 1993. False starts and filler syllables: Ways to learn grammatical morphemes. *Language* 69, 742-77.

[9] Clark, Eve. 1993. *The lexicon in acquisition.* Cambridge University Press.

[10] Kehoe, Margaret and Carol Stoel-Gammon. 2001. Development of syllable structure in English-speaking children with particular reference to rhymes. *Journal of Child Language* 28, 393-432.

4.   Children's strategies when they cannot do it (pp.153 – 159)

(21)   a.   Avoid using the word altogether.

        b.   Deletion

        c.   Substitution

        d.   Assimilation

(22)   More than 90% of the time, deletion and/or substitution strategies are employed.

4.1   Deletion

(23)   CVC ➜ CV

        a.   dog → "dah"

        b.   bus → "buh"

        c.   boot → "boo"

(24)   The CV pattern is preferred by children across languages, and is the syllable type most widely found in human language in general.

        e.g., Japanese, French

(25)   ...CC... ➜   a.   ...C̶C...

                          b.   ...CC̶...

(26)   Common pattern 1

        "l" or "r" drop when they are syllable second.

        try → "tie"

        blanket → "bankie"

(27)   Common pattern 2

        nasal drop before "p, t, k"

        bump → "bup"

        tent → "tet"

(28)   Common pattern 3

        "s" drop before C

        stop → "top"

        desk → "dek"

4.2   Substitution

(29)   Another strategy children often use is Substitution where a difficult speech segment is replaced by an easier one.

(30)   Common pattern 4

        C [+continuous] ➜ C [-continuous]

        see → "tee"

        zebra → "debra"

        thing → "ting"

(31)   Common pattern 5
       "l" or "r" ➔ "y" or "w"
       lion → "yine"
       rock → "wock"

(32)   Common pattern 6
       C [+nasal] ➔ C [-nasal]
       room → "woob"
       spoon → "bood"

(33)   C [-front] ➔ C [+front]
       ship → "sip"
       go → "doe"

(34)   Special case of substitution:
       metathesis (position exchange of speech sounds)
       ask → "aks"
       animal → "aminal"
       テレビ → テベリ
       terebi   teberi
                 cf.   metathesis (for historical change)
                          "thridda" (Old English) → third
                          "taxa" (Medieval Latin) → task
                                                    tax
                 山茶花(さんざか=> さざんか) 'sasanqua' (a name of flower)
                 新たな (あらたな => あたらしい) 'new'
                 雰囲気(ふんいき=>ふいんき) 'atmosphere (among people)、

4.3   Assimilation
(35)   Overview of Assimilation
       A segment becomes "similar" to its neighboring segment(s).

(36)   negative prefix in-
       inactive, indirect, intangible, etc.

(37)   a.   impossible, immoral, etc.
       b.   irregular, irrational, etc.
       c.   illegal, illogical, etc.

(38)   Japanese assimilation (place of articulation)

(39)   voicing assimilation
       a.   kicked
       b.   begged

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(40)   Children's "over-(voicing) assimilation"

     CV → CV

     [-v]   [+v]

(41)   pig → "big"

     tell → "dell"

     soup → "zoop"

5.   Stress Saving Strategies (pp.159 - 163)

(42)   For multi-syllable words, small children often keep only one syllable with the primary stress.

(43)   gi<u>raffe</u> → faff

     mus<u>tache</u> → tass

     a<u>way</u> → way

(44)   "Stress saving strategies"   → HW12(B)

6.   Summary

(45)   Early language perception

             attention to human speech sounds

(46)   Learning by forgetting

(47)   production order

(48)   Strategies when they cannot do it

     a.   deletion (keeping stress pattern)

     b.   substitution

     c.   assimilation

Homework Assignment 12

1. Turn in by Tuesday 12:30

        via Email (MSWord file attached to email)

        Make the name of the file as [ID/your name/hw 12]

███████████████████████████

███████████████████████████████

        *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.

