

## General comments on hw checking.

[ ] indicates that something is missing.

An underline indicates that the expression is grammatically incorrect or is very unnatural (word selection or collocation).

// indicates that a necessary space was missing there.

## Useful Hints

- Read the text very very carefully.
- Read aloud the sentences you wrote. You may often notice if there is something wrong.
- Check the usage of the main verb in a sentence. (What pattern of complement(s) does the verb take?)

Common errors by Japanese students:

It is occurred an interesting overuse.

They listen [ ] the list two longer.

- Check the collocation between words.
- State what you are going to talk about at the beginning of the paragraph.
- Give specific examples of the general statement/explanation you give.
- Read carefully the examples/usages in your dictionary (not just the meaning of the word).

## The Real Story of Child Language Acquisition

### Day 2

Note on hw submission: follow the instruction properly: i.e., use your ID and name as the name of the file, and write your ID and name inside as well. Thanks!

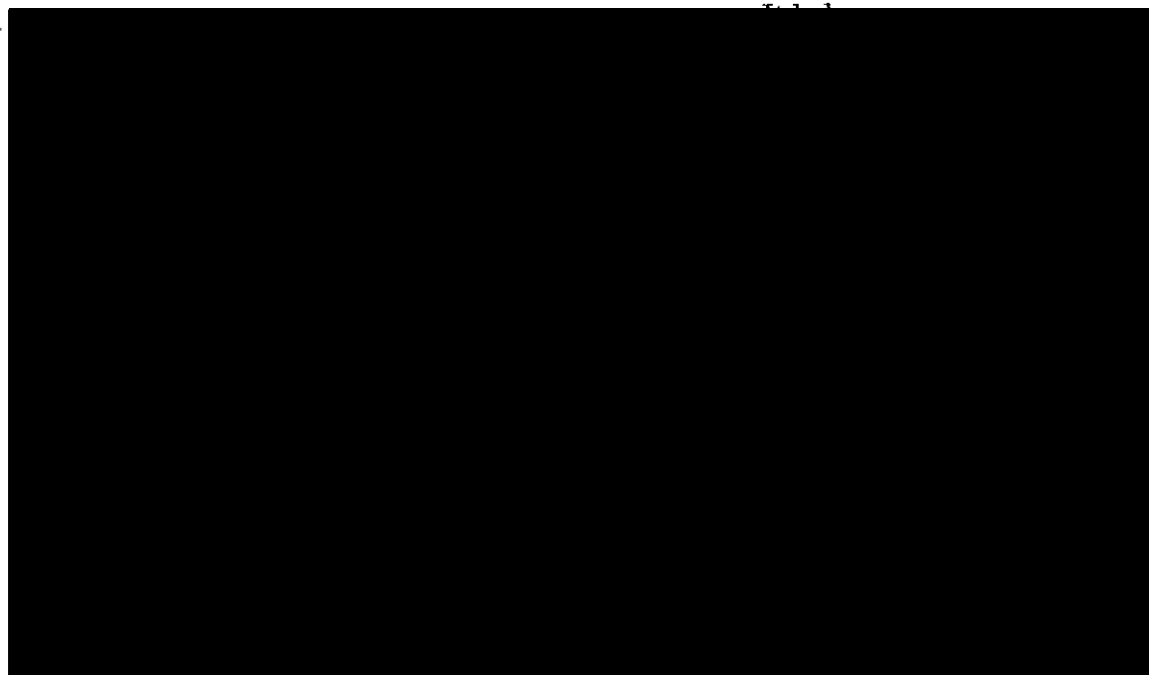
#### 0. Questions

- Can we learn another language without using our native language? [REDACTED]
- I wonder whether children in different language communities have different LADs (language acquisition devices)? [REDACTED]
- If the systems of speaking each language are different, is it impossible for Japanese people to master English and speak English like native speakers? [REDACTED]
- How can deaf or blind children acquire a human language? [REDACTED]

Sandler, W. and D. Lillo-Martin (2002) Natural Sign Language. In Aronoff and Rees-Miller (eds.) *Handbook of Linguistics*. Wiley-Blackwell, 533-562.

Mehler, J. and E. Dupoux (1994) *What Infants Know*, Wiley-Blackell.

