

Aspects of the Acquisition Process of Grammatical Rules of English —A Case Study of English-Japanese Bilingual Children—¹

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Introduction

The acquisition process of grammatical rules by children interests language instructors a great deal, especially those who are engaged in teaching a foreign language, for they expect that studies on grammar acquisition in children will yield some applicable sources to foreign language teaching as well as evidence of the validity of modern linguistic theory. In fact, recent exhaustive studies done by such scholars as Paula Menyuk (1969)², Carol Chomsky (1969)³, and Lois Bloom (1970)⁴ have contributed to the searching examination of the process of grammar acquisition in children. Their studies have concentrated on monolingual children whose native language is English.

The writer of this paper has been interested in the acquisition process of English grammar by English-Japanese bilingual children who are exposed to a natural bilingual (English-Japanese) environment, for he believes that an investigation of this sort will offer pedagogical benefits to the English language instructor of the speakers of the Japanese language.

Hence this paper mainly deals with some aspects of the acquisition process of grammatical rules of English in three English-Japanese bilingual children between the ages of five and six. In this paper we have two main purposes :

1. To find out the type of grammatical errors they make and examine the reduction process of their grammatical errors.

2. To find out how much their knowledge of the Japanese language interferes with their acquisition of grammatical rules of English.

This study is limited to small samples, so that it may be difficult for us to reach a decisive conclusion but we expect to obtain a suggestive one in conjunction with pedagogical application.

Procedure of Investigation

Our corpus was offered by two girls, Crystal and Laura, and one boy, Nathaniel. We worked with Crystal in July 1970 when she was five years and four months old, with Laura in March 1970 when she was five years and eleven months old, and with Nathaniel in May 1970 when he was six years and four months old. All of them are the children of highly educated parents, their fathers have done some graduate work and the mothers are college graduates. The informants were all born in Japan, but they had returned once to the United States of America prior to this investigation. Crystal had been in the United States from the age of 1 to 3, Laura for three months when she was three years old, and Nathaniel for six months when he was three years old.

All of them were being exposed to both English and Japanese when this research was carried out. At home they communicated with their parents in English, however they were exposed to Japanese through TV programs even when they were at home. When they were outside, they were naturally under constant exposure to Japanese, through their Japanese playmates. Crystal and Laura were attending kindergartens where only the Japanese language was used. Therefore it seemed that with them Japanese was more dominant than English.

As to obtaining the corpus we had great cooperation from each child's mother. The children were asked to give their comments on 36 pictures of *English Dialogue Through Pictures*⁵ being guided by each child's mother. The span of the interviews covered about one week spending an hour every day. We made a tape recording of every utter-

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ance by the children. From these tapes a final transcription was made, and these transcriptions constitute the corpus of this study. Approximate total number of words and the length of the longest utterance given by the children are as follows :

	Crystal	Laura	Nathaniel
Total number of words	1840	3800	1500
Length of the longest utterance	25 mrphms*	83 mrphms	58 mrphms

* mrphms = morphemes

The following is part of the corpus :

Crystal's Samples

Mother : (Is Jane drinking, too? What's she doing?)

Crystal : She doesn't like, she doesn't ... He doesn't let her have some of it.

Mother : (Which one is the best? Which one do you think is the best?)

Crystal : All of them. All of them are the same best.

Laura's Samples

Mother : (What are these children doing?)

Laura : The boy is drinking pineapple juice. I wanted some, too. It makes you good when you sick. Milk has a whole lot of energy.

Mother : (What are these two children doing?)

Laura : This time the girl is eating something good. I wish I had some of that, too. But before he had some. We eated after television, because it was already time for television and before television we had to do devotions.

Nathaniel's Samples

Mother : (Nathan, tell me something about these pictures.)

Nathaniel : There's a girl and a boy. The boy is drinking pine-

apple juice and the girl is thinking if she could have some.

Next time the girl is eating the fruit and the boy is thinking if...thinking why she's eating it.

Error Count and Interpretation

We will count the grammatical errors in the corpus which we obtained through the procedure mentioned in the previous section. We will try to analyze the errors on three levels; Morphological, Lexical, and Syntactic. Some features of the error types will be examined and interpreted from the viewpoint of the acquisition process of grammatical rules.

A. Morphological Errors

1. Omission of third-person singular inflection

Crystal 2/11 (This indicates that she omitted {-s} twice out of the eleven cases.)

Laura 2/37

Nathaniel 1/3

- (1) Mother fix__ a apple.
- (2) It look__ like a restaurant.
- (3) When it rain__, when it's hot.
- (4) The father and the mother teaches.
- (5) Children drinks tea.

It is evident that the three children have almost acquired the correct use of the third-person singular inflection, though Nathaniel's samples are very few. However (4) and (5) convince us that there exists a transitional stage in which children give a third-person singular inflection to the verb if the subject slot is filled by a third person, without giving attention to the difference of number.

2. Omission of Plural Ending

Crystal 0/33

Laura 1/34

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Nathaniel 0/12

(6) two sandbox__

We find no omission of plural endings except in a single sample (6) given by Laura. The error made by Laura must have taken place because of her phonological confusion. That is, Laura seems to believe that the morpheme whose ending occupies such a phonemic sequence as /-ks/ functions as either a third-person singular inflection carrier or a plural suffix carrier as we see in (1) and (6) respectively.

3. Non-occurrence of morphophonemic change; a → an /___ Vowel

Crystal 2/2

Laura 5/5

Nathaniel 1/1

(7) a airplane

(8) a apple

(9) a eagle

(10) a elevator

(11) a orange

(12) a otona "adult"

(13) a owl

With the above samples it is evident that the children have not acquired the morphophonemic rule which must be applied when an indefinite article occurs before a word initiated with a vowel sound. The reason why they fail to acquire the rule earlier is not clear. However, at least we may say that it is difficult for them to acquire the rule by the inductive way of learning.

4. Fallacious Analogy of Past Tense Form

Crystal 0/0

Laura 6/13

Nathaniel 4/7

(14) goed

(15) eated

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- (16) falled
- (17) gived
- (18) runned
- (19) teached
- (20) thinked*
- (21) winned

* This form and the correct form 'thought' are used interchangeably by Nathaniel.

As anticipated prior to the investigation, we find that strong operation of analogy goes with the acquisition process of the past tense form among bilingual children as well as English monolingual children. The following samples offered by Laura and Nathaniel sustain this view.

- (22) sawed (Laura's sample found in a sentence :

I sawed a crow many times.)

- (23) haded (Nathaniel's sample found in a sentence :

So he haded to take the other dog.)

We also can assume that there exists a stage in which children use the correct form and the form based on fallacious analogy, as Nathaniel's sample (20) shows, before they have acquired the correct form of past tense.

5. Substitution of Singular Be-verb for Plural Be-verb

- (a) are → is

Crystal 0/8

Laura 14/16

Nathaniel 1/1

- (24) Those words is easy for me.

- (25) There is a five teachers.

- (b) were → was

Crystal 0/0

Laura 8/8

Nathaniel 11/12

- (26) They was me and my friend.

(27) We was going home on a train.

(28) There was two babies.

Contrary to what we anticipated the result shows that Laura and Nathaniel have not acquired the rule of number agreement. As in the case of learning the rule of morphophonemic change in the indefinite article, they failed to developing morphological differentiation by the inductive way of learning.

B. Lexical Errors

It is pointed out that interference is extremely common on the lexical level among bilinguals. In this investigation, we, too, anticipated that there might be quite a few samples of interference caused by the children's knowledge of the Japanese language. We found quite a few lexical errors in the corpus. However we must keep in mind that not all of the lexical errors are caused by interference from their knowledge of the Japanese language. There must be some errors which are made through the operation of analogy or creative activity on the part of the children. It is extremely difficult to set up the criteria by which we can judge whether their lexical errors are caused by interference or not. Here we will rely on the native intuition of both English speakers (the children's mothers) and Japanese speakers. We place the following symbols at the end of each unacceptable utterance; (+) or (-) or (\pm). (+) indicates obvious interference, (-) no interference and (\pm) less obvious interference.

1. a baseball ball < a baseball

(29) A baseball glove is for catching a baseball *ball*. (+)

The Japanese phrase, "yakyuu no booru" seems to have been literally translated.

2. break < cut

(30) You may cut yourself and *break* your hand off. (-)

3. do < play, become, study, give,

(31) I will be a ... *do* the piano. (+)

(32) They was gonna *do* ski outside. (+)

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(33) Let's *do* a game. (+)

(34) I *did* the pink-tulip two times. (+)

(The donor of this sample means that she was enrolled in the pink-tulip class twice.)

(35) She is *doing* plusses. (\pm)

(36) *Do* shots. (\pm)

For the donors of the above samples, (31), (32), (33) and (34), the morpheme "do" has a wider semantic range than its actual use in English. Evidently this is caused by the interference of their Japanese competence, since the Japanese verb, "suru" takes a greater variety of object than the English verb "do" does.

4. get hot < keep warm

(37) (Mother's stimulus: Why do we need a stove?)

To *get hot*. (-)

5. get to < become

(38) If that *gets to* water, then it'll be coffee. (-)

6. have < keep

(39) Tights is for *having* your feet warm. (-)

7. look at < watch

(40) We *looking at* television. (+)

Like Case 3, this interference seems to be caused by the difference of the semantic range between English and Japanese, because the Japanese verb "miru" is comparable to English verbs, "see", "look at" and "watch."

8. leave < put

(41) To *leave* a letter into the mailbox. (-)

9. look < wonder

(42) They *looking* what kind of cars they are. (+)

(43) They are *looking* how much this one weighs. (+)

10. many < much

(44) ...how *many* they weigh... (-)

We find that the donor of the above sample uses "many" and "much" interchangeably in the same context.

11. piano person < pianist

- (45) ...because the *piano person*...the father and the mother learns piano... (±)

This error may have been made on the analogy of such expressions as milk-man, mail-man and fire-man.

12. piano place < piano

- (46) The girl and the boy's father was going to the *piano place*. (+)

This seems to be a direct translation from Japanese expression "Piano no tokoro."

13. say < answer

- (47) I *said* this question. (+)

14. skin-colored < flesh-colored

- (48) No, not a white car, but this *skin-colored* car... (+)

The donor of this sample seems to have tried a direct translation from a Japanese phrase "hada-iro."

15. slow < late

- (49) And sometimes some boys make me be *slow*. (+)

The donor of this sample has not acquired the morphological differentiation between sense of time and sense of speed. Evidently the child is slow in acquiring the differentiation because the Japanese morpheme "osoï" is comparable to the English morphemes "slow" and "late".

16. sore < hurt

- (50) When I get *sores*, you do it at home. (-)

17. the next day yesterday < the day before yesterday

- (51) I forgot because today and yesterday and *the next day yesterday* was oyasumi. (±)
oyasumi "holiday"

18. to play ski < to ski

- (52) Do you want to *play ski*? (±)

C. Syntactic Errors

1. Substitution of Unacceptable Preposition

- (53) (I live) *at* Sapporo.
- (54) (He lives) *at* the United States.
- (55) A girl is writing a letter *of* her uncle.
- (56) I will be marry *with* Makoto-chan.
- (57) Laura likes to...is good of...*of* sleeping.
- (58) Lenny is good *for* writing,

In (53) and (54) 'at' is substituted for 'in'. The donor of (55) obviously indicated a letter to her uncle rather than 'a letter of her uncle' when she responded to the stimulus. In (56) 'with' is substituted for 'to'. We find, however, that the donor of this sample uses 'with' and 'to' interchangeably in the similar construction: 'Be married to Makoto-chan'. As (57) and (58) show, 'at' in such a phrase as 'be good at' is replaced by either 'of' or 'for'.

2. Omission of Be-verb

- (59) It makes you good when you __ sick.
- (60) I don't know that they __ thinking about.
- (61) We had a whole lot of apples and always when we __
looking at television.

Can the above samples be interpreted as a case of the children's being slow in learning the use of the Be-verb? The answer might be 'no'. Because in the corpus we rarely find omission of the Be-verb in simple sentences. It seems that the children are likely to omit a Be-verb in subordinate clauses. The above samples seem to indicate that the children are in the transitional stage of acquiring deletion rules in complex constructions - as found in the adult grammar, for example, in a sentence like "Please call me up *when necessary*."

3. Substitution of Inanimate Noun for Animate Noun

- (62) *The violin* is learning in the meeting room.

Though we find only one sample of this kind in the corpus, it is a very significant finding in terms of linguistic interference. (62) is not a sentence produced through the child's animism. From the given context we can assume with ease that the donor of this sample takes it

for granted that a Japanese particle 'wa' always functions as a subject marker and has shifted the object-filler 'violin' to the subject-slot as an agent noun.

4. Disagreement of Tense

(63) We had a car when we're in America.

In the corpus we find only one error regarding Agreement of Tense—the past tense in the subordinate clause cooccurs with the past tense in the principal clause—out of 26 cases offered by the three informants. Contrary to our anticipation they have acquired the rule of Tense-Agreement almost perfectly. Some examples are as follows:

“Because it was long time ago when I was in America.”

(Crystal)

“I was born in Tokyo, but I forgot what it looked like.”

(Laura)

“He thought he would be late so he hurried and hurried.”

(Nathaniel)

5. Prenominalization

(64) He was thinking about *the mother was a doctor*.

(65) The girl was thinking about *the father was a fixer*.

(66) And we use this for *put* things in.

(67) And the grandfather is for *help* his father.

The above samples are very significant from the viewpoint of generative transformational grammar. These are typical examples of intermediate structures, used as a surface structure, which occur in the process of transformational operation from deep grammar to surface grammar. These samples convince us that children learn the acceptable forms of complex sentences through their creative power manifested by pseudo-structures in their grammar acquisition.

6. Imperfect Indirect Narration

(68) The father *said to* the boy he wanted a stove.

(69) The father *said to* the boy to get another newspaper.

(70) The mother *said to* the girl to put this book in the

father's room.

Like the samples in the preceding section, these samples also indicate that there exists a stage in which children rely on intermediate grammar prior to reaching surface grammar.

7. Substitution of 'what' for 'which', 'who', 'that' in the Relative Clause

(71) Maybe he is practicing something *what* you do at school.

(72) Singing a song *what* they are playing.

(73) Because he was the last one *what*...ummmm...who was born.

The informants seem to have acquired the rule to produce a relative clause though they fluctuate lexically a little.

8. Confusion of Word Order

(74) Six animals of picture.

(75) A knife you need to cut the food.

(76) She's thinking about what will she be when she grows up.

(77) ...the color I like...yellow and blue and a whole lot of colors...all paint...not anything not paint.

The sample (74) seems to be one produced through interference by the informants' knowledge of Japanese. The word order in the Japanese phrase "Muttsu no doobutsu no e" seems to have been applied directly to producing the English phrase. (76) infers the existence of a transitional stage in which children pass from direct interrogative structures to indirect ones. As to (77), it is almost impossible for us to figure out what the donor intends to say. It seems to have been caused by psychological fluctuation.

9. Insertion of Japanese Morphemes

(78) I'd really like to try it way up to the *oyama*.

(79) What do you do with this *sen*?

(80) I make things with *origami*.

(81) Because it's *omoshiroi*, you know.

(82) She said, when it's time *abunai*, that you should to put

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on them, those belt thing...know when it will be *hantai*
now.

oyama "mountain"

origami "colored paper for folding play"

abunai "dangerous"

sen "line"

omoshiroi "interesting" or "fun"

hantai "opposite"

In the corpus we also find insertion of the morphemes of one language into the syntactic structure of the other language which is considered to be a common phenomenon in the language acquisition process of bilingual children. It is of interest and significance that the donors of the above samples are fully conscious of the linguistic relation between syntactic function and class words. That is, they insert Japanese morphemes in the appropriate slots of English syntactic structures. This makes us conclude that the insertion of Japanese morphemes does not interfere very much with their acquisition of English syntactic structures.

10. Some Other Unacceptable Constructions

(83) In *the* Japan?

(84) That's *too* impossible.

(85) ...because his father was going *to* there.

(86) The hat keeps you *not sweating*.

(87) The girl knew why and *why* was to see if bad people came.

(88) We sawed *he* doing a great thing on animal world.

An unnecessary intensifier "too" in (84) is offered by Nathaniel. This seems to be his idiosyncrasy. According to his parents he alone in his family uses such an expression from time to time in daily conversation. As to (85), the donor seems to regard "there" as a noun which functions as the object of "to". We often find this kind of error among Japanese students of English in the typical compound setting of English teaching in Japan. Sample (86) can be considered to have ori-

ginated in the donor's knowledge of the Japanese language. The Japanese phrase "Ase o kakanai" seems to have been translated directly. In (88) we find that the donor has almost acquired the rule to produce an embedding construction by using the *Participial Complement*. Here we once again see the use of intermediate structure in the process of transformational operation from deep grammar to surface grammar.

Conclusion

First of all, we find in this investigation that there are still quite a few grammatical rules of English which English-Japanese bilingual children between the ages of five and six have not acquired on each of three linguistic levels; *Morphological, Lexical and Syntactic*. On the morphological level, the children clearly show that they have not acquired the rules of morphophonemic change for indefinite articles and morphological differentiation with regard to the Be-verb when it correlates to either a singular noun or a plural noun. We also note that bilingual children learn the past form of irregular verbs through the operation of false analogy as monolingual children do. On the lexical level, we find quite a few errors which seem to be caused by interference of their knowledge of the Japanese language. On the syntactic level, the children do not seem to have completely acquired well-transformed constructions- complex or embedding constructions.

Secondly, in regard to the reduction process of grammatical errors, we find that the children are likely to reduce errors gradually passing through a transitional stage. We note that there is a transitional stage in which the children use well-formed utterances and non-well-formed utterances interchangeably especially on the morphological level as the samples in 1 and 4 under *Morphological Errors* indicate. We also note on the syntactic level that the children have a transitional stage in which they use so-called intermediate structures as surface structures, which occur in the process of transformational operation from deep grammar to surface grammar. The samples, (64), (65), (66), (67), (68), (69), (70) and

(88) confirm this observation. These samples also sustain Emmon Bach's view :

...it is almost correct to say that language learning by the child consists in finding the transformations which will derive the surface structures of sentences in his language from the universal set of base structures.⁶

Thirdly, we find that interference takes place notably on the lexical level. As the samples of Section 3 under Lexical Errors imply, the difference of semantic range between English and Japanese seems to cause heavy lexical interference. Hence it is assumed that confusion in the use of the English lexicon by English-Japanese bilingual children is more prolonged than for English monolingual children. Less interference is found on the syntactic level, though. The samples in Section 9 under Syntactic Errors seem to indicate that English-Japanese bilingual children do not suffer very much from interference during the acquisition process of English syntactic structures. The parents of Laura (one of the informants in this study) gave an interesting example concerning this to the writer of this paper. It is, however, not Laura's sample but her younger brother's.

"Ken-chan did ijiwaru to Yooko-chan.

I didn't do any *waruikoto*."

Ken "boy's name"

Yooko "girl's name"

chan "an honorific ending for little boys and girls"

ijiwaru "tease"

waruikoto "mean thing"

The first utterance consists of seven morphemes. Only two morphemes are English and the rest Japanese. However, we regard this utterance not as a Japanese syntactic structure but as an English one.

Since it is evident that Japanese and English are unrelated languages and the informants in this study are learning both languages by the direct approach in a coordinate setting, our observation on linguistic inter-

ference which the informants face leads us to conclude tentatively that Jakobovits' hypothesis derived from Osgood's three laws —“With unrelated languages, a coordinate setting will yield less negative transfer than a compound setting”⁷— may be proved on the syntactic level but refuted on the lexical level.

Finally, one more significant finding in this study, which we did not anticipate, is that the informants have not acquired the rule of number-agreement as seen in the samples of Section 5 under Morphological Errors while the same informants have almost perfectly acquired the rule of tense-agreement as seen in the beautiful samples of Section 4 under Syntactic Errors. It is a common observation of English instructors of the speakers of the Japanese language that the students learning English by the indirect approach in a compound setting show the reverse order of acquiring these agreement rules. This discovery seems to suggest that the rules on the morphological and lexical levels can be acquired more easily and efficiently by an indirect approach (deductive way) than by a direct approach (inductive way) while the rules on the syntactic level can be acquired more easily and efficiently by a direct approach than by an indirect approach.

-Notes-

1. This is a modified and expanded version of my paper read at the 15th annual meeting of the English Literary Society of Japan, Hokkaido Branch, held at the University of Hokkaido on October 3, 1970. I am very grateful to Crystal, Laura, Nathaniel and their mothers for the very great cooperation which enabled me to get the corpus on which this study is based.
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Kohei FUNATSU

This paper deals with some aspects of the acquisition process of grammatical rules of English in three English-Japanese bilingual children between the ages of 5 and 6. The main part of this study is concerned with the analysis of the grammatical errors English-Japanese bilingual children tend to make while they are on the way to acquiring the basic grammatical rules of English. The errors are analyzed on three linguistic levels, Morphological, Lexical and Syntactic. Through this analysis this study tries to examine the reduction process of their grammatical errors and to find out the types of linguistic interference they encounter from the viewpoint of pedagogical implications.

An Essay on Henry Fielding's Narrative Method

Hiroshi WATANABE

In the previous paper I have tried to make out what Fielding intended through digressions and authorial intrusions, and here are discussed the purpose and effect of his characterization and ironical style. Both of these factors, together with those discussed before, co-operate to alienate us from the story, but this alienation, or the distance thus produced between the readers and the story, facilitates the former to evaluate the latter in a proper and natural perspective. This, it seems to me, is the greatest merit of Fielding's peculiarly external attitude to his characters and the story.

By way of conclusion, I briefly touch upon the new 'author-work-audience' relationship introduced by the novel. And this, I believe, is a problem particularly important for the future study of literature in general.

A Study of Conrad Grebel's Letters to Thomas Münzer

Gan SAKAKIBARA

Conrad Grebel was a top-level leader of the so-called Swiss Brethren, the first Anabaptist group in Zürich. Seventy extant letters