A STUDY OF JAPANESE RELATIVIZATION

by

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A THESIS SUBMITTED IN PARTIAL FULFILMENT OF

THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in the Department

of

LINGUISTICS

We accept this thesis as conforming to the

required standard

THE UNIVERSITY OF BRITISH COLUMBIA

February, 1974
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Date February 18, 1974
ABSTRACT

A Japanese relative construction is different in some respects from that of English. This thesis is an attempt to investigate the nature of Japanese relativization in contrast to that of English relativization. It deals with some hypotheses concerning Japanese relativization and its related problems. Through the examination of those hypotheses, it is hoped that the nature of Japanese relativization will be clarified.

The analysis in this thesis is within the framework of a transformational generative grammar, which can be considered as a modified version of the theory proposed in Aspects of the Theory of Syntax, but which is not within the framework of so-called generative semantics. It is assumed in this thesis that every acceptable sentence has its deep structure and its surface structure, which are related by some appropriate transformations.

There are seven chapters in this thesis. Chapter I presents the characteristics of Japanese thematization
discussing the hypotheses about the underlying structure of a thematized sentence. The reason for this chapter is to investigate the hypothesis that relativization is closely related to thematization.

Chapter II presents a contrastive study of relativization between English and Japanese. It attempts to put the characteristics of Japanese relativization into relief. In this chapter, a claim is also examined that relativization is a movement transformation. Further, Ross's Complex NP Constraint and Coordinate Structure Constraint are investigated in connection with Japanese relativization.

Chapter III is concerned with a copying relativization hypothesis. The underlying structure of a relative construction is also examined.

Chapter IV examines the hypothesis that a relativized noun phrase in Japanese leaves its (reflexive) pronoun behind. In this chapter various conditions of Japanese relativization proposed so far are outlined in order to give an explanation to the source of the reflexive pronoun of the relative clause.
Chapter V investigates the hypothesis that a noun phrase in an adverbial clause is relativizable.

In Chapter VI, a hypothesis is examined that a relativizable noun phrase is a thematic noun phrase immediately followed by the particle wa. In this chapter, three types of examples are presented, which show that relativization applies to a non-thematized noun phrase as well as a thematized noun phrase.

Chapter VII is the summary and conclusions of this thesis. It also presents unsolved problems.

The Japanese examples are represented by using phonemic transcription.
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1.1 INTRODUCTION

In this chapter, we will deal with the theme-comment structure in Japanese because thematization is claimed to be related to Japanese relativization. We will present some characteristics of thematization and also discuss some hypotheses about the underlying structure of athematized sentence.

1.1.1 The theme-comment structure, which is the typical sentence structure of Japanese, is linearly arranged in the following way:

(1) NP-wa + sentence

\[
\begin{array}{c}
\text{(theme)} \\
\text{(comment-part)} \\
\text{(theme-comment structure)}
\end{array}
\]

where: \( \text{wa=thematic particle} \)

NP=noun phrase

However, there sometimes occurs an intervening particle
between the thematic NP and wa, such as kara 'from', de 'with' etc. In this case, the word-order of the structure is as follows:

(2) \[ \text{NP} \rightarrow \{kara\} \rightarrow \text{wa} + \text{sentence} \]

\[ \{\text{de}\} \rightarrow \text{etc.} \]

(theme) \quad \quad \quad \quad \quad \quad \quad (comment-part)

(theme-comment structure)

1.1.2 The theme is usually translated into 'speaking of NP' or 'as for NP'. When an intervening particle like kara 'from' or de 'with' occurs, the literal meaning of the theme is something like 'as for from NP' or 'as for with NP'. Therefore, as these literal translations show, the theme functions as a kind of "frame of reference" within which some statement is made about that theme. Or the theme restricts the scope of the succeeding statement. In other words, the comment-part of a sentence is some appropriate statement about the preceding theme.

1.1.3 A thematic NP is an anaphoric NP which refers to an NP in the preceding sentences. For example, observe the following sentences:
Please note interrogative sentence (3). The natural answer to (3) is sentence (4). In sentence (4), the theme Hanako-wa presupposes Hanako-ga of sentence (3). Thus, the thematic NP in NP + wa must be mentioned in preceding sentences. It must be anaphoric, that is, part of the old information presented. It must not be new information.

New information introduced in a sentence is usually called a focus. In sentence (4), Taro-o-ni, which is new information, functions as a focus. A focus receives strong accent. On the other hand, the rest of the sentence which is already understood between a speaker and a hearer is usually unstressed. Therefore, a NP, which is part of the old information, is unstressed in all cases, except when an NP + wa has some contrastive connotation as in (5).
(5) **Taro-wa ookii ga Hanako-wa ookiku nai.**
    big-is  not

(Lit.)* Taro is big, but Hanako is not big.*

Here, we follow Schachter's definition of a focus as "the focused constituent of a sentence is the one that expressed the non-presupposed part of the propositional meaning of the sentence."  

1.1.4 A thematic NP may not only be a part of a previous sentence but in some cases may be a whole sentence. Suppose we have the following assertion (7) in connection with a presupposed sentence (6).

(6) **Hanako taught somebody English.**

(7) **[[Hanako-ga eigo-o osieta ]_{NP} no-wa]_{one} Taroo datta.**

(Lit.)* The one to whom Hanako taught English was Taro.*

In this pseudo-cleft sentence (7), the thematic NP constitutes the whole part of the presupposed sentence (6).

1.1.5 As we have already seen, a thematic NP is anaphoric and has a feature [+ definite]. If it is not anaphoric, it
must be **generic**. Please note the following example (8).

(8) *Zoo-wa hana-ga nagai.*

**elephant trunk long-is**

(Lit.) 'As for **elephants**, their trunks are long.'

A **generic NP** is an NP which represents, without any antecedent, the whole class of an entity in question, such as 'human beings in general' 'dogs in general' etc..

### 1.2 THEMATIZATION HYPOTHESES

1.2.1 Now, let us examine some hypotheses about thematization.

According to Ross (1967), English topicalization is a **chopping transformation** which moves a topicalized NP to the leftmost position of a sentence as in (9). It can be formulated as (10).

(9) I'm going to ask Bill to make the old geezer take up these points later.

These points I'm going to ask Bill to make the old geezer take up later.
Claim 1

A theme-comment sentence is derived from a corresponding non-thematized sentence by a movement transformation.

Claim 2

A thematic NP exists originally in the deep structure of a sentence.

Claim 1 has the following two sub-arguments.

Claim 1.a

Thematization is a kind of chopping transformation.

Claim 1.b

Thematization is a kind of copying transformation and is followed by equi-NP deletion or pronominalization.
Let us examine here the nature of a chopping rule, a copying rule, and a feature-changing rule as proposed by Ross. Ross gives us the following definition in his dissertation:

If the structural index of a transformation has \( n \)-terms, \( a_1, a_2, \ldots, a_n \), it is a reordering transformation if its structural change has any \( a_i \) as its \( k \)th term, or if \( a_i \) is adjoined to its \( k \)th term, where \( i \neq k \). If a transformation reorders \( a_i \), and its structural change substitutes the identity element of some \( a_k \), \( i \neq k \), for the \( k \)th term of the structural index, the transformation is a chopping transformation. Other reordering transformations are called copying transformations.

\[
\begin{align*}
\text{Chopping rule} \\
\text{S.D. } & a_1 \rightarrow a_2 \rightarrow a_3 \rightarrow a_4 \quad \Rightarrow \quad \text{S.C.} \quad (a.1 \ 3 \ 2 \ 4) \\
& \quad \quad (b.1 \ 2+3 \ 0 \ 4) \\
& \quad \quad (c.1 \ 0 \ 3 \ 4+2) \\
& \quad \quad (d.4# [1 \ 0 \ 3# 2 \ 0]) \\
& \text{etc.}
\end{align*}
\]

\[
\begin{align*}
\text{Copying rule} \\
\text{S.D. } & \text{the same as above } \Rightarrow \quad \text{S.C.} \quad (a.2+1 \ 2 \ 3 \ 4) \\
& \quad \quad (b.1+2 \ 2 \ 3 \ 4) \\
& \quad \quad (c.1 \ 2 \ 3 \ 4+2) \\
& \text{etc.}
\end{align*}
\]

\[
\begin{align*}
\text{Feature-changing rule} \\
\text{By 'feature-changing rule' I mean any rule whose structural index is of the form (5.78a) and whose structural change is of the form of either (5.78b) or (5.78c).}
\end{align*}
\]
With the enumeration of Ross's three rules, let us examine claims 1.a and 1.b stated above.