#### HW Review



#### 1. Quick Review

- (1) Questions about "language" (I-language)
  - a. What does Jones know when he has a particular language?
  - b. How did Jones acquire this knowledge?

(Chomsky 1995: 17)

## &lt;Language Acquisition Model&gt;

- (2) a. Primary linguistic data: PLD  
 (“examples” you hear/experience in the ordinary situation)  
 ↓  
 b. Language Acquisition Device, LAD  
 (innate endowment of human beings)  
 ↓  
 c. knowledge of language, KL  
 (unconscious system that enables you to use language: “I-language”  
 “grammar”)
- (3) Children acquire:
- words
  - meaning of words
  - how to build a sentence (using words they know)
  - how to compute the meaning of a sentence
  - speech sounds

Today's topic: (3a) words

- (4) a. What is KL (2c) concerning children's vocabulary?  
 b. What is PLD (2a) concerning children's vocabulary building?  
 c. What is LAD (2b) concerning children's vocabulary building?

2. Stages of Word Acquisition (pp.7-8)<sup>1</sup>

- (5) KL
- about 12 month: first word (nonverbal development as well)
  - 15 months: 10 words
  - 18 months: 50 words  
 <= vocabulary spur: 10 words a day
  - 6 years: 14,000 words  
 <= up to 20 words per day
  - 18 years: 60,000 words

<sup>1</sup> These are based on the data from the following:

- Anglin, J. (1993) Vocabulary Development: A Morphological Analysis. *Monographs of the Society for Research in Child Development*. Serial No. 238, Vol. 58, No. 10.
- Bloom, P. and L. Markson (1998) Capacities underlying word learning. *Trends in Cognitive Science* 2, 67-73.
- Clark, E. (1993) *The lexicon in acquisition*, Cambridge University Press.
- Garman, M. (1979) Early grammatical development. In P. Fletcher and M. Garman (eds.), *Language acquisition: Studies in first language development*. Cambridge University Press, 177-208.
- Pinker, S. (1994) *The language instinct*. Morrow & Co.
- Tamis-Lemonda et al. (1998) Predicting variation in the timing of language milestone in the second year: An events history approach. *Journal of Child Language* 25, 675-700.

3. Segmentation Problem (pp.9-11)

(6) What kids hear: = PLD

- a. wewatchedthedoggiesrun.
- b. wanwangahashirunomitayo

or

(7) Listen to a sentence of an unfamiliar language, and try to identify words.

(8) Class Work 2-1

Do you think that parents talk to their small child in a special way, so that the child can identify words easily?

Try to think of possible "special ways" parents would use to talk to very small children. Discuss with your partner. Try hard. Be specific.

(9) Parents often use one-word sentences?

"Milk" "Open" etc.

(10) Parents do not always talk to their children in some special ways:

PLD ("examples" around small children) are not always kind enough to small children.

(11) Hence, children sometimes make some segmentation errors.

- Children's segmentation errors (see English examples on page 10 of the text)

(12) A Japanese child asking her mother to read a book say:

"yonde-ageru"

read-give

as if "yonde-ageru" is a single unit expression for reading request.

Class Work 2-2

What kind of segmentation error is involved in the following?

Yu-chan no namae-wa "yuko". Ken-chan no namae-wa "ken."

Are? tohchan no namae-wa "toh"?

'Yu chan's name is "Yuko"; Ken-chan's name is "Ken". Oh? Is father's name "Toh"?

4. Children's Strategies to Identify Words (pp.12 – 18)
- (13) How do small children pick out words out of stream of speech sound, if parents do not talk to them in a special way?
- (14) LAD (i.e. innate ability to acquire language) must have been playing an important role. Here are a couple of LAD candidates researchers are suggesting.
- 4.1 The Spotlight Strategy (an example of LAD)<sup>2</sup>
- Children pay attention to stressed syllables.
  - Children pay attention to stress pattern.
  - Children pay attention to element at the end of a sentence.
- (15) your DAD is BUILDing a Chair.
- (16) Children's LAD is also sensitive to certain stress pattern.
- (17) Many English nouns have strong-weak stress pattern = PLD  
(Nouns with weak-strong stress pattern are less frequent.)  
e.g., TEACHER, KITTY, SOFA, PENCIL vs. girAFFE, guiTAR,
- (18) Experiment (by Jusczyk and his colleagues)<sup>3</sup>
- Nine-months-old infants pay longer attention to S-W pattern words than to W-S pattern words.
  - After listening to a passage containing a particular S-W word (e.g. HAMlet), the infants show preference to the word *hamlet*, while after listening to a passage containing a W-S word (e.g. guiTAR), the infants do not show special preference to the word *guitar*.
  - The infants are sensitive to stress pattern of the language spoken around them.