A.   Read the text p.150 and summarize the point, focusing how babbling patterns are influenced by the language spoken around the child. Be concise. Write the number of the words. (use about 100 words)

B.   Read carefully from *Under the spotlight* (p.160) to " *...of the last syllable of elephant, which is missing the "t"*. (p.162). Then, summarize the four types of children's strategies when a word consists of more than one syllable (and thus children cannot pronounce the whole word accurately). Be concise. Use about 120 words.

C.   Read the text from the third paragraph (*Then, what about the possibility ...*) on p.168 to the middle of p.169, and summarize the point. Be concise. Use about 80 words.

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

E.   Read the text up to page 179

Some feedback on Qs   Day 12

- We learned that no adult directly teaches pragmatic competence. However, I think children learn how to describe stories clearly/structurally (e.g., 5Ws and H) at school. Can we consider this is part of adult intervention? ▮▮▮▮

* It is not very clear whether children become better in their story telling by having been taught at school. Some children would be better, and some children would not. But in any case, people usually can tell other people what they have in mind eventually (some people may be good talkers, while other would take some time, though). It is not very easy sometime to tease apart "our knowledge of language that develops naturally" from "our language skills that are taught or trained consciously". Generally, scientific study of human faculty of language is more interested in the former (naturalistic viewpoint), while research communities on education/pedagogy party are more interested in the latter.

- A sentence that contains "a" and "every" has two different meanings. So, to avoid misinterpretation, is it better not to use such words? ▮▮▮▮

* It would be very difficult to communicate if we do not use expressions that have "a" and "every". Also, there are many linguistic expressions which are potentially systematically ambiguous (i.e., having more than one possible interpretation), but usually the specific context will make the speaker/writer's intention clear. Sometimes, our pragmatic knowledge (our common sense knowledge about the world) help understand a potentially ambiguous sentence clearly.

    a.   Two TAs will close the door of every CALL room.
                (TA can be just two or more than two)
    b.   Two TAs are working in every CALL room to help students.
                (Different two TAs are assigned to each CALL room)

- Japanese *zibun* was used as a reflexive pronoun in class, but I think it is not. *Zibun* can be a subject in a sentence like *Zibun-wa kore-ga suki* "I like this", while in English *herself/himself* cannot be a subject. Is *zibun* really a reflexive pronoun? ▮▮▮▮

* True.   When we compare words (any linguistic expressions) between two different languages, we have to be very careful about the fact that there would be no completely identical elements among different languages.   In the last class discussion, we did not say that *himself/herself* in English is identical to *zibun* in Japanese. More specifically, in the discussion, we were interested in the bound-pronoun function of *himself/herself* in English, and Japanese *zibun* also has the similar bound-pronoun function. In this respect, both English reflexive pronouns and Japanese *zibun* share the relevant property.

1

- Some grammatical ways are too difficult or are used too rarely, and so it is difficult understand them simply through the PLD or even with grammar classes even for native speakers. The more people use it wrong, the more the PLD has "bad examples" so new learners will be more likely to get it wrong too. Does these kinds of mistakes change significantly the language? (For instance, in French, making mistake with some conditional structure is getting officially more and more accepted). ▮

* Sometimes, so called "wrong" usage becomes a standard eventually which would be one reason of historical language change. Imagine your native language (or any human natural languages) about 800 years ago. There must be many systematic (grammatical) differences from the current version of the language. This is not about the language is getting worse or getting better. Languages just change; it is one of the very natures of human languages.

- You said that human languages are the same in deep part. Is it true? Are there any differences if we learn as a foreign language? ▮

* People have different faces. So if you focus on differences, there are many. On the other hand, all human faces have many common properties. If you focus on the common properties, all human faces are almost identical (different from human hands, or different from fish faces). All human languages are almost identical in this sense. You can count many differences between, say, English and Japanese. How many? Three thousands difference? But everything else would be identical among all natural human languages (different from the communication system of bees, and different from human immune system, etc.). We human beings cannot communicate with honey-bees because the two systems are too different. We can translate expressions in one language to those in another, on the other hand. This is possible because our systems are almost identical. Some may say that "complete" translation from one language to another is not possible. This is true, but the same apply to the communication between two persons in the same language community.