

THE ACQUISITION OF ENGLISH INTERROGATIVES BY A JAPANESE SPEAKER

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Abstract

Much syntax-based research in second language (L2) has given us useful information on the developmental processes of acquisition, although such research is difficult to apply towards improving teaching materials and teaching methods in English as a second language. This article examines the process by which the author's 11-year-old daughter acquired interrogatives and outlines some of the syntactically interesting features of her question forms. The data collected during 11 months are compared with those compiled by other researchers in this field and suggestions are offered for teaching English in Japanese junior and senior high schools.

This paper reports some of the major developmental features of acquiring interrogatives by a second language learner. It analyzes the English utterances of an eleven-year-old Japanese girl learning English as a second language in a natural setting and examines the process by which she acquired interrogatives, comparing the data with those compiled by other researchers in this field.

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The following are the main reasons why, from among various structures in English, interrogatives were chosen for this study:

- a) As questions and answers are the most basic pattern in communication, the learner's developmental stages appear clearly in her utterances of questions and answers.
- b) As questions and answers are one of the most popular methods used in classrooms, a knowledge of the difficulties L2 learners encounter in this area is useful in teaching English as a second language.
- c) The syntax of interrogatives in the subject's L1, Japanese, is sharply different from the syntax of interrogatives in her target language, English, so transfer from L1 will be clearly seen, if it exists.

In this paper the following problems are discussed on the basis of empirical data.

- 1) What developmental stages do L2 learners go through in acquiring interrogative constructions?
- 2) Is there any difference in the acquisition order of English question formation between L1 and L2?
- 3) Does learners' L1 interfere with L2 in the acquisition process of English interrogatives?
- 4) What roles do "chunks"¹ play in the acquisition of interrogatives?
- 5) Does comprehension of L2 learners always have superiority over production as regards questions and answers?

Data Collection

The subject in this study is the writer's daughter, June. In April, 1983, when she came to the U.S., she had had four years of elementary school education in Japan and acquired almost all the grammar of her native language. On the other hand, she knew nothing of English except for some borrowings and the alphabet. Her exposure to English came in April, 1983, when she was enrolled in grade four at a monolingual

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public school in Belmont, Mass., at the age of 10. At school she was exposed mainly to English, but at home Japanese remained her language. Lessons at school, American friends and, later, TV were her major sources of L2 input.

Her English was observed over a period of 11 months, from May, 1983 (age 10;11) until March, 1984 (11;10). But during the first 7 months some aspects of her L2 acquisition process were recorded unsystematically, depending on my interest as a parent. Data collection focusing on interrogatives began at the beginning of January and continued until the end of March, when June went back to Japan. About every two weeks during the three-month period she was asked to engage in conversations with my husband and me in English for at least 30 minutes and her spontaneous speech was recorded. Her conversation with her American friends was also recorded on March 24. In addition, tests for production and comprehension of interrogatives were given four times at regular intervals in February and March. The tests consisted of translation from Japanese into English and questions and answers.² The same materials were used in every test.

Results

Developmental Stages

An analysis of interrogatives in June's utterances in English showed a striking similarity between her developmental stages and those of English monolingual children. Unlike her native language, structures of English interrogatives require transformational rules, specifically, wh-preposing, subject-auxiliary inversion and do-insertion. These are discussed in the literature on L1 acquisition, in particular, by Klima & Bellugi (1966) and Brown (1968). Klima & Bellugi posit the following three stages in the development of questions observed in their subjects. At Stage I the most common questions are a nucleus with a rising intonation or some version of a chunk like 'what's that?'. This stage is clearly pretransformational, since no con-

scious question transformation occurs. At Stage II constituent questioning develops, but there are still no auxiliary verbs, and so there is no subject-aux inversion in Yes-No questions. The wh-words merely serve as question introducers. By Stage III certain auxiliaries are inverted, though rarely, in wh-questions. The wh-words are moved to the beginning of the question by wh-transformation (see Klima & Bellugi 1966:200-207).

Interrogatives produced by June show similar stages with some differences at Stage III. The following are her developmental stages:

Stage I One- or two-word sentences were used with different intonation and gestures (May-June)

e.g.: Play?

Jump rope?

What this?

What's drink?

Daddy, where going?

Stage II No inversion was made in either Yes-No or wh-questions (September-November)

e.g.: Play jump rope?

You want this?