1.2.2 Claim 1.a According to Makino, in order to have thematic NP at the leftmost position of a sentence, we must apply two steps of transformation:

(i) wa-insertion rule

(ii) thematization rule

Rule (i) is the process of inserting wa after an NP which already has another particle. This rule includes the process of transforming the sequence of the phrase from NP + particle + wa to NP + wa by the following rule:

(11) \[ C \rightarrow \emptyset / \_\_\_ \text{wa} \]

where: \( C = \text{ga, o, ni.} \) The rule is optional with ni but obligatory with ga/o.

Here, ga is a subject particle, o is a direct object particle, and ni is an indirect object particle.
Rule (ii) is an optional transformation which shifts the NP with wa to the initial position of a sentence. Thus, Makino gives the following rule for (ii).

(12) \((\text{Top})\)

\[
\begin{array}{c}
\# X \quad N + \text{wa} \quad \rightarrow \quad \emptyset + 2, \quad \emptyset + 1 \\
1 \quad 2
\end{array}
\]

\# = sentence boundary
Top = optional transformational rule

I will give my example of Makino's above two steps of transformation. Sentence (14) will be generated from the corresponding non-thematized sentence (13) in the following way:

(13) Hanako-ga Taroo-ni eigo-o osieta.
   (S.P.) (I.O.P.) (D.O.P.)
   English teach-past

(Lit.) 'Hanako taught English to Taro.'

\[\Rightarrow\] Hanako-ga Taroo-ni eigo-o-wa osieta.
\[\Rightarrow\] Hanako-ga Taroo-ni eigo-wa osieta.

(14) \[\Rightarrow\] Eigo-wa Hanako-ga Taroo-ni osieta.

S.P. = subject particle
I.O.P. = indirect object particle
D.O.P. = direct object particle
1.2.3 Claim 1.3. Now, I will introduce Muraki's analysis of thematization. Suppose sentence (14) has Taroo as a focus. Muraki's underlying structure of sentence (14) would be roughly representable as (15),

where $S_1$ is presupposed for $S_2$.

The necessary transformation process would be as follows:

(i) stress-specification

S.D. (15)
S.C. 1. Mark all the $S_1$ constituents as [-sts]. Obligatory.
2. If any $S_2$ constituent is identical to its corresponding $S_1$ constituent, specify it as [-sts]. Obligatory.
3. Specify any unmarked constituent as [+sts]. Obligatory.

(ii) particle insertion

(iii) presupposition deletion

If $S_1$ has no sister, delete it, and delete the verb-$Prsp$. Obligatory.
(iv) **thematization**\(^15\)

1. Chomsky-adjoin a non-stressed non-verbal constituent to the left of the topmost sentence as the theme. If it applies to a constituent within an embedded sentence, leave a pronoun behind. Obligatory if there is no theme in the sentence.

2. Chomsky-adjoin the thematizer wa to the right of the theme. Obligatory.

Now, if we follow Muraki's analysis, sentence (14) would be derived from its underlying structure (15), as is roughly illustrated in the following simplified tree-diagrams:

stress specification

```
S → NP₁ \( \downarrow \) NP₂ \( \downarrow \) V \( \downarrow \) Prsp
   \( \downarrow \) S₁ \( \downarrow \)
   \( \downarrow \)
   Hanako Taroo eigo osieta [+sts]
```

particle insertion

```
S → NP₁ \( \downarrow \) NP₂ \( \downarrow \) V \( \downarrow \) Prsp
   \( \downarrow \) S₁ \( \downarrow \)
   \( \downarrow \)
   Hanako-ga Dum-ni eigo-o osieta
   \( \downarrow \)
   Hanako-ga Taroo-ni eigo-o osieta [+sts]
```
If we formulate Muraki's thematization, it will be as follows:

\[
X \rightarrow NP \rightarrow Y \rightarrow Z \Rightarrow 2^# \begin{bmatrix} 1 & 2 & 3 & 4 \end{bmatrix}
\]
According to Muraki, after copying thematization we have a kind of equi-NP deletion, as is shown above.

1.2.4 Let us examine Makino's Claim l.a and Muraki's Claim l.b and decide which is correct. Observe the following sentences cited from Mikami.\(^\text{16}\)

(17)

(a) \[[\text{Senzitu katta}]_S\text{sake-ga}_N\text{P nokotte iru.}\]

the other day bought left-over-is

\[(\text{Lit.}) \text{ 'The sake which (I) bought the other day is left-over.'}\]

(b) \text{sake-wa, }[[\text{senzitu katta}]_S\text{ sake}_N\text{P \{no one\} nokotte iru.}]

\[(\text{Lit.}) \text{ 'Speaking of sake, the sake/which (I) one bought the other day is left-over.'}\]

When we postulate thematization as reordering, (17.b) is supposed to be derived from (a). If thematization is a chopping rule, the following sentence (c) and (d) will be generated from (a) by its application, but (b) is not derived from (a).
(17) 

(a) \[ ([\text{Senzitu katta}]_S \text{sake-ga-wa}]_{NP} \text{nokotte iru.} \]  
\[ \Rightarrow ([\text{Senzitu katta}]_S \text{sake-Ø-wa}]_{NP} \text{nokotte iru.} \]  
(c) \[ ([\text{Senzitu katta}]_S \text{sake-wa}]_{NP} \text{nokotte iru.} \]  

(Lit.) 'As for the sake which I bought the other day, it is left-over.'

(a) \[ ([\text{Senzitu katta}]_S \text{sake-ga-wa}]_{NP} \text{nokotte iru.} \]  
\[ \Rightarrow ([\text{Senzitu katta}]_S \text{sake-Ø-wa}]_{NP} \text{nokotte iru.} \]  
(d) \[ *\text{Sake-wa}, ([\text{senzitu katta}]_S -Ø-Ø]_{NP} \text{nokotte iru.} \]  

Sentence (17.c) is grammatical but it is not synonymous with (17.b). Sentence (17.d) is absolutely ungrammatical. In other words, (17.b) can not be derived by chopping thematization.

Rather, the above examples show that thematization is a copying rule. If we follow Muraki's copying thematization, the derivational process of (17.b) from (17.a) will be roughly as follows:

(17) (a)\[ ([\text{Senzitu katta}]_S \text{sake-ga}]_{NP} \text{nokotte iru.} \]  
\[ \Rightarrow \text{Sake-ga-wa}, ([\text{senzitu katta}]_S \text{sake-ga}]_{NP} \text{nokotte iru.} \]
(b) \[ \text{Sake}-\phi\text{-wa}, \left[ \left[ \text{senzitu katta} \right]_S \text{ sake-ga} \right]_{\text{NP}} \text{nokotte iru.} \]

Or from the above (b), by pronominalization,

\[ \Rightarrow \text{Sake-wa,} \left[ \left[ \text{senzitu katta} \right]_S \text{ no-ga} \right]_{\text{NP}} \text{nokotte iru.} \]

The following sentences are from Mikami.\(^7\)

(18) Nittyoku\textsubscript{i}-wa, zyosi-syokuin-ga kore\textsubscript{i}-ni ataru.

\text{day-duty female-staff this undertake}

(Lit.) 'As for day-duty, the female staffs (should) take charge of it.'

(19) Nihon-no gendai bungaku\textsubscript{i}-wa, sore\textsubscript{i}-ga hazimatte

\text{Japan's modern literature it begin}

kara sono\textsubscript{i} dentoo-ga dekita to ieru hodo-no

\text{since its tradition established that say-can degree's}

zikan-mo tatte inai.

\text{time is-not}

(Lit.) 'As for Japanese modern literature, since it started, the time has not elapsed to such an extent that we can say it has established its tradition.'

According to Mikami, we leave pronouns like sore 'it',

\text{sono 'its; the'} in a formal style and we have also kore
'this' or kono 'this' at least in an editorial tone of the press or in legal usage. If so, Makino's chopping thematization can not explain sentences like (18) and (19), which leave pronouns behind after thematization.

Therefore, it is necessary for us to consider thematization as copying rather than chopping. After copying thematization we have some conditions of equi-NP deletion or pronominalization.