<sup>2</sup> This is proposed by Peters, A. and S. Strömqvist (1996) The role of prosody in the acquisition of grammatical morphemes. In J. Morgan and K. Demuth (eds.), *Signal to syntax*. Erlbaum, 215-32.

<sup>3</sup> Jusczyk, P. et al. (1993) Infants' preference for the predominant stress pattern of English words. *Child Development* 64, 65-87.

Jusczyk, P. et al. (1999) The beginnings of word segmentation in English-learning infants. *Cognitive Psychology* 39, 159-207.

Newsome, M. and P. Jusczyk (1995) Do infants use stress as a cue in segmenting fluent speech? In D. MacLaughlin and S. McEwan (eds.) *BUCLD 19*, Vol. II. Cascadilla Press, 415-26.

HW2: summary of the experiment pp.14 - 15

(19) Sensitivity to the end of utterances<sup>4</sup>

- a. Find the dog.
- b. Find the dog for me.

Children tend to respond more correctly to (19a) than to (19b)

(20) Parents place unfamiliar words (or words with new information) sentence finally 75% of the time. (Cf. 53% of the time when talking to adults.)

#### 4.2 Children do Paradigm Comparison Unconsciously

(21) Class Work 2-3: segmentation game

What are Turkish words (morphemes) for

(the) hand: \_\_\_\_\_ (the) house: \_\_\_\_\_ my: \_\_\_\_\_  
your: \_\_\_\_\_ to: \_\_\_\_\_ from: \_\_\_\_\_

| Turkish form | English gloss  |
|--------------|----------------|
| elim         | my hand        |
| eve          | to the house   |
| evine        | to your house  |
| evden        | from the house |
| eline        | to your hand   |

(22) The Matching Strategy<sup>5</sup>

“When an utterance contains a part that matches something you already know, the matching part is a word and what’s left over is too.”

(See the chart on p.16)

<sup>4</sup> Shady, M. and L. Gerken (1999) Grammatical and caregiver cues in early sentence comprehension. *Journal of Child Language* 26, 163-75.

Fernald, A. and C. Mazzie (1991) Prosody and focus in speech to infants and adults. *Developmental Psychology* 27, 209-21.

<sup>5</sup> Peters, A. (1985) Language segmentation: Operating principles for the perception and analysis of language. In D. Slobin (ed.) *The crosslinguistic study of language acquisition*. Vol. II: Theoretical issues. Erlbaum, 1029-68.

Slobin, D. (1985) Crosslinguistic evidence for the language-marking capacity. In D. Slobin (ed.) *The crosslinguistic study of language acquisition*. Vol. II: Theoretical issues. Erlbaum, 1157-1256.

(23) The Matching Strategy sometimes leads to “oversegmentation” (a kind of segmentation error) See (12) above.

- a. “I want you to be good while I’m away.” “I’m good.”
- b. “I want you to behave while I’m away.” “I’m hayve.”

(24) box - bok  
lens - len

(25) Note that all these child strategies for segmentation (identification of words out of a stream of sounds) are NOT taught by parents/adults around them. Children do all of these by themselves! Part of the property of LAD. Also, children’s “speech errors” tell us a lot about the property/nature of human LAD.

5. How to Learn Grammatical Morphemes (pp.18 – 26)

5.1 Plural formation

(26) Suppose that little Johnny (who already knows the word *book*) said “books” for the first time referring to two of them. There are at least two possibilities how he can say that.

- a. Johnny has heard someone say “books” and remembers it as a whole (i.e. gestalt style), and just use it.
- b. Johnny has acquired the English plural formation rule (add *-s*), and applies that rule to the word *book* (which he already knows)

(27) How to test which is correct, (26a) or (26b)?  
Any suggestion?

