

『同志社大学英語英文学研究』24号 (1980年3月)

## 研究ノート

# Notes on Japanese Anaphora\*

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In this paper I will discuss, rather fragmentarily, three problems in Japanese anaphora: the Specific Antecedent Condition on full-pronominalization,<sup>1</sup> the invisible  $\phi$ -pronoun,<sup>2</sup> and the distinction between full-pronominalization and  $\phi$ -pronominalization or reflexivization.

## I

### Specific Antecedent Condition

In this section I will concern myself with the counter-examples to a condition I proposed in Nakai (1977) concerning full-pronominalization in Japanese.

In Nakai (1977), the main purpose was to prove that *kare* and *kanozoyo* are not ordinary nouns, but pronouns. I proposed a condition on full-pronominalization, which I called the Specific Antecedent Condition.

#### (1) *Specific Antecedent Condition*:<sup>3</sup>

A full pronoun cannot be coreferential with an NP if the NP refers to a nonspecific person.

Compare the sentences in (2) and (3). In (2), the examples, where the antecedents are specific as to their referents, are all grammatical;

while in (3), the examples, where the antecedents are nonspecific as to their referents, are all ungrammatical.<sup>4</sup>

- (2) a. *sensei-wa* [*Mary<sub>i</sub>-ga kanningu-o sita*]<sub>s</sub> *node*  
 teacher-Top Subj cheated in the exam because  
*kanoz<sub>i</sub>yo<sub>i</sub>-ni reiten-o ataeta.*  
 she-to grade of zero gave  
 'The teacher, because Mary<sub>i</sub> had cheated in the exam,  
 gave a grade of zero to her<sub>i</sub>.'
- b. *John<sub>i</sub>-wa* [*kare<sub>i</sub>-ga zibun-de tukutta*]<sub>s</sub> *pooru-de*  
 Top he-Subj by himself made pool-in  
*mainiti oyoide imasu.*  
 every day swimming is  
 'John<sub>i</sub> swims every day in the pool which he<sub>i</sub> built by  
 himself.'
- c. *John-wa Mary<sub>i</sub>-ni kanoz<sub>i</sub>yo<sub>i</sub>-no heya-de atta.*  
 Top to she-of room-in met  
 'John met Mary<sub>i</sub> in her<sub>i</sub> room.'
- (3) a. *\*dare<sub>i</sub>-ga kare<sub>i</sub>-no ie-de sinda no ka.*  
 who-Subj he-of house-in died Question  
 'Who<sub>i</sub> died in his<sub>i</sub> house?'
- b. *\*subeteno gakusei<sub>i</sub>-wa* [*kare<sub>i</sub>-ga sudeni otona*  
 all student-Top he-Subj already adult  
*dearu*]<sub>s</sub> *koto-o zikakusite iru.*  
 is that-Obj aware is  
 'Every student<sub>i</sub> has realized that he<sub>i</sub> is already adult.'

- c. \**ono-ono-no gakusei-wa [kare-ga tukut-ta]<sub>s</sub>*  
 each student-Top he-Subj made  
*kikai-o kyoozyu-ni miseta.*  
 machine-Obj professor-to showed  
 'Each student<sub>i</sub> showed the professor the machine which  
 he<sub>i</sub> had made.'
- d. \**dareka-ga kare-no musume-o turete kita.*  
 someone-Subj he-of daughter-Obj taking came  
 'Someone<sub>i</sub> brought his<sub>i</sub> daughter along.'
- e. \**kimi-wa dare-o kare-no ie-de mita no ka.*  
 you-Top who-Obj he-of house-in saw Question  
 'Who<sub>i</sub> did you see in his<sub>i</sub> house?'

Kitagawa (personal communication) provided counter-examples to the Specific Antecedent Condition.

- (4) a. *tikatetu-kara detekita hitori-no otoko-ga,*  
 subway-from came out one man-Subj  
*kare-no mawari-o sewasinaku ikikau hitobito-ni*  
 he-of around restlessly pass people-to  
*itibetu-o ataeru koto-mo naku, tabako-o*  
 a glance-Obj without giving cigarette-Obj  
*toridasite hi-o tuketa.*  
 taking out lit

'A man<sub>i</sub>, who had just come out of the subway, took out a cigarette and lit it, without giving a glance at the people passing by him<sub>i</sub>, restlessly.'

- b. *aru otoko<sub>i</sub>-wa, rikonsite ninennimo naru*  
 a certain man-Top divorced two years passed  
*kare<sub>i</sub>-no tuma<sub>i</sub>-ni atta totan, mata kekkonsitaku natta.*  
 he-of wife-with met when again wanted to marry  
 'A certain man<sub>i</sub>, when he<sub>i</sub> saw his<sub>i</sub> wife whom he<sub>i</sub> had  
 been divorced from for two years, wanted to marry her  
 again.'

In footnote 13 in Nakai (1977), I cited these examples and mentioned that the Specific Antecedent Condition might have to be revised. But reconsidering the condition and the counter-examples, I have found that the examples in (4) are not counter-examples and therefore the condition does not have to be revised. The problem was that I was not aware of the distinction between "definiteness" and "specificness."

An indefinite noun phrase is either specific or non-specific. The following example, which contains the indefinite noun phrase *a dog*, is ambiguous in two ways:<sup>5</sup>

- (5) John is looking for *a dog*.

In one reading, there is a specific dog (e.g. Snoopy) that John is looking for. In the other reading, John is looking for any dog. The ambiguity will become clear when appropriate contexts are given:

- (6) John is looking for a dog.
- a. John has kept *it* for ten years, but it was stolen last night. (Specific)
  - b. John needs *one* for his experiment with a new medicine. (Nonspecific)

Notice that the noun phrases *hitorino otoko* and *aru otoko* serving as the antecedent for *kare* in (4) are both indefinite but specific. The speaker of the sentences can identify and specify the referent. Therefore the sentences in (4) are not counter-examples to the Specific Antecedent Condition.

The anaphoric relations shown in (2) and (4) are all intra-sentential. It is also useful to see how the Specific Antecedent Condition applies inter-sententially. Some examples which contain indefinite noun phrases are given below. In each example, the indefinite noun phrase can serve as the antecedent of the full pronoun only under the specific reading.

(7) *John-wa kaminoke-ga nagai onnanoko-to kekkonsuru*

Top hair-Subj long girl-with marry  
to itte imasu.

that saying is

'John says that he will marry a girl<sub>i</sub> who has long hair.'

a. *Demo, kanozoyo-wa John-yori se-ga takai node*  
but she-Top than height-Subj tall because  
*John-wa compurekkusu-o motte imasu.* (Specific reading)

Top inferiority complex having is

'But, because she<sub>i</sub> is taller than he is, he has an inferiority complex.'

b. *\*kanozoyo-wa mata se-mo takaku-naku-te-wa ikenai*  
she-Top also height-too should be tall  
*soodesu.* (Nonspecific reading)

it seems

'He also says that she<sub>i</sub> should be tall.'

- (8) *Michiko-wa Amerikazin<sub>i</sub>-to kekkonsitai to itte imasu.*

Top American-with want to marry that saying is

'Michiko says that she wants to marry an American<sub>i</sub>.'

- a. *asu kare<sub>i</sub>-o ryoosin-ni syookaisuru tumori desu.*

tomorrow he-Obj parents-to introduce plan

(Specific)

'She plans to introduce him<sub>i</sub> to her parents tomorrow.'

- b. *\*kare<sub>i</sub>-wa kanemoti-de-naku-te-wa naranai soodesu.*

he-top should be rich it seems

(Nonspecific)

'She says that he<sub>i</sub> should be rich.'

- (9) *Michio-kun-wa Yamamoto Yoko no yoona zyosei-to*

Top woman-with

*deito-o sitai to itte imasu.*

date-Obj want to do saying is

'Michio says that he wants to go on a date with a girl like Yoko Yamamoto.'

*\*mosi kanozyo<sub>i</sub>-o mituke-tara sugu Michio-kun-ni*

if she-Obj find soon to

*sirasete agate kudasai.* (Nonspecific)

tell him

'If you find her<sub>i</sub>, please tell Michio at once.'

Cf. *mosi sono yoona zyosei-o mituketara sugu Michio-kun-ni*

such a woman

*sirasete agete kudasai.*

'If you find such a woman, please tell Michio at once.'

Finally, let us consider the following example, which seems to be a counter-example to the Specific Antecedent Condition.

- (10) *Michio-kun-wa*, " *Zibun-no kekkon-aite-wa Yamamoto Yoko*  
                   Top      self-of      marriage-partner-Top  
*no yoona hito de nakutewa naranai. Boku-wa sono yoona*  
                   like woman should be                  I-Top      such  
*hito-o sagasu."* to *itte imasu. Sarani* " *mata,*  
                   find      that saying is                  Furthermore, also  
*kanozyo-wa rititekide nakereba naranai."* to-mo *itte imasu.*  
                   she-Top      intellectual should be                  that-too saying is  
 'Michio says, "I want to marry a woman who is like Yoko Yamamoto. I will look for such a woman." And he also says, "She should be intellectual."'

Both *zibun-no kekkon aite* and *Yamamoto Yoko no yoona hito*, which are assumed to be the antecedents for *kanozyo*, are indefinite and nonspecific. There is no specific girl that can be identified (either by the speaker or by the hearer). Yet full-pronominalization is allowed.

I interpret this in the following way. Though there is no specific identifiable girl, Michio has so concrete an image of the girl he wants to marry that he can identify the girl in his mind. Therefore he can use the full pronoun *kanozyo*.

To sum up, I have discussed counter-examples to the Specific Antecedent Condition, and have also shown that the Specific Antecedent Condition applies not only intra-sententially but also inter-sententially.

In the next section, I will discuss a very interesting topic: Is  $\phi$ -pronominalization the same as deletion?

## II

### Interpretive Analysis vs Deletion Analysis of Zero Pronominalization

As Kuroda (1965) points out, Japanese uses a zero form where English uses a concrete pronoun. For instance,

- (11) a. George<sub>i</sub> wears glasses when he<sub>i</sub> reads a book.  
 b. *George<sub>i</sub>-wa* [ $\phi$ <sub>i</sub> *hon-o yomu*]<sub>s</sub> *toki-ni megane-o kakeru.*  
           Top      book-Obj read when glasses-Obj wear

Let us call this anaphoric relation (between the antecedent and the zero form)  $\phi$ -pronominalization.

There are two analyses of  $\phi$ -pronominalization. One is what I call the interpretive analysis. Under this analysis, an abstract pronoun without phonetic specification is assumed to exist in the lexicon of the Japanese grammar, and the coreference relation between the invisible pronoun and its antecedent is determined at the surface level in terms of the interpretive rules. (11b) is derived from the following structure, where PRO is an abstract pronoun.<sup>6</sup>

- (12) *George-ga* [*PRO hon-o yomu*]<sub>s</sub> *toki-ni megane-o kakeru.*

The other analysis is what I call the deletion analysis. Under this analysis,  $\phi$ -pronominalization is assumed to be a deletion transformation. For example, Kuroda (1965) proposes the following rules:<sup>7</sup>

- (13) a. [+Noun]  $\longrightarrow$  [+Pro] in env. X - A - Y  $\bar{A}$  Z  
 b. [+Pro]  $\longrightarrow$   $\phi$

And Ohso (1976) also considers  $\phi$ -pronominalization to be a deletion transformation. Under their analyses, (11b) is derived from the following:

- (14) *George<sub>i</sub>-ga* [*George<sub>r</sub>-ga hon-o yomu*]<sub>s</sub> *toki-ni megane o kakeru.*

As far as I know, no evidence has been presented either for the interpretive analysis or for the deletion analysis. The interpretive analysis has not been taken seriously and  $\phi$ -pronominalization has been and is treated as deletion without any justification by Japanese linguists. In this section I would like to present an argument against the deletion analysis of  $\phi$ -pronominalization.

Ohso, who regards  $\phi$ -pronominalization as a deletion transformation, distinguishes  $\phi$ -pronominalization from Equi-NP deletion, but she does not provide any explicit arguments for the distinction. She seems to invoke only one criterion: the presence or absence of empathy. If I understand Ohso correctly,  $\phi$ -pronominalization deletion is an empathy-controlled phenomenon, while Equi-NP deletion is not.

According to Kuno and Kaburaki (1975), to "empathize with a person" is to describe the event from the person's point of view. Following Kuno and Kaburaki, Ohso proposes the Empathy Constraint on  $\phi$ -pronominalization.

- (15) *Empathy Constraint*:

When two NPs are coreferential and when the speaker is em-

pathizing with the referent of these two NPs [that is, the speaker is describing the event from the referent's point of view], the second NP can be zero pronominalized only when it is either in subject position or when it is in the object position of an object-centered verb like *kureru*. (Ohso (1976: p. 37))

The following example is an illustration.

- (16) *John<sub>i</sub>-wa* [ $\phi_i$  *tukarete nemuritakatta*]<sub>s</sub> *keredomo*  
           Top      tired      wanted to sleep   although  
*Mary-to*   *tenisu-o*   *sita*.  
           with      tennis-Obj  did

'John<sub>i</sub>, though  $\phi_i$  was tired and wanted to sleep, played tennis with Mary.'

It is obvious that the speaker is empathizing with (that is, describing the event from the point of view of) John, because the speaker is describing John's internal feelings. Therefore, according to Ohso's theory, (16) is an example of  $\phi$ -pronominalization and not of Equi-NP deletion.

Then let us see what happens if *John* is replaced by *dare* 'who.'

- (17) *dare<sub>i</sub>-ga* [ $\phi_i$  *tukarete nemuritakatta*]<sub>s</sub> *keredomo Mary-to*  
           *tenisu-o sita no desu ka*.

'Who<sub>i</sub> played tennis with Mary although  $\phi_i$  was tired and wanted to sleep?'

The sentence is grammatical, but something mysterious is happening.

The speaker is describing the event from the point of view of a person he cannot identify. Is it possible for the speaker to empathize with an unidentified person?

Neither Ohso nor Kuno and Kaburaki mention anything about such a case. Since the notion "empathy" has not been well studied, using empathy as the criterion to distinguish  $\phi$ -pronominalization deletion from Equi-NP deletion is a questionable procedure.

To sum up, I have given an argument against the deletion analysis of  $\phi$ -pronominalization. Of course it is not an argument supporting the interpretive analysis. In the next section, I will concern myself with the differentiation of full-pronominalization from  $\phi$ -pronominalization and reflexivization.

### III

#### Classifying Pronominalizations

So far, three kinds of pronouns have been proposed in Japanese grammar:  $\phi$ -pronoun, reflexive, and full pronouns. But it is often argued that *kare* and *kanozō* are not pronouns.<sup>8</sup> In fact, full-pronominalization behaves differently from  $\phi$ -pronominalization and reflexivization. In this section, I will point out in what respects full-pronominalization is different from the other two kinds of pronominalization.

Let us first enumerate the conditions so far proposed on Japanese anaphora.

- (18) (i) *Condition on  $\phi$ -pronominalization* (Nakai (1978))

Given a complex sentence, where NP<sub>1</sub> is in the ma-

trix clause and NP<sub>2</sub> is in an embedded clause :

If NP<sub>1</sub> is a  $\phi$ -pronoun and NP<sub>2</sub> is a full noun, then  
NP<sub>1</sub> and NP<sub>2</sub> are non-coreferential.

*Examples :*

- a. *George<sub>i</sub>-wa* [ *$\phi_i$  hon-o yomu*]<sub>s</sub> *toki-ni megane-o*  
*kakeru*
- b. \* *$\phi_i$*  [*George<sub>i</sub>-ga hon-o yomu*]<sub>s</sub> *toki-ni*  
*megane-o kakeru.*

(ii) *Condition on Reflexivization* (Oyakawa (1973, 1974))

The antecedent of the reflexive must be the subject of a sentence and command the coreferential NP to be reflexivized.

*Examples :*

- a. *John<sub>i</sub>-wa* [*zibun<sub>i</sub>-ga sore-o sita*]<sub>s</sub> *koto-o*  
Top self-Subj did it fact-Obj  
*mitometa.*  
admitted  
'John<sub>i</sub> admitted that he<sub>i</sub> had done it.'
- b. \**John-wa Mary<sub>i</sub>-ni* [*zibun<sub>i</sub>-ga rakudaisita*]<sub>s</sub>  
Top to self-Subj flunked  
*koto-o tutaeta.*  
fact-Obj informed  
'John told Mary<sub>i</sub> that self<sub>i</sub> had flunked.'

(iii) *Condition on Full-Pronominalization* (Nakai (1977))

A full pronoun can be coreferential with an NP if the NP precedes the full pronoun.

*Examples :*

- a. *Mary<sub>i</sub>-wa* [*John-ga kanoz<sub>o</sub>-ni*  
           Top          Subj she-to  
*kekkon-o moosikonda*]<sub>s</sub> *keredomo uresikunakatta.*  
 marriage-Obj proposed although was not glad  
 ‘Mary<sub>i</sub>, although John had proposed marriage to  
 her<sub>i</sub>, was not glad.’
- b. \**kanoz<sub>o</sub>-wa* [*John-ga Mary<sub>i</sub>-ni kekkon-o*  
                   *moosikonda*]<sub>s</sub> *keredomo uresikunakatta.*  
 ‘She<sub>i</sub>, although John had proposed marriage to  
 Mary<sub>i</sub>, was not glad.’

- (iv) *Specific Antecedent Condition*  
 (v) *Empathy Constraint* (Kuno and Kaburaki (1975) and  
 Ohso (1976))  
 (vi) The reflexive (*zibun*) and the full pronouns (*kare* and  
*kanoz<sub>o</sub>*) have their own semantic value.

(i) and (ii) say that  $\phi$ -pronominalization and reflexivization work downward only, and that the linear order of the antecedent and the pronoun is irrelevant. (iii) says that full-pronominalization works forward only, and that the vertical relation of the antecedent and the pronoun is irrelevant.

(vi) needs explanation. According to Inoue (1976), when the reflexive *zibun* is used in a sentence, it gives an accusatory tone to the sentence. For example, in (19),

- (19) *sensei-wa go-zibun-ga osiete irass<sub>o</sub>gaku* *gakusei-to*  
       teacher-Top self-Subj teaching is student-with

*kekkonsitagatte irassiyaru yo.* (Inoue's (20))

want to marry

'The professor wants to marry the student he himself is teaching.'

it is implied that "the teacher should be aware that the student he wants to marry is his own student." So Inoue argues that *zibun* has its own semantic value (and therefore that reflexivization is a surface interpretation and not a transformation). But there is dialectal or idiolectal variation. I do not feel any accusatory tone in (19).

It seems unquestionable that *kare* and *kanozyo* have their own semantic value. Ohso (1976) gives the following stylistic or sociological condition on full-pronominalization:

- (20) The application of *Kare* Pronominalization is more strongly conditioned stylistically and sociologically than ZP [Zero Pronominalization] and Reflexivization. . . . The referents of the pronouns arising as a result of *Kare* Pronominalization are also conditioned stylistically and sociologically. For example, they are usually not used to refer to small children. And many people who employ them avoid using them to refer to superiors (one's boss, teachers, elders, etc.) especially in formal occasions particularly in the presence of the referent. (Ohso (1976: p. 128))

Compare *a* and *b* in (21).

- (21) a. *\*watasi-no titi-wa [kare-ga zibun-de tukutta]*<sub>s</sub>  
 I-of father-Top he-Subj himself made

*kuruma-ni notte iru.*

car-in driving is

'My father<sub>i</sub> drives a car which he<sub>i</sub> himself made.'

b. *boku-no yuuzin<sub>i</sub>-wa [kare<sub>i</sub>-ga zibun-de tukutta]<sub>s</sub>*

I-of friend

*kuruma-ni notte iru.*

'My friend<sub>i</sub> drives a car which he<sub>i</sub> himself made.'

(18i) through (18vi) may be summarized in a table as follows:

(22)

	$\phi$ -Pronominalization	Reflexivization	Full-Pronominalization
Vertical relation between A and P	○	○	×
Linear relation between A and P	×	×	○
Specific Antecedent Condition	×	×	○
Emyathy-Controlled	○ (According to Ohso)	○	×
Independent Semantic Value	×	○ (According to Inoue)	○

A: Antecedent. P: Pronoun ○: Relevant ×: Irrelevant

It will be noticed immediately that full-pronominalization is differ-

ent from  $\phi$ -pronominalization and reflexivization. Whether this suggests that *kare* and *kanozoyo* are not pronouns need not be discussed here.<sup>8</sup> I close this section with a remark which I made in footnote 12 of Nakai (1978):

Reflexivization is downward only. In this respect, reflexivization and  $\phi$ -pronominalization are similar and they are different from full-pronominalization.

With respect to the applicability of the Empathy Constraint, reflexivization and  $\phi$ -pronominalization behave differently from full-pronominalization.

These two facts may support the claim that full-pronominalization is an anaphoric device recently adopted on the analogy of the pronouns of European languages.

#### Conclusion

To sum up, in Section I, I have discussed counter-examples to the Specific Antecedent Condition, and have given some examples of discourse anaphora. In Section II, I have discussed two analyses of  $\phi$ -pronominalization (the interpretive analysis and the deletion analysis), and have given an argument against the deletion analysis. In Section III, I have classified the three kinds of pronominalization and have pointed out that full-pronominalization is different from  $\phi$ -pronominalization and reflexivization.

#### Footnotes

- \* I am grateful to Ronald C. Taylor for his valuable comments on an earlier version of this paper. I would also like to thank the anonymous reviewer of *Doshisha Studies in English* for his or her helpful comments.

1. I call *kare* and *kanozyo* full pronouns. See Nakai (1977) for more details.
2. See Ohso (1976) and Nakai (1978) for more information of  $\phi$ -pronominalization.
3. The condition has been revised. The original condition given in Nakai (1977) is as follows:

A full pronoun cannot be coreferential with an NP if the NP refers to a nonspecific person *when the full pronoun and the NP are in the same sentence.*

The proviso "when the full pronoun and the NP are in the same sentence" has been omitted so that the condition is now applicable both intra- and inter-sententially.

4. The abbreviations used in this paper are as follows:

Subj: Subject Case Marker

Obj: Object Case Marker

Top: Topic Marker

5. According to Barbara H. Partee (1972), the ambiguity can be represented as one of the scope of an existential quantifier. (i) is interpreted either as in (ii) or (iii).

(i) John would like to marry *a girl his parents don't approve of.*

(ii)  $(\exists x)$  (x is a girl John's parents don't approve of  $\wedge$  John would like to marry x)

(iii) John would like  $(\exists x)$  (x is a girl John's parents don't approve of  $\wedge$  John marries x)

6. *George-wa* is assumed to be derived from *George-ga* by Topicalization. The derivation is as follows:

George-ga  
 $\downarrow$  Topicalization (Wa-Attachment)  
 George-ga-wa  
 $\downarrow$  Ga-Deletion  
 George-wa

7. To be accurate, in Kuroda's framework, (13a) is a transformational rule, and (13b) is a morphophonemic rule.
8. See Nakai (1977) for an argument that *kare* and *kanozyo* are pronouns.

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