1.2.5 Now, let us proceed to the examination of Kuno's and Muraki's hypotheses with regard to the source of a thematic NP, and decide which has a better explanation for Japanese thematized sentences.

In 1970, there was a controversy between Kuno and Muraki concerning the following sentence.

(20) Sakana-wa tai-ga ii.
    fish red-snapper

(Lit.) 'Speaking of fish, red-snapper is the best.'

Muraki says that the thematized sentence (20) comes from a corresponding non-thematized sentence (21) in the following way:
(21) Tai-ga sakana-no-naka-de *itiban ii.*

(Lit.) 'Red-snappers are the best among the fishes.'

thematization

⇒ Sakana-no-naka-de-wa tai-ga (itiban) ii.

deletion of no-naka-de

⇒ Sakana-∅-wa tai-ga ii.

Muraki's argument for his copying thematization hypothesis is summed up in the following way:

If thematized sentences did not have any corresponding non-thematized sentences, the theme NP-wa would have to be generated by the base rules independently of the following sentence. In other words, there would not be a requirement that the theme be identical to some constituent of the following sentence in the underlying structure. Then, we could not explain the fact that the thematized sentence typically has a slot in which the theme can fit, nor the fact that the particle which can occur at the end of the theme depends on the verb of the following sentence.20

Thus, he gives us the following examples to support his argument.21

(22)

(a) John-kara-wa Mary-ga kane-o karita.

(Lit.) 'From John, Mary borrowed some money.'
(b) *John-kara-wa Mary-ga kane-o kasi-\text{ta}.  
(Lit.) *From John, Mary lent some money.'

Judging from his above argument and his examples, the acceptability of (22.a) and the unacceptability of (22.b) correspond to the acceptability or unacceptability of their associated non-thematized sentences (23.a) and (23.b).

(23)
(a) Mary-ga John-kara kane-o kari-\text{ta}.
(b) *Mary-ga John-kara kane-o kasi-\text{ta}.

Further, the theme John-kara-wa in (22.a), especially the particle kara, does not originally exist in the underlying structure but is copied from the corresponding non-thematized sentence. He seems to think that there are the same selectional restrictions between thematic sentences and the corresponding non-thematized sentences.

On the other hand, Kuno says that a thematized sentence (20) does not have a corresponding non-thematized sentence, as is shown in his following sentence (24).

(24) *Sakana\[\text{ga}\] no\[\text{de}\] tai-ga \[\text{ni}\] etc.  
(non-thematized sentence)

Thus, he says that in sentence (20), the theme sakana-wa exists originally as the theme in the underlying structure,
Further, Kuno argues against Muraki's derivational process of (20), saying in the following way:

There is no justification for transformationally deleting `no uti / naka de`, which contains `uti` and `naka` (both meaning 'inside'). Indeed, `no uti / naka de` is not ordinarily deletable.

He gives the following example to support his counter-argument against Muraki.

(26)

(a) John to Bill to Mary-`no uti / naka de` Mary-ga and among

itiban yoku dekiru.
most well does-well

(Lit.) 'Among John, Bill, and Mary, Mary does the best.'

(b) ?? John to Bill to Mary-`ø-wa`, Mary-ga itiban yoku dekiru.
In his new book, Kuno cites the following examples from Mikami to support his claim that a thematic sentence does not always have its corresponding non-thematized sentence.

(27) Sinbun-o yomi tai *hito-wa, koko-ni arimasu.*
Newspaper read-want people here exist

(Lit.) 'Speaking of those who want to read newspapers, they (=newspapers) are here.'

(28) *Basyo-wa, okunai-setu-ga attooteki datta.*
Places indoor-theory predominant was

(Lit.) 'Speaking of the place (of the murder), the "indoor" theory was predominant.'

Kuno's argument for his so-called deep structure theme hypothesis would be summed up as follows:

There are thematic sentences for which there are no corresponding themeless sentences. ... Thus, we are forced to assume that themes exist as themes in the deep structure of thematic sentences.

Concerning the above two hypotheses, I agree with Kuno and reject Muraki's hypothesis for two reasons.

First, if we do not follow Kuno's hypothesis, there will be cases which can not be accounted for. For example,
Kuno's examples (27) and (28) do not have their corresponding non-thematized sentences. I will give two more examples to support Kuno's view. Observe the following sentences.

Notice that (b) sentences are not acceptable.

(29)

(a) Kore-wa simatta.
    this made a mistake

(Lit.) 'Oh, I screwed up.'

(b) *Kore-{\textit{ga}}\textsubscript{\textit{de}}\textsubscript{\textit{ni}} simatta.  (non-thematized sentence)

(30)

(a) Kuwasii koto-wa hon-no go peezi-o mite
    detailed thing book's page look-at
    kudasai.
    please

(Lit.) 'As for the details, please look at page five of the book.'

(b) *Kuwasii koto-{\textit{o}}\textsubscript{\textit{ni}} hon-no go peezi-o mite
    etc.
    kudasai.  (non-thematized sentence)

The above thematized sentences (29.a) and (30.a) can not be explained by Muraki's hypothesis because they do not
have any corresponding non-thematized sentences, as is shown in (29.b) and (30.b).

Second, with the ordering of a set of transformations, we could reply to Muraki's argument quoted on P. 17 in this chapter. My solution to the ordering of a set of transformations is as follows.

(i) We should have an underlying structure something like (25), for any thematic sentence.

(ii) **particle-copying**

(a) If the thematic NP happens to be identical to an NP in the comment-part, the particle (attached to the identical NP in the comment-part) must be copied to the thematic NP.

(b) If there is no identical NP in the comment-part, this rule does not apply.

(iii) **particle-deletion**

If the newly-inserted particle is *ga* or *o*, it must be deleted. The formulation of this rule would be something like Makino's rule (11) quoted on P. 8.
(iv) equi-NP deletion or pronominalization

(a) If the thematic NP has an identical NP in the comment-part, the identical NP must be deleted or pronominalized.

(b) If there is no identical NP in the comment-part, the rule does not apply.

With this set of transformations, Muraki's counterexample (22.a) and Mikami's sentence (17.b) will be analyzed in the following way.

(i) the underlying structure of (22.a)

```
S
  /   \\
theme / \\
  NP  wa
    /
  John

S
  /   \\
NP-ga NP-o NP-kara V
    /  \\
  Mary okane John  karita
```

(ii) particle-copying

John-kara-wa Mary-ga okane-o John-kara karita.

(iii) particle-deletion

This rule does not apply here.

(iv) equi-NP deletion

John-kara-wa Mary-ga okane-o ∅ karita.
(i) the underlying structure of (17.a)

```
NP      NP-o  V
|       |     |
senzitu sake katta
```

In this case, we have deletion relativization first, by which we derive the following string.

```
Sake-wa [senzitu φ katta] sake-ga
nokotte iru.
```

(ii) particle-copying

```
⇒ Sake-ga-wa [senzitu katta] sake-ga
nokotte iru.
```

(iii) particle-deletion

```
⇒ Sake-φ-wa [senzitu katta] sake-ga ...
```

(iv) pronominalization (optional)

```
⇒ Sake-wa [senzitu katta] no-ga ...
```
Now, we can explain the derivations of three types of thematic NP's in the following way.

(i) In case there is no identical NP in the comment-part.
   \[
   \text{NP} + \text{wa}
   \]

(ii) In case there is an identical NP in the comment-part and an intervening particle is \text{ga} or \text{o}. (In this case, the intervening particle is deleted by particle deletion.)
   \[
   \text{NP} + \text{particle} + \text{wa} \downarrow \\
   \emptyset
   \]

(iii) In case there is an identical NP in the comment-part and an intervening particle is not \text{ga} or \text{o}. (In this case particle deletion is not applicable.)
   \[
   \text{NP} + \text{particle} + \text{wa}
   \]

Thus, we are inclined to go along with Kuno's deep structure theme hypothesis. We think that a set of appropriate transformations can deal with Muraki's counter-argument, and that Kuno's hypothesis is the best representation of
of a theme-comment structure because it represents best the semantic function of the theme to restrict the scope of the comment-part.

1.3 THE P-MARKER OF A THEMATIZED SENTENCE

Let us examine the P-marker of a thematized sentence. Notice that both Kuno and Muraki claim that a thematic NP is Chomsky-adjoined to the left of a following comment-sentence. This P-marker is quite natural as the semantic representation of a theme-comment structure and also for the phonological reason that we seem to have a longer pause after the thematic NP than at any other place in a simplex sentence. This is true also for syntactic reasons.

A typical example for this P-marker will be found in the sentence which follows, where the comment sentence is a kind of predication of the theme. The structure of (31) is one which equates one thing with another, such as 'A is B', where A is the theme and B is the whole comment-sentence.
We have cross-linguistic evidence which may support our P-marker under discussion here. Park claims that the multiple subject construction in Korean is not a simple sentence, but a complex sentence construction, where embedded sentences function as the predicate phrases of each higher sentence. Lewkowicz also has a hypothesis that in Arabic a topic-comment sentence has a structure — NP + S, in which NP is a theme and S is a predicate that consists of an embedded comment clause.

The fact that a thematic NP relates semantically to the entire sentence also substantiates our claim for the P-marker of a thematic sentence. Observe the following sentences, which are from Muraki.

(a) [Sono hito-ga byooki da] kara ie-ni kaet-ta.

the person ill-is because home-to returned.

(Lit.) 'Since that person was sick, (I) went home.'
(b) \[ \text{Sono hito-wa [byooki da]_S} \text{ kara ie-ni kaet-ta}_S \]

(Lit.) 'As for that person_1, since he_1 was sick he_1 went home.'

(c) \[ \text{Sono hito}_1\text{-wa [sono hito}_j\text{-ga byooki da]_S} \]

\[ \text{kara ie-ni kaet-ta}_S \]

(Lit.) 'As for that person_1, he_1 went home because the person_j was sick.'

Normally each sentence given above means: (32.a)'the person who was sick and the person who went home are different.' (32.b)'The person was sick and went home.', and (32.c) 'The person went home because somebody else was sick.'.

These sentences lead us to say that a thematic NP relates semantically to the entire sentence, whereas the NP with ga in (32.a) and (32.c) relates only as far as the verb of the clause in which it occurs. This fact supports our claim that a thematic NP must be Chomsky-adjoined to the left of the following comment-sentence.

1.4 SUMMARY

To summarize the observations in this chapter, we
have discussed the following three topics:

a. Some characteristics of Japanese thematized sentences

b. Hypotheses about thematic noun phrases

c. The P-marker of thematic sentences.

With respect to (a), we have seen the following characteristics in Japanese thematized sentences.

(i) The word-order of a thematized sentence is as follows:

\[
\text{NP} \rightarrow \{\text{kara}\} \rightarrow \text{wa} + \text{sentence} \]

\[
\text{P} \quad \text{P} \\
\text{(theme)} \quad \text{(comment-part)}
\]

(ii) The theme functions to restrict the scope of the succeeding statement, and is usually translated as 'as for NP'.

(iii) A thematic NP is an anaphoric NP or a generic NP.
(iv) An anaphoric thematic NP refers either to an NP in a preceding sentence or to the whole preceding sentence.

Concerning topic (b), we have examined three hypotheses, that is, Makino's chopping thematization, Muraki's copying thematization, and Kuno's deep structure theme hypothesis. After the various examples we have concluded that Kuno's hypothesis has the best explanation for thematized sentences. Also, we have seen that the ordering of some transformations is needed to account for an intervening particle between a thematic NP and \textit{wa}.

Finally, we have observed that the theme must be Chomsky-adjoined to the left of the following comment-sentence, because this P-marker represents best the underlying structure of a thematic sentence, semantically and syntactically.
CHAPTER I

NOTES


3. In English, a cleft sentence and a pseudo-cleft sentence are respectively illustrated in the following sentences:

   (i) Tom broke the window.
   (ii) It was the window that Tom broke. (cleft sentence)
   (iii) What Tom broke was the window. (pseudo-cleft sentence)

The above pseudo-cleft sentence (iii) is translated into Japanese as follows:

   (iv) (Tom-ga kowasita) no-wa mado datta.

   where: no means 'the one; the thing'.
   datta 'was' is a copula verb.


5. The term Chomsky-adjunction is defined in the following way:

   When an element B is adjoined to node A, it is possible to make another node A over the original node A and have the new node A dominate both node B and the original node A. The following tree diagrams are a depiction of the Chomsky-adjunction.

   (i) 
   \[
   \begin{array}{c}
   \text{A} \\
   \text{X} \\
   \text{B} \\
   \text{Y}
   \end{array}
   \]  
   \[
   \begin{array}{c}
   \rightarrow \\
   \text{B} \\
   \text{A}
   \end{array}
   \]

   In this case, B is said to be Chomsky-adjointed to the left of the original node A. B and the original node A are said to be in sister relation in (ii).

   He did not say that thematization is a chopping rule, but judging from a reading of his rule, his thematization contains an implicit chopping rule.


12. Ibid., pp. 165 f.
13. Ibid., p. 154.
15. Ibid., pp. 168 f.

   The original orthography used by each author was kept except for some necessary modifications, such as underlining, labeled bracketing etc., for the purpose of direct quotes.
17. Ibid., pp. 140–144.
18. Ibid.
21. Ibid., p. 234.
23. Ibid., Chap. 19, pp. 10 f.
25. See Kuno, op. cit., Chap. 19, pp. 9 f.


28. Sentences (32 a, b, c) are from Muraki. He argues that (32, a) and (32, b) are ambiguous even though one of the readings may be more common than the other. See Muraki, op. cit., pp. 190-192.
CHAPTER II

JAPANESE RELATIVE CONSTRUCTIONS

AND

ROSS'S CLAIMS

2.1 INTRODUCTION

There are some characteristics which distinguish a relative clause construction in Japanese from that in English. In the following, we will enumerate the characteristics of Japanese relative constructions.

(i) A relative clause in Japanese precedes its head NP, as in (1), while in English it follows the NP.

(1) [boku-ga suwatte ita] isu
    I sitting-was chair
    (relative clause) (head NP)

(Lit.) 'the chair which I was sitting on'

(ii) There is no special relative morpheme, except for tokoro-no which corresponds to English 'who', 'which', 'that' etc., as is shown in example (1). Tokoro-no, whose literal meaning is 'of the place',
is only used in direct translation from foreign languages, and is not used in ordinary conversation or writing. Therefore, tokoro-no is out of our present study.

(iii) Relativization in Japanese is assumed to be a deletion process (or we could call it \( \emptyset \)-pronominalization), which deletes the relativized NP in an embedded clause, together with the following particle (or postposition).\(^1\) In English, however, relativization may be considered to involve a movement transformation and the preposition attached to the relativized NP is not deleted. Sentence (1) is derived from sentence (2), where **ni** 'on' undergoes deletion by relativization.

\[
(2) \left[ \text{boku-ga sono isu-ni suwatte ita}\right] \text{isu} \\
\Rightarrow \left[ \text{boku-ga } \emptyset \text{ suwatte ita}\right] \text{isu}
\]

(Lit.) 'the chair which I was sitting on'

(iv) Japanese relativization is said to be subject only to a restricted version of Ross's **Complex NP Constraint**. It is also said that an NP in an adverbial clause is relativizable. These topics will be detailed later.
(v) It has also been claimed that "Japanese has no phonological, morphological and syntactic distinctions between restrictive or non-restrictive clauses."\(^2\) They are distinguished only semantically as in the following examples.

(3) \([\text{Stanley Park-ni iru}] \text{ zoo} \quad \text{(restrictive)}
\text{ in is elephant}

(Lit.) ' the elephant which is in Stanley Park '

(4) \([\text{rikuzyoo saidai-no doobutu dearu}] \text{ zoo}
\text{ land-on biggest animals are}
\text{ (non-restrictive)}

(Lit.) ' elephants, which are the biggest animals on land '

2.2 THE RELATIVE CONSTRUCTION IN ENGLISH AND JAPANESE

In this chapter, we will discuss some of the problematic points with respect to the Japanese relative constructions. Let us enumerate them first.

(i) English restrictive and non-restrictive relative clauses and their counterparts of Japanese.
(ii) Whether or not Japanese relativization is a movement transformation.
(iii) Whether or not an element in a complex NP is relativizable.
(iv) The examination of the Coordinate Structure Constraint.

Now, let us examine these points one by one.

(i) English restrictive and non-restrictive relative clauses and their counter-parts of Japanese.

In order to provide a contrast between the use of relative clauses in English and Japanese, we will discuss the following:

(a) identity condition

(b) the problem of a relative marker

(c) the semantic roles of restrictive and non-restrictive relative clauses.

In English, a relative construction is divided into two types: restrictive relative constructions — hereafter abbreviated as RR-constructions and non-restrictive ones — NRR-constructions. An RR-construction is a kind of endocentric construction. It consists of a relative clause and its modified head NP, and the whole construction functions as an NP. In an RR-construction, a clause is usually said to
be an embedded sentence in the head NP of a matrix sentence. To generate a relative clause, a condition must be met that some NP within the embedded sentence be identical with the head NP. This condition is called hereafter identity condition.

From a semantic viewpoint, we can say with Schachter that the function of an RR-construction is:

to provide names for or ways of designating the multitude of identities that people wish to talk about, but for which there is no established single-noun designation.

The above two functional characteristics of RR-constructions — that is, the modification of the head NP and naming the entities in question — are common to Japanese.

Nevertheless, there are some characteristics which are not shared between English and Japanese. For example, in English we have relative pronouns to designate the syntactic relation between a clause and its head NP. A Japanese relative clause, as mentioned previously, does not have these kinds of substantial markers which explicitly indicate the existence of relative clauses. For example, observe the following sentences:
In (5.a), relative clause transformation adds the features [+pronoun] and [+WH] to the embedded NP 'the book' and moves it to the front of the embedded sentence. On the other hand, the only structural change in (5.b) is the deletion of the embedded identical NP. That is, no special relative markers are involved in Japanese.

Also, in English NRR-constructions are divided into two sub-types. Type 1 sentences, whose relative pronouns match the head NP's, are exemplified by (6) (7) and (8), while type 2 sentences, by (9). A type 2 sentence is a sentence whose relative pronoun matches the whole preceding clause, or part of the preceding VP as in the following sentences:

Tom is tall, which I will never be.

I saw that Tom was easy to please, which I should be, too.
(6) My father, who is now 80 years old, is still working.

(7) Elephants, (which live) in India and Africa, have long trunks.

(8) I went to Osaka, where I happened to see Mr. Sato.

(9) Tom remained silent, which made his wife still more angry.

The above sentences can be translated into Japanese as follows:

(10) (a) Boku-no titi-wa ima hatizyuu desu ga
    my father now 80 is
    mada hataraitte iru.
    still working-is

    (Lit.) 'My father — he is now 80 years old — is still working.'

(b) Hatizyuu-ni naru boku-no titi-wa mada
    80 become my father still
    hataraitte iru.
    working-is

    (Lit.) 'As for my father, who is 80 years old, (he) is still working.'
(11) (a) Zoo-wa India to Africa-ni sunde iru ga 
elephants and in living-are 
hanaga nagai. 
trunks long-are 

(Lit.) 'Elephants — they live in India and 
Africa — their trunks are long.'

(b) India to Africa-ni sunde iru zoo-wa 
and in living-are elephants 
hanaga nagai. 
trunks long-are 

(Lit.) 'As for elephants, which live in India 
and Africa, (their) trunks are long.'

(12) Boku-wa Oosaka-ni itta, (sosite) sokode 
I Osaka-to went and there 
guuzen Satoo-san ni atta. 
by chance met 

(Lit.) 'I went to Osaka, and there I happened to 
see Mr. Sato.'

(13) Tom-wa damatte ita, (suruto) sono koto-ga 
silent-was and then the thing 
okusan-o naosara okoraseto. 
wife still angry-cause-past 

(Lit.) 'Tom remained silent, and it made his wife 
still more angry.'
As sentence (13) shows, Japanese does not have type 2 sentences. Instead, we express the meanings of these sentences in the form of conjoined sentences or two independent sentences as in (13). This may be because Japanese does not have relative pronouns.

Similarly, because of the lack of a relative pronoun, (12), which expresses two events at one place in a sequential order, is represented only by juxtaposing the two sentences. That is, some kind of sentence in type 1-NRR-construction like (8) has no relative counter-part of Japanese.

As for an intrasentential NRR-construction like (6) and (7.), we have two kinds of Japanese translations, one is in terms of conjoined sentences and the other is in terms of embedding. However, we must note that it is said that there are no phonological, morphological, or syntactic distinctions between an ordinary RR-construction (for example (5.b)) and sentence (10.b). That is, in English we can distinguish between RR-constructions and NRR-constructions by means of distinctive intonation contours, the existence
or non-existence of commas when written, and by some restrictions such as, 'in case of NRR-sentences, the objective relative pronouns must not be deleted' etc..

Since Japanese has no NRR-RR distinctions, there is a possibility that if, for example, (11.b) is spoken to a person who does not know where elephants live and what elephants look like, he thinks that there are some other kinds of elephants whose trunks are not long. Thus, (11.a) is, more often used in ordinary speech when a speaker suspects that the information may be new to his hearer. Rather it may be that we should say (10.a) and (11.a) are more natural in Japanese.

Here we must examine the semantic property of intrasentential NRR-construction—for example (6) (7)—compared with that of the NRR-construction which is attached sentence-finally as in (8). A. Loetscher (1973)^5 says that in an (8)-type sentence, the preceding conjunct and the sentence-final NRR-conjunct are considered to be equivalent from the point of information value. His example (14) shows that $S_1$ and $S_2$ are interpreted as the
same-level information and constitute an answer as a whole.

(14) Q: Did you get anything to eat yesterday?

A: Oh, yes. Paul invited us to him,

\[ S_1 \]

where he offered us a splendid dinner.

\[ S_2 \]

On the other hand, in (6) and (7), which involve intrasentential NRR-constructions, the intended messages are contained respectively in each main clause, that is, the part of the sentence which excludes the NRR-clause. Loetscher gives the following examples: 6

(15) Q: What are the particular characteristics of a lark?

A: (a) The lark has a very sweet song. It builds its nest on the ground.

(b) The lark, which builds its nest on the ground, has a very sweet song.

Both of the two independent sentences in (a) equally express the characteristics of a lark, but in (b) the NRR-clause does not give any information to the preceding question.
and only the main clause is considered to be relevant to the question.

The reasons why we insert an NRR-clause into a main clause are, according to Loetscher (1973), that

(i) One can avoid treating a hearer as being un-informed by embedding such a sentence as a NRR-construction, thereby indicating that one tells this sentence only as a supplementary information, in order to recall an old fact, but it is not the actually intended message.

(ii) The message one wants to convey is contained in the main clause, but it needs an explanation which is given in the NRR-construction.

In other words, an NRR-construction is used in a situation where one wants to distinguish between hot news and less hot news.

As a conclusion, he says that only an intrasentential NRR-construction is exclusively low-ranked information, due to the position in a sentence called the parenthesis position. He also says it is often the case that these NRR-constructions can be paraphrased into simple non-relativized parenthetical sentences without changing the discourse sense, as in (16).
(16)  
(a) Sam, who Jack had given a blow on the head, went down and started squeaking.  
(b) Sam —— Jack had given him a blow on the head —— went down and started squeaking.  

Then, how about in Japanese? (12), which is the translation of (8), consists of two juxtaposed sentences, and each conjunct is equivalent concerning information value. That is, the conjunction **sosite** 'and then' conjoins two conjuncts as equal information value. The only difference between (8) and (12) is that the former uses a sentence-final NRR-construction and the latter uses a coordinate conjunction.

On the other hand, in (10.a) and (11.a), a conjunction **ga** seemingly conjoins the two conjuncts in the same way as in (12). But it is not true. To most native speakers, **ga** has mostly two meanings and functions. One meaning is purely 'but'. In this case, **ga** is strongly stressed and functions as a coordinate conjunction which juxtaposes two conjuncts. The other **ga** is unstressed and does not mean
'but'. In this latter case, the first conjunct + _ga_ part indicates that the information there is only supplementary and low-ranked. The main message which a speaker wants to convey is contained in the second conjunct. For example, take (11.a) again.

(11)
(a) **Zoo-wa India to Africa-ni sunde iru**[ga] hana-ga nagai.

(Lit.) 'Elephants — they live in India and Africa — their trunks are long.'

The main information is contained in the underlined part and the frame-part is subsidiary. _Ga_, in this case, does not function as a coordinate conjunction which conveys the two contrary messages, but functions only as a marker indicating that the supplementary information is expressed within the frame. The following example also points to the same phenomenon.

(17)
(a) **Sono gakusei-wa tetugaku senkoo da**[ga] the student philosophy majoring-in-is ima tosyokan-de mainiti sanzikan now library at every day 3-hours-for
hataraite imasu.
working-is

(Lit.) 'The student — (he) is majoring in philosophy — now works at the library for three hours every day. / The student, who is majoring in philosophy works at the library for three hours every day.'

(b) Sono gakusei-wa [tetugaku senkoo nan desu(yo)] is (I tell you) sosite ima tosyokan-de mainiti sanzikan and hataraitte imasu(yo)

(Lit.) '(I tell you) the student is majoring in philosophy and (I tell you in addition) he works at the library for three hours every day.'

The two pieces of information in the frames of (17.b) are equivalent, while in (17.a) the information within the frame is of secondary information value. Thus the above observation shows that an intrasentential supplementary NRR-construction is expressed in Japanese in the form of the frame as in (18). This may be due to the lack of relative pronouns.

(18) \[ \text{NP - wa ... \[ ga \]\[ - stress \[- contrastive] \]} \]
To summarize the above observations:

(English) | (Japanese)
---|---
I RR-construction (embedding) (e.g. (5.a)) | I RR-construction (embedding) (e.g. (5.b))

II NRR-construction

<table>
<thead>
<tr>
<th>Type 1</th>
<th>Type 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) intrasentential NRR-construction</td>
<td>sentence-final NRR-construction (e.g. (8))</td>
</tr>
<tr>
<td>(ii) sentence-final NRR-construction (e.g. (8))</td>
<td>coordinate construction (e.g. (12))</td>
</tr>
<tr>
<td></td>
<td>coordinate construction (e.g. (13))</td>
</tr>
</tbody>
</table>

Notice that we are not discussing here whether the deepest underlying representation for a relative construction involves a sentence embedded into an NP, or conjoined sentences proposed by S.A. Thompson.
What I want to say is that at least at some stage of derivation, the above mentioned embedding or conjoining is observed. It must also be said that our present study is mainly concerned with a so-called embedded relative clause.

2.3 Ross's Constraints and Relativization

2.3.1 The CNCP and Japanese Relativization

Let us turn to the claims of Japanese relativization proposed by Ross in his dissertation.

Ross argues in his dissertation that Japanese relative clause formation must involve reordering, and not simple deletion because it is subject to the following constraints:¹¹

(a) the Complex NP Constraint
(b) the Coordinate Structure Constraint
(c) the Cross-over Condition proposed by P.M. Postal.
He gives us the following definition of the above constraints:

(19) **The Complex NP Constraint (CNPC)**

No element contained in a sentence dominated by a NP with a lexical head noun may be moved out of that NP by a transformation.\(^{12}\)

The above constraint is explained in the following diagram.

(20)

(21) **The Coordinate Structure Constraint (CSC)**

In a coordinate structure, no conjunct may be moved, nor may any element in a conjunct be moved out of the conjunct.\(^{13}\)

(22) **The Cross-over Condition**

No NP mentioned in the structure index of a transformation may be reordered by that rule in such a way as to cross over a coreferential NP.\(^{14}\)

In CNPC, he thinks it necessary for the theory of grammar to distinguish between lexical items like 'claim'
and an abstract pronoun 'it' because this distinction accounts for the grammaticality and ungrammaticality of the following sentences and this distinction also holds even in Japanese. (23) and (24) are from Ross. 15

(23)

(a) I believed the claim that Otto was wearing this hat.

(b) I believed that Otto was wearing this hat.

(24)

(a) *The hat which I believed the claim that Otto was wearing is red.

(b) The hat which I believed that Otto was wearing is red.

His Japanese translation to (23) and (24) is (25) and (26).

(25)

(a) Otto-ga kono boosi-o kabutte ita
   this hat wearing-was
   to iu syutyoo-o watakusi-wa sinzita.
   that say claim I believed

(b) I believed that Otto was wearing this hat.
As a conclusion, he argues that the Japanese nouns koto, mono, and no, which mean roughly 'thing' are non-lexical while nouns like syutyoo 'claim' are lexical because the CNPC only prevents the elements with a lexical head NP from reordering.

Let us observe the crucial points with regard to the CNPC; (i) the necessity of the existence of a feature [+Lex] and (ii) the subjection of Japanese relativization to the CNPC.

First of all, we must note that Ross's example (26.a) is perfect to native speakers. We can easily present another example against Ross.
(27)

(a) \[
(\text{Bacon-ga} \ '\text{Hamlet}'-o \ kaita)_{s} \text{syooko-o}_{NP}
\]
\[
\text{wrote evidence [+ Lex]}
\]
\[
boku-wa \text{sitte iru.}
\]

(Lit.) 'I know the evidence that Bacon wrote 'Hamlet'.

(b) \[
(\text{Bacon-ga} \ '\text{Hamlet}'-o \ kaita)_{s} \text{koto-o}_{NP}
\]
\[
\text{thing [- Lex]}
\]
\[
boku-wa \text{sitte iru.}
\]

(Lit.) 'I know that Bacon wrote 'Hamlet'.

(28)

(a) \[
(\text{Bacon-ga} \ \emptyset \ kaita)_{s} \text{syooko-o}_{NP}
\]
\[
boku-ga \text{sitte iru}_{NP} \ '\text{Hamlet}'_{NP}
\]

(Lit.)*' 'Hamlet', which I know the evidence that Bacon wrote '

(b) \[
(\text{Bacon-ga} \ \emptyset \ kaita)_{s} \text{koto-o}_{NP}
\]
\[
boku-ga \text{sitte iru}_{NP} \ '\text{Hamlet}'_{NP}
\]

(Lit.) ' 'Hamlet', which I know that Bacon wrote '

It would be helpful for us to add Kuno's following counter-examples to Ross's proposal saying that the element in a relative clause can not be moved out of
(29)  
(a) \[\text{[Sono } \text{sinsi-wa kite iru]_{S} \text{ yoohuku-ga]}_{NP}\]
the gentleman wearing-is suit
\[\text{yogorete iru. } [+ \text{ Lex}]\]
dirty-is

(Lit.) '"The suit which the gentleman is wearing is dirty.'"

(b) \[\text{[\emptyset kite iru]}_{S} \text{ yoohuku-ga]}_{NP}\]
wearing-is suit
\[\text{yogorete iru]}_{S} \text{sinsi]}_{NP}\]
dirty-is gentleman

(Lit.) '"A gentleman who the suit that (he) is wearing is dirty.'"

(30)  
(a) \[\text{[Sono sensei-wa osiete ita]}_{S} \text{ seito-ga]}_{NP}\]
the teacher teaching-was student
\[\text{rakudaisita. } [+ \text{ Lex}]\]
flunked

(Lit.) '"The student who the teacher was teaching flunked.'"

(b) \[\text{[\emptyset osiete ita]}_{S} \text{ seito-ga]}_{NP}\]
teaching-was student
If we assume Japanese relativization to be a movement transformation, we are tempted to doubt that the CNPC applies to Japanese. Notice that we have seen in (26) ~ (28) that at least in Japanese relativization, the distinction between [+ Lexical] and [- Lexical] does not seem to work at all, though Ross claims that there is a strong evidence for the existence of the distinction in Japanese.

Let us now observe Ross's claim that Japanese relativization is also subject to the Cross-over Condition.

First, he argues that the Japanese version of passivization can not apply to a reflexive sentence as in (31). Sentence (31) is his example for his claim.

(31) (a) Sono hito$_{i}$-wa zibun$_{i}$-o aratta.
     that man    self    washed
(Lit.) 'That man$_1$ washed himself$_1$.'

(b) *Zibun$_1$-wa sono hito$_1$-ni arawareta.

(Lit.) 'That man$_1$ was washed by himself$_1$.'

We argue against Ross in the following way:

First, example (31.a) itself is unacceptable to most native speakers. N.A. McCawley's **Like-NP Constraint** explains the ungrammaticality of the sentence in such a way that:

Japanese has a syntactic constraint, the Like-NP Constraint, which discards the sentences as ungrammatical if the reflexive and its antecedent are in peer relationship.\footnote{21}

If we follow her, the P-marker of (31.a) would be represented as (32).

(32)

\begin{center}
\begin{tikzpicture}
  \node (S) {S};
  \node (NP1) [below left of=S] {NP$_1$ \[\text{sono hito}_1\]};
  \node (NP2) [below right of=S] {NP$_2$ \[\text{sono hito}_1\] \[\text{aratta}\]};
  \draw (S) -- (NP1);
  \draw (S) -- (NP2);
\end{tikzpicture}
\end{center}

Notice NP$_1$ and NP$_2$ are in peer relationship, so NP$_2$ can not be reflexivized nor can it be left untouched.
Because if it is left untouched, we have a reading that 'the person washed somebody else.' When we want to express Ross's English translation in idiomatic Japanese, we will have the following sentence,

(33) Sono hito\textsubscript{1}-wa zibun\textsubscript{1}-no karada-o aratta.
     that man  self's  body  washed

(Lit.) ' That man washed his body.'

Second, note that the passive sentence of (32) is neither (34) nor Ross's (31.\textit{b}).

(34) *Zibun\textsubscript{1}-no karada-wa sono hito\textsubscript{1}-ni
    self's  body  that man-by

     arawareta.
     wash-passive-past

(Lit.) *' Self's body was washed by that man.'

As Muraki (1970) indicates, it is not yet proven that passivization should be a reordering transformation in Japanese.\textsuperscript{22} Rather many scholars claim that Japanese passivization is not a reordering transformation on the ground that some passive sentences have no corresponding active sentences as in (35).
The underlying structure of (35.a) would look like (36).

After the verb-raising and the subject-raising of $S_2$ into the matrix sentence, we could get (35.a) as a surface structure. Therefore, if the Japanese passivization is not a reordering transformation, the Cross-over Condition will become entirely irrelevant.

Ross gives another example as evidence for the
applicability of the Cross-over Condition. This time, he uses Japanese relativization for evidence. Observe his following example. The underlined lexical items in (37) are mine for the purpose of correction.

(37)

(a) *hit'o-ga naga to itta hit'o
    zibun ooki
    he tall that said man

(Lit.) 'the man who said he was tall'

(b) *hit'o-ga naga to itta hit'o
    ooki
    man tall that said man

(Lit.) 'the man who he said was tall'

He gives the following underlying structure of (37).
He says, "the boxed NP can be relativized, although the circled NP can not." This is not exactly clear. As Muraki says, if Japanese relativization involves reordering of a relativizable NP in the rightward direction, the boxed NP can not be relativizable. It must cross over the circled NP in its movement to the right. Rather the circled NP should be relativizable.

Nevertheless, in fact if the circled NP were to undergo relativization, it would generate (37.b) incorrectly, which is ungrammatical. On the other hand, (37.a) is acceptable when we correct *kare* 'he' into *zibun* 'self', as in (39).

\[
(39) \begin{array}{c}
\llbracket \text{zibun}_i\text{-ga ooki}\rrbracket_S \text{NP to itta}_{S \text{ hito}_i} \text{NP}
\end{array}
\]

That is, only the boxed NP can be relativizable in spite of the Cross-over Condition.

In order to derive (39) correctly, we must postulate its process in the following way:

(i) The reflexivization of the circled NP under identity with the boxed NP which
meets the **Subject-antecedent Condition**. The **Subject-antecedent Condition** requires that:

The reflexive refers back to the subject in the same simplex sentence or the subject in any higher sentence.  

(ii) The relativization of the boxed NP as a deletion process.

If we conclude that relativization is a deletion transformation, the **Cross-over Condition** has nothing to do with relativization. If we assume relativization is reordering even in Japanese, and believe in the applicability of the **Cross-over Condition** to Japanese (whose examination is beyond the scope of our present study), we block a grammatical sentence (39) incorrectly.

Thus, we must reject Ross and others with respect to their relativization as a movement transformation. If Japanese relativization is only a deletion process, the CNPC itself has nothing to do with it. We can explain the deletion of the relativized circled NP in (40) by saying that the circled NP is deleted as relativization.
under identity with the boxed NP.

(40)

2.3.2 THE CSC AND JAPANESE RELATIVIZATION

We will now examine Ross's CSC (the Coordinate Structure Constraint). According to him, a coordinate structure is defined "as any structure conforming to the schematic diagram in (41)", although a conjunction is a
more abstract, language-independent representation of 'and' or 'or,' and this abstract conjunction "should be understood as either preceding all its conjuncts, as in English, French, etc., or as following them, as in Japanese".²⁸

(41)

After the applications of conjunction copying, where a conjunction is Chomsky-adjoined to each conjunct, and the deletion of the first conjunction to (41), we could get an ordinary coordinate construction, as in (42).

(42) I went to the store and Mike bought some whisky.

Now, if 'some whisky' in (42) is moved out of the second conjunct by relativization, it generates an ungrammatical sentence (43). (42) and (43) are from Ross.²⁹

(43) *Here's the whisky which I went to the store and Mike bought ∅.
Similarly, the underlined elements in (44.a) can not be moved out of each conjunct by relativization or question formation.

\[(44)\]

(a) The nurse polished her trombone and the plumber computed my tax.

(b) *The plumber who the nurse polished her trombone and \(\emptyset\) computed my tax.

Also, an NP which is a conjunct in a coordinate NP structure can not be relativized nor be reordered by WH-question formation. (44) and (45) are from Ross. 30

\[(45)\]

(a) He will put the chair between

\[\text{[NP [NP some table]}_{\text{NP}} \text{ and [NP some sofa]}_{\text{NP}} \text{]}_{\text{NP}}\]

(b) *What sofa will he put the chair between

some table and \(\emptyset\) ?

Thus, he proposed his so-called universal constraint (CSC) cited on page 51 in this chapter.
Would this CSC be applicable to Japanese? First, it must be noted that Japanese WH-question formation is irrelevant concerning the CSC because a WH-question word replaces the NP in question without involving a movement transformation, as in (46), which is the translation of (45).

(46)
(a) Kare-wa teeburu to sohaa-no aida-ni
   he table and sofa between
   sono isu-o oku.
   the chair put
(b)               dono sohaa
   what sofa

___     ka?
Q.P.

Q.P. = question particle

We will now examine the relativization of an NP in a coordinate NP construction. For example, take (46.a) and relativize, respectively, the conjunct NP's.

(47)
(a) *[kare-ga [teeburu to ®-no]aida-ni
   sono isu-o oku] sohaa
(Lit.) *' the sofa which he will put the chair between some table and $\emptyset$ *

(b) *[kare-ga $[\emptyset$ to sohaa-no] aida-ni isu-oku] teeburu

(Lit.) *' the table which he will put the chair between $\emptyset$ and some sofa *

Similarly, observe the following sentences:

(48)

(a) *[Taro to Hanako-wa] nihongo-o hanasu. and Japanese speak

(Lit.) *' Taro and Hanako speak Japanese.'

(b) *[[Taro to $\emptyset$-ga] nihongo-o hanasu] Hanako

(Lit.) *' Hanako, who Taro and $\emptyset$ speak Japanese'

(c) *[[$\emptyset$ to Hanako-ga] nihongo-o hanasu] Taro

(Lit.) *' Taro, who $\emptyset$ and Hanako speak Japanese *'

(49)

(a) *[Taro ka Hanako-ga] soko-e itta. or there went

(Lit.) *' Either Taro or Hanako went there.'

(b) *[[Taro ka $\emptyset$-ga] soko-e itta] Hanako

(Lit.) *' Hanako, who either Taro or $\emptyset$ went there *'
The above examples show that the CSC does apply to the relativization of the conjunct NP in a coordinate NP construction.

Next, observe the following sentences:

(50)
(a) Taro-wa piano-o hiki (sosite) Hanako-wa
    play and
    uta-o utatta.
    song sang

(Lit.) ' Taro played the piano and Hanako sang.'

(b) * Taro-ga piano-o hiki (sosite) $\emptyset$ uta-o
    utatta] Hanako

(Lit.) *' Hanako, who Taro played the piano and $\emptyset$ sang.'

(c) * [ Hanako-ga piano-o hiki (sosite) Hanako-ga uta-o
    utatta ] Taro

(Lit.) *' Taro, who played the piano and Hanako sang.'
(51)
(a) Taroo-wa kuruma-de dekaketa ga boku-wa car-by went-out but I
uti-ni ita.
home-at was

(Lit.) ' Taro went out by car, but I stayed at home.'

(b) Taroo-wa ∅ dekaketa ga boku-wa uti-ni ita kuruma

(Lit.) ' the car by which Taro went out and I stayed at home.'

As is shown above, the NP in a coordinate sentence construction is also subject to the CSC. This is due to the fact that the head NP is semantically related only to the conjunct in which the identical NP is contained, and not to the other conjunct. For example, in (51.b), the head NP kuruma 'car' has nothing to do with the second conjunct boku-wa uti-ni ita 'I stayed at home'. Similarly, in (48.b) the head NP Hanako has the relation with only part of the relative clause — that is, nihongo -o hanasu 'speak Japanese', but Taroo in the relative clause does not constitute any relevant part of the
description of the head NP Hanako.

We must conclude that the fact that the above examples show the applicability of the CSC to Japanese is not evidence for Ross's claim that Japanese relativization is a movement transformation. Indeed, the relativization of only one NP in a coordinate structure does not generate a meaningful relative clause for the head NP.

If the relativized NP occurs both in the two conjuncts and if these two NP's are identical concerning grammatical functions, then the derived sentence is grammatical, and the relative clause constitutes an appropriate description of the head NP as Makino states.\textsuperscript{31} For example, observe the following sentences:

(52)

(a) Taroo-ga sono sake-o katta ka Ziroo-ga

_\text{the} _\text{bought or} _\text{it from received} _\text{Hanako-kara moratta.} _\text{received}

(Lit.) ' Taro bought the sake or Ziro received it from Hanako.'

(b) Kore-wa[Taroo-ga _∅ _katta ka Ziroo-ga

Hanako-kara _∅ _moratta]sake desu.
(Lit.) 'This is the sake which Taro bought $\emptyset$ or Ziro received $\emptyset$ from Hanako.'

(53)
(a) Taroo-wa sono hon-o katta ga Hanako-wa the book bought but
sono hon-o kawanakatta.
the book buy-not-past

(Lit.) 'Taro bought the book, but Hanako did not (buy it).'

(b) Kore-wa[Taroo-wa $\emptyset$ katta ga Hanako-wa $\emptyset$
this
kawanakatta]hon desu.
book is

(Lit.) 'This is the book which Taro bought but Hanako did not.'

This fact is explained by Ross in such a way that a relative clause is not subject to the CSC when it works 'across the board'. According to Ross, an across-the-board-rule is the one which applies to all the conjuncts simultaneously when some element is contained in all the conjuncts. Therefore, as is shown in the following examples, relativization applies to the NP's in both conjuncts 'across the board', regardless of their grammatical functions.

(54)
(a) Saisyo-ni Taroo-ga Ziroo-o nagutta ka
first
hit or
soretomo Ziroo-ga saisyo-ni Taroo-o ketta.
(or) first kicked

(Lit.) 'First Taro hit Ziro, or Ziro kicked Taro first.'

(b) [Saisyo-ni Taroo-ga シ노 nagutta ka soretomo
ザリオ-o saisyo-ni ketta] Ziroo-wa kanzen-ni
yopparatte ita.
drunk-was

(Lit.) 'Ziro, whom Taro first hit or who kicked Taro first, was completely drunk.'

(55)
(a) Taroo-wa tiisai ga boku-wa sumoo-de
short but I in Sumo
kare-ni katenai.
him defeat-can-not

(Lit.) 'Taro is short, but I can not defeat him in Sumo wrestling.'

(b) [ シノ tiisai ga boku-ga sumoo-de シノ katenai]
Taroo

(Lit.) 'Taro, who is short but whom I can not defeat in Sumo wrestling'

Finally, observe the following sentences:
(56)

(a) \[
\left\{ \begin{array}{l}
(Boku \text{ to } Taroo) \\
(Bokutati)
\end{array} \right\} \text{-ga sakaya-ni itte Taroo-ga liquor-store to went and sake-o katta.}
\]

(Lit.) ' (I and Taro) went to the liquor store and Taro bought some sake.'

(b) Kore-wa \[
\left\{ \begin{array}{l}
(boku \text{ to } Taroo) \\
(bokutati)
\end{array} \right\} \text{-ga sakaya-ni itte Taroo-ga katta] sake desu.}
\]

(Lit.) ' This is the sake which \{ I and Taro \} went to the store and Taro bought.'

One may say that (56) is a kind of ostensibly conjoined structure from which items can be moved out. J.D. McCawley says:

Ostensibly conjoined structures in English have parallels in Japanese, or rather these structures are more freely allowed in Japanese. 33

Ostensibly conjoined structures are not clearly defined in Ross's dissertation, but judging from his and McCawley's examples, the structures in question are exemplified in (57) and (58), which are respectively from Ross and McCawley. 34
(57)
(a) I went to the store and bought some whisky.

(= I went to the store to buy some whisky.)

(b) Here's the whisky which I went to the store

(and bought).

(58)
(a) Taroo-wa daigaku-e itte, boodoo-o okosita.

university-to go riot caused

(Lit.) ' Taro went to the university and started

a riot.'

(b) Taroo-ga daigaku-e itte, okosita boodoo

(Lit.) ' the riot which Taro went to the university

and started '

In these cases, the subject NP's are identical in

all the conjuncts.

Further, according to Ross, the syntactic indications

of ostensibly conjoined structures are as follows: 35

a. It is only with a non-stative verbs as the

main verb of the second conjunct that sentences

(4.101.a) can be constructed.

b. The second conjunct can not be negative.
c. There are restrictions on the tenses that may appear in such sentences as (4.101.a).

In the above quotation, the sentence (4.101.a) is the sentence (57.b) here.

These syntactic indications do not hold in Japanese.

For example, we can say in the following way:

(59)
(a) Taroo-ga sakaya-ni itta ga sono sake-o liquor-store-to went but the
    kaenakatta.
    buy can-not-past

    (Lit.) 'Taro went to the store, but (he) could not buy the sake.'

(b) Kore-wa [Taroo-ga sakaya-ni itta ga ø this
    kaenakatta] sake desu.
    is

    (Lit.) 'This is the sake which Taro went to the store but could not buy ø.'

(60)
(a) Taroo-wa London-ni ryuugaku site ita in study-abroad doing was
    ( ga )
(sikasi) kare-wa sono kan hotondo
    but he the time-for almost
noiroyooze datta,
[+ stative]
neurosis was

(Lit.) 'Taro studied in London, but he was almost a neurotic during that period.'

(b) [Ø London-ni ryuugaku site ita ga Ø sono kan hotondo noiroyooze datta] Taroo-ga tootoo [+ stative] finally kaette kita. returned

(Lit.) 'Taro, who studied in London, but was nearly neurotic during that period, finally came back (to Japan).'

Furthermore, take (56) again. In (56.b) the subjects in each conjunct are not perfectly identical. Therefore, I doubt (56) is an ostensibly conjoined structure, and I think this example constitutes a counter-example to Ross's CSC.

Nevertheless, we must admit that the CSC does apply to Japanese in most cases, and at the same time the constraint must be re-examined and revised in order to hold to all the examples in Japanese.

It must be pointed out that the fact that Japanese
relativization is, in most cases, subject to the CSC is not the evidence for the claim that Japanese relativization is not a deletion process but a movement transformation. Whether or not we assume it to be a movement transformation, the ungrammaticality of the sentences which violate the CSC comes from the semantic anomaly of the derived relative clauses. Further, there is no reason nor any syntactic evidence for us to conclude that because the CSC is applicable to Japanese relativization, it must not be a deletion transformation. Rather, it is quite natural for us to believe on the basis of the investigation of the CNPC that it is a deletion process.

2.4 CONCLUSION

What we have discussed in this chapter are as follows:

a. some characteristics of Japanese relative constructions

b. the contrastive study of English and Japanese relativization
c. Ross's hypothesis about Japanese relativization in connection with his CNPC and CSC and Postal's Cross-over Condition.

We have shown that in Japanese, relativization must meet the identity condition, exactly as in English. However, because of the lack of relative markers, Japanese has no sentence-final NRR-construction. Instead of that construction, we use a juxtaposed coordinate construction in Japanese.

Concerning an intrasentential NRR-construction, Japanese has no such construction, either, for the same reason mentioned above, namely, that there is no relative marker. Instead, we use either