## Child Language Acquisition

- (28) Wug test (Berko 1958)<sup>6</sup>  
See the result on p.20.
- (29) Even preschoolers are pretty good at plural formation when it is pronounced [s] or [z]
- (30) However, when it comes to the [-əz] form, percentage of correct responses lowers drastically, even for first graders.
- (31) Further, these children are good at [-əz] with familiar words like *glass, buzz, lunch, judge*, etc.
- (32) Therefore, even first graders still seem to have two types of learning style at work; analytic and gestalt.

### 5.2 Past Tense Marker (pp.21 - 22)

- (33) Traditional "U-shaped" learning picture<sup>7</sup>
- a. Step 1: bare form *make* (no inflection period)
  - b. Step 2: sporadic use of *made* (probably gestalt style)
  - c. Step 3: over regularized *maked* (over application of regular rule)  
between 37 – 39 months
  - d. Step 4: *maked* disappear and *made* takes place
- (34) However, the picture in (33) is not entirely accurate.
- (35) Mistakes with irregular verbs occur only 10% of the time.
- (36) No children (in the experiment) made more than 25% of the time: they all produce correct irregular form 75% of the time.<sup>8</sup>

HW2 pp.23-24

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<sup>6</sup> Berko, J. (1958) The child's learning of English Morphology. *Word* 14, 150-77.

<sup>7</sup> Maratsos, M. (2000) More overgeneralization after all: New data and discussion on Marcus, Pinker, Ullman, Hollander, Rosen, and Xu. *Journal of Child Language* 27, 183-212.

<sup>8</sup> Marcus, G. et al. (1992) *Overgeneralization in language acquisition*. Monographs of the Society for Research in Child Development 57.



## 5.3 Irregular nouns (pp.24-25)

- (37) a. error rate on irregular plurals: less than 10% [preschoolers]  
 b. error rate on irregular past tense: less than 10% [preschoolers]

However,

- (38) a. Irregular nouns make up less than 5% of the nouns children hear.  
 b. Irregular verbs make up more than half of the verbs children hear.

- (39) Children seem to be very good at acquiring irregular forms even when the rate of input of irregular forms is very low.

## 5.4 Exposure to Irregular Forms: How much is necessary? (pp.25 - 26)

- (41) a. For frequent verbs, children quickly acquire correct irregular forms:  
*go – went, see – saw, etc.*  
 b. For less frequent verbs, children take much longer time to get correct irregular forms: *sink – sank, win – won, etc.*

- (42) How many times do you have to hear an irregular verb before you acquire its correct inflections?  
 => several hundred exposures<sup>9</sup>

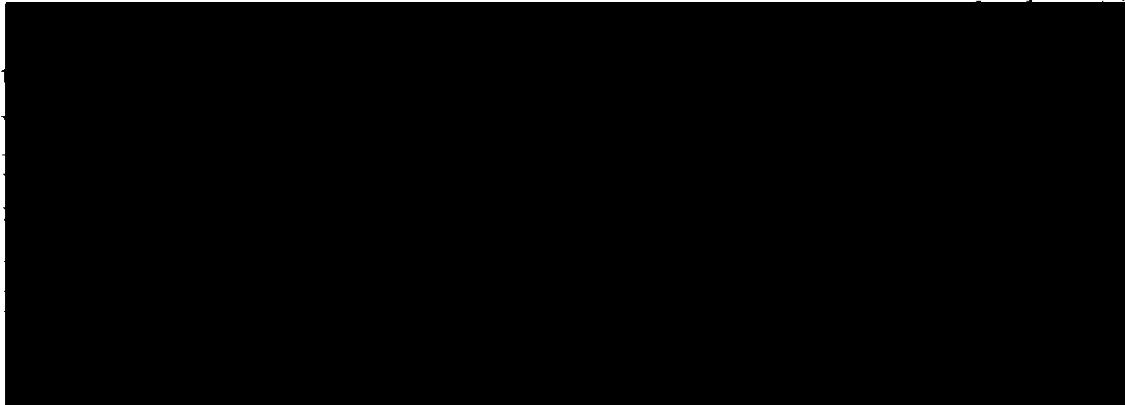
## 6. Summary

How Children pick up words from a stream of speech sound.

- (43) Only small portion of PLD is specially designed for small children.  
 a. One-word sentence (only 10 – 20% in utterances to children)  
 b. Important word at the end of the sentence
- (44) Otherwise, normal “examples” of utterances in the speech community seem to suffice. Several hundred exposures? => If 5 “went”/day, then 35 exposures a week. 2 months is enough.
- (45) LAD is the key player.  
 a. Spotlight Strategy  
 b. Matching Strategy
- (46) These strategies sometimes lead children to overgeneralization (e.g., go – goed).
- (47) But such overgeneralization is not prevailing very much (children are conservative), and varies from children to children, and from words to words.
- (48) Nobody teaches these strategies to children. They just do it all by themselves!

<sup>9</sup> Maratsos, M. (2000) More overgeneralization after all: New data and discussion on Marcus, Pinker, Ullman, Hollander, Rosen, and Xu. *Journal of Child Language* 27, 183-212.

Appendix



- (49) **Tips for Class Work 2-1**  
“One-word sentences make up just 10 – 20 % of parents’ utterance to children.” (O’Grady, W. 2005. *How Children Learn Language*, Cambridge University Press, p.9)
- (50) **Coffee Break: segmentation game**  
The following words consist of two parts. Where is the boundary? Try many possibilities
- a. kilimanjaro (name of an African mountain: “mountain” + “bright”)
  - b. kamehameha  
(name of the first king of Hawaiian Kingdom: “person” + “sad”)
- (51) Even in adult English, some phrases or sentences are not analyzed into segments but rather interpreted as a whole.
- a. I like reading “whodunits.”
  - b. His “whereabouts” is unknown.

## Homework Assignment 2

1. Turn in by **Tuesday 12:30:**

via Email (MSWord file attached to email)

Make the name of the file as [ID/your name/hw2]



\*If you have trouble sending your files attached via Email, let me know.

2. Write as concisely 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. (See Samples below)

- A. From p. 14, second paragraph from the bottom to p.15, the author reports one experiment which suggests one way of children's spotlight strategy. Summarize how the experiment is done and what the result shows. Be concise. [100 words]
- B. Read the text pp.23 – 24. (i) Discuss what seems to be going on with the child in Adult-Child conversation on p.23. [50 words] (ii) Summarize the point on pp.23-24. [50 words] Be precise.
- C. Read the text pp. 26 -- 28, and summarize the point. What are three ways of creating new words. Be concise. [120 words]
- D. Write any questions and/or comments on reading text pp.7 – 26, or on class discussion Day 2.
- E. Read the text up to page 39.

(over)

## Tips for how to do summary homework

Summary of the third paragraph on p.2:

1. Horrible sample: Simple copying of some of the sentences in the text.

Most children start producing words some time between 8 and 12 month and many of them have ten words by 15 months. Things gradually pick up speed then. Although an 18-month-old child learn one or two words a day, a 4-year-old often acquires a dozen.

2. Bad example (very common mistake among Japanese students)  
Changing the words/phrases a little bit, but still largely depending on the expressions and organization of the original paragraph.

Most children begin uttering words some time between 8 and 12 month and many acquire ten words by 15 months. Then, things gradually pick up speed. An 18-month-old child learn one or two words per day, while a 4-year-old often acquires a dozen of words a day.

3. Good example: Understanding the content of the paragraph correctly and state it in your own wording and organization.

The paragraph summarizes the pace of child word acquisition on the earliest stage. Children's first word utterance is observed around 8 to 12 months. Starting with just 10 words (by 15 months), an 18-month-old can get one new words or two a day, a four-year-old a dozen, and a seven-year-old twenty: an amazing speed of "one every hour!"

When you use language something other than English:

Give the following:

- (1) original orthography (can be omitted)
- (2) phonetic alphabet (or something close to it) to show how to pronounce the example.
- (3) word by word gloss
- (4) English translation

### Example

|                        |        |
|------------------------|--------|
| 太郎が バスに のった            | <= (1) |
| Taroo-ga basu-ni notta | <= (2) |
| Taroo-NOM bus-on got   | <= (3) |
| 'Taro got on the bus'  | <= (4) |