What's drink you like?

Why so funny?

Amanda, when you have to go home?

Stage III Both Yes-No and wh-questions were sometimes inverted and sometimes not. (December-March)

e.g.: Can I play jump rope?

You want this?

Do you want this one?

What kind of drink you like?

Which do you like best?

When Tomoko is coming?

When is she coming?

An examination of the data indicates the following features:

1. Through all stages June adopted rising intonation for Yes-No questions but never used it for wh-questions. From the

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earliest period she seemed to use properly either intonation or *wh*-words as a question signal.

2. In Yes-No questions the developmental stages I observed in are the same as those described in Cancino et al. (1978:228):
 - i) no inversion (i.e., sentence with rising intonation)
 - ii) some inversion, gradually increasing, but with variability

The stage where Yes-No but not *wh*-questions are inverted (Klima & Bellugi 1966) was not observed in the data on my subject. The data on February 5 shows that out of her 18 Yes-No questions, 6 were not inverted and out of 22 full-sentence *wh*-questions, all of which require inversion, 5 were not inverted (see Appendix A). Viewed from the ratio of uninverted questions to inverted ones, Yes-No questions are more frequent than *wh*-questions. This does not mean, however, that inversion in the former case is more difficult for my subject to acquire than inversion in the latter case. As a very little consideration will show, I reach the opposite conclusion for the following reason. Inversion is optional in Yes-No questions and most of 6 uninverted Yes-No questions in my data are as natural as their inverted counterparts. In contrast, inversion is obligatory in *wh*-questions except when the *wh*-word serves as the subject; the 5 ungrammatical uninverted *wh*-questions, therefore, reveal an incomplete stage of question acquisition.

3. Yes-No questions meaning request (Can I . . . ?, May I . . . ?, Will you . . . ?) were perfectly inverted from the very beginning. I assume that June heard such request forms in her daily life more frequently than any other question form and memorized such *aux* + *S* forms as a single unit. This seems to have enabled her to utter correct request forms.
4. Whether June used inverted forms or not did not always depend on her syntactic knowledge. She tended to use uninverted forms when they were easier for her to utter or when they sounded more natural to her. She sometimes rearranged word orders of her own English, saying "Sounds

strange!" (The first and third examples are inverted, of course; the second and third are not.)

e.g.: When is she coming?

Why Mr and Mrs Inada is coming today?

Can we eat dinner outside?

Or we eat at home?

5. There was no evidence that June depended on the rules of her native language in forming questions. She never uttered Yes-No questions without rising intonation or never placed a wh-word within a sentence, both cases of which often occur in Japanese questions. Nor did she produce subject-verb or verb-object inverted sentences like 'Play I jump rope?' or 'Jump rope play?'. Such examples are noted for Rune by Ravem (See Butterworth 1978:240-241) and for Ricardo (Butterworth 1978), but rarely found in case studies of Japanese children.

6. The order of appearance of inverted auxiliaries in June's case is

can, may, will → do → be-copula → did, does.

This acquisition order seems to reflect the frequency of occurrence in the input, and the early acquisition of 'do' could be partly explained by chunking (see 'Role of Memorized Chunks', below).

7. The order of acquisition of question patterns by June is

Yes-No Q., what, where → alternative Q., when, why →

tag Q., who → which → indirect Q., how.

This order excludes what seem to be 'memorized chunks'.

She used lots of chunks including 'how . . . ' (e.g., How do you do?, How are you?, How old are you?, How much is it?, How about you?) at an early stage, but as of March,

1984 she had not yet acquired questions including 'how' as a manner-adverb. She used 'how to' both in direct and indirect questions.

e.g.: I don't know how to open this can.

Daddy, how to make this?

After she learned the expression 'how come', she preferred

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to use it instead of 'why'.

8. June had also not yet acquired the use of indirect questions completely. She did not distinguish between simple and embedded wh-questions in production, nor did she distinguish between 'Do you know . . . ' + wh-question and wh-word + 'do you think . . . ?'.

e.g.: What time is it now?

Do you know what time is it now?

Why you can't play with me now?

Do you think why Tomoko is crying?

In Yes-No indirect questions without a wh-word she did not invert subject-aux in the object clause.

e.g.: Is it raining now?

Do you think tomorrow is raining?

Do you know this milk is bad or not?

L1 Interference

As previously mentioned, there was no clear evidence of transfer from Japanese in my data. Similar observations were reported by Gillis (1976) on the acquisition of interrogatives by two Japanese school-age children learning English in Canada. Hakuta (1976:347), however, came up with an argument against Gillis. He asserted that "interference errors are not the only manifestations of the process of language transfer, . . ." and that other possibilities such as structural avoidance and the overall rate of development should be taken into consideration. My data are too limited to either support or refute his argument. All I can say now is that interference errors were not found, and if there were any, they were negligible in my data. Most of the errors as well as the acquisition order are similar to those observed in English monolingual speakers.

Akiyama's study of Yes-No answering systems (1979) is of interest to the present discussion. Different languages require quite different systems for answering negative questions. In English the speaker answers 'yes' or 'no' depending

on the speaker's intention about the matter. In Japanese the speaker answers 'yes' or 'no' in agreement or disagreement with the literal meaning of the question. (e.g. In answering the question "*Asagohan tabenakatta-no?*" ("Didn't you eat breakfast?"), if the speaker ate it, he answers in Japanese, "*Iie tabemashita.*" ("No, I did."), and if the speaker did not eat it, he answers, "*Hai tabemasendeshita.*" ("Yes, I didn't.)) Akiyama reports that these two systems interact in Japanese bilingual children. It is true that these different answering systems are difficult for Japanese students to master and cause a lot of trouble in English classrooms in Japan. I tested June on March 1 using the same type of materials as Akiyama used for his 18 subjects (see Akiyama 1979:491). A total of 32 Yes-No questions were asked in English and in Japanese. There were four types of questions (positive, negative, positive tag and negative tag questions) and four verbs (is, are do and can) giving 16 verb-question combinations. June gave correct answers 100% of the time (Appendix B). She seemed to have no difficulty in answering them without delay. This is perhaps due to the fact that she had already acquired the Japanese answering system and that she could code-switch between the two languages without translations from one language to the other.

Role of Memorized Chunks

Hakuta (1976:332-333) argues that using memorized chunks (that is, prefabricated patterns) plays a very important role in language acquisition. The data on his five-year-old Japanese subject shows that "(1) patterns using the copula including all allomorphs of 'be', (2) the pattern 'do you' as used in interrogatives and (3) the pattern 'how to' as in embedded how-questions were all prefabricated in the sense that they all showed a characteristic rigidity in usage and lack of variability, as well as misuse in linguistically inappropriate contexts." He says that prefabricated patterns "enable learners to express functions which they are yet unable to construct

from their linguistic system, . . . ” (p. 333). He also supports Huang’s suggestion cited in Hakuta (1976:332; also Huang 1971) that the strategy of sentence imitation did not disappear altogether when the L2 learners began producing utterances out of their own syntactic system.

My data support Hakuta’s argument. I noted that June had produced a large number of memorized chunks. She was able to express a wide range of functions from the beginning by employing this strategy together with gestures. And from October she had begun to generate sentences by replacing some constituents of the expressions she had learned. For example, “Can I take one?” was expanded to various utterances for asking permission.

Can I play with Amanda now?

Can I eat this one, too?

Can I use this pencil?

Can I get dinosaur’s egg?

What’s that?

What’s her name?

What’s name is that store?

What’s you drink?

What’s the matter?

Do you want drink?

Do you have a lot of friends?

Do you like . . . ? Do you know . . . ? Do you think . . . ?

I don’t know how to open it.

Tell me how to do it.

I know how to call, but I don’t know what’s her number.

How to spell ‘New Hampshire.?’

Chunking could explain the reason why she had acquired ‘do you’ at an early stage and why she misused ‘how to’ in simple how-questions. In the former case, she successfully extended the memorized chunks to the pattern of ‘do you’, while in the latter case, overgeneralization of ‘how to’ was observed. When she began to produce tag-questions, she attached ‘isn’t’ or ‘don’t’ to every sentence.

- e.g. Funny, isn't it?
They are so cute, isn't it?
You are busy now, don't you?

Although these are also considered to be errors of overgeneralization, they facilitated her acquisition of tag-questions. In a week or so she acquired the rules of tag-questions.

Comprehension/Production

In L1 acquisition, general superiority of comprehension over production is observed. According to Dale (1972:90-91), at Stage II (in Klima and Bellugi's case study) "many wh-questions are answered appropriately, but they are not formulated correctly. Why questions, on the other hand, are asked but apparently not comprehended." Menyuk (1971:123), citing Fraser, Bellugi and Brown (1963) also notes: "Finally it has been found that children approximately 3 years of age comprehend grammatical contrasts which they do not produce."

Through all stages June showed much higher competence in comprehension than in production of any type of interrogative. She not only correctly understood the questions whose syntax she had not yet acquired completely but also responded correctly to them. The following are some questions June could not produce.

How did you come home with Meg?

— By car. Her mother pick up us.

Who did you eat lunch with?

— With Meg and her mother.

When do you think Tomoko is coming?

— I think she's coming around four.

As for why-questions, June's production was limited to memorized chunks at Stage II, but she could comprehend and respond properly to why-questions other than memorized chunks. The logic required to answer why-questions is more complicated than logic needed to answer other types of wh-questions. As Brown (1968:286) points out "... learning to

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answer why-questions means learning what explanation is"; there must be some logic for explanation between why-questions and their answers. Such explanatory logic as June already had in her L1 seems to have enabled her to answer why-questions, since it works effectively in English as well.

June's speaking ability suddenly began to make rapid progress when a certain amount of L2 input accumulated and her listening comprehension advanced to a certain degree (in her case, about six months after she began to be exposed to L2).

Conclusion

Through my daughter's case study, I have outlined some syntactically interesting issues related to acquiring English interrogatives by L2 learners. Based on my findings, I now want to offer some tentative answers to the questions raised at the beginning of the paper.

1. There is a great similarity between English as the L1 and English as the L2 in the acquisition order of question formation.
2. June's case supports the contention that children acquiring English as a second language in a natural setting make few interference errors during production of interrogatives.
3. Many question forms produced by L2 learners in the earlier stages are considered to be memorized chunks. Chunking seems to play an important role in the process of second language acquisition.
4. There are some types of question which L2 learners cannot produce but whose meaning or concept they can understand correctly. As for interrogatives, comprehension is decidedly superior to production. This was clearly reflected in June's case.

In addition, to understand the developmental process, we need to know about the *appropriateness* of syntactic choice, an area

of research which will require a great deal more work.

Some implications can be drawn from this study for teaching English as a foreign language in Japan. I want to suggest the following for our junior high school English teaching.

1. Even if students produce sentences which do not have well-formed structures, their errors show their developmental stages just as the data for my daughter shows. Errors are not only inevitable but also offer evidence of students' growth through language use. Thus, students should be encouraged to communicate in English and not deprived of spontaneous speech by overcorrection of their syntactic errors. The more they speak, the better their English will be.
2. The teaching of English should be tied to real, concrete situations, which will reduce interference from the first language. Authentic English should be taught from the beginning.
3. Students should be asked to memorize useful expressions as chunks. Chunking helps learners, especially beginners, exercise communicative ability.
4. As many opportunities as possible for students to listen to natural English should be provided. There is some evidence suggesting that listening comprehension is essential for communication and helps to develop production.

I hope that further studies, with larger and more accurate data, will reinforce my suggestions.

Notes

¹ Chunks are also called 'prefabricated patterns' by Hakuta and 'formula utterances' by Wong-Fillmore. See the definition of 'prefabricated patterns' given by Hakuta (1976:331).

² The test were based on "The collection of sentence patterns and grammatical items for a junior high school English course" in *Koko Eigo Shido Shiryō* (The data on senior high school English courses of study), Tokyo: Kairyudo (no date).

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Appendix A

Some of the following questions were uttered while June was talking to Gerbils, her pet. The rest were uttered when she was talking with my husband and me before and during lunch. Sentences (a) to (r) are Yes-No questions and (1) to (22) are wh-questions. An asterisk shows uninverted forms.

- Hi, guys. (1) How are you? Dinner is ready. Today I'll give to you special dinner. Special rice. (a) Don't you like rice? It taste yummy. Here you go. O.K. Go ahead. Kuro, [a pet's name] go ahead. (2) How do you like it? Hey, Noro, [another pet's name] (3) what's you doing? You, bad boy! . . . (4) What do you want to do? (5) What do you want to do, next? (b) *You wanna go the outside? O.K. I'll take you out. Go! (c) Noro, do you want to eat some peanuts? Kuro, how about you? (d) Do you think Noro is very fat? I think Noro is too fat, so maybe . . . forget it
- (e) *We go out somewhere, then we eat?
(f) *Or we eat at home?
(g) Daddy, can we eat dinner outside?
(6) *What kind of rice you have? Just white rice?
(h) Do you have Japanese tea - - - er - - - *mugi-cha*?
(i) Are you listening, mummy?
(j) Do you think I wear skirt or pants?
(k) *Pink sweater - - - pink sweater little white rabbit on it - - - is OK?
- (7) What did you say?
(8) *What kind of dress you wear?
(9) *Then why you don't wear?
(10) *You have other kind. Why you don't?
(1) Can I eat this one, too?
(11) Where's *surume*?
(12) Where's carrot?
(13) Which can I have, this one or that?
(14) What time will you have dinner?
(15) *When the bus coming?
(m) *Mine's important?

- (n) *You mean 'always'?
- (o) Do I have to say it to everybody?
- (p) Are you serious?
- (q) Mummy, may I have a glass of Japanese tea?
- (r) Uh, is that cup or glass?
- (16) What did you say?
- (17) What time is it?
- (18) Where can I get it?
- (19) What's name is that store?
- (20) What's your problem mean?
- (21) What do you mean for that?
- (22) What are you doing, daddy?

Appendix B

Out of 32 Yes-No questions in English, 16 are listed here together with June's answers.

QUESTIONS

- Is it hot today?
- Isn't it hot today?
- It's hot today, isn't it?
- It isn't hot today, is it?
- Are you a boy?
- Aren't you a boy?
- You are a boy, aren't you?
- You aren't a boy, are you?
- Do you have any Japanese books?
- Don't you have any Japanese books?
- You have some Japanese books,
don't you?
- You don't have any Japanese books,
do you?
- Can you speak English?
- Can't you speak English?
- You can speak English, can't you?
- You can't speak English, can you?

ANSWERS

- No. Today is cold.
- No, it isn't.
- No. Today is cold.
- No, it isn't.
- No, I'm not.
- No, I'm not.
- No. I'm a girl.
- No. I'm a girl.
- Yes, I have a lot.
- Yes, I have a lot.
- Yes.
- Yes, I have a lot.
- Yes, a little.
- Yes, I can.
- Yes.
- Yes, I can speak a little.

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References

- Akiyama, M. M. 1979. Yes-No answering systems in young children. *Cognitive Psychology*, 11, 485-504.
- Brown, R. 1968. The development of wh-questions in child speech. *Journal of Verbal Learning and Verbal Behavior*, 7, 279-290.
- Butterworth, G. & Hatch, E. 1978. A Spanish-speaking adolescent's acquisition of English syntax. In E. Hatch (Ed.), *Second language acquisition*. Rowley, Mass.: Newbury House.
- Cancino, H., Rosansky, E. & Schumann, J. 1978. The acquisition of English negatives and interrogatives by native Spanish speakers. In E. Hatch (Ed.), *Second language acquisition*. Rowley, Mass.: Newbury House.
- Dale, P. S. 1972. *Language development*. New York: The Dryden Press.
- Dulay, H. & Burt, M. 1973. Should we teach children syntax? *Language Learning*, 23, 235-252.
- Fraser, C., Bellugi, U., & Brown, R. 1963. Control of grammar in imitation comprehension and production. *Journal of Verbal Learning and Verbal Behavior*, 2, 121-135.
- Gillis, M. 1976. The emergence of sentence modalities in the English of Japanese-speaking children. *Language Learning*, 26, 77-94.
- Hakuta, K. 1976. A case study of a Japanese child learning English as a second language. *Language Learning*, 26, 321-351.
- Hatch, E. M. 1983. *Psycholinguistics: A second language perspective*. Rowley, Mass.: Newbury House.
- Huang, J. 1971. *A Chinese child's acquisition of English syntax*. Unpublished M.A. thesis, U.C.L.A.
- Klima, E. & Bellugi, U. 1966. Syntactic regularities in the speech of children. In J. Lyons & R. J. Wales (Eds.), *Psycholinguistics papers*. Edinburgh: Edinburgh University Press.
- McLaughlin, B. 1978. *Second-language acquisition in childhood*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Menyuk, P. 1971. *The acquisition and development of language*. Englewood Cliffs, N.J.: Prentice-Hall.
- Rutherford, W. E. 1982. Markedness in second language acquisition. *Language Learning*, 32, 85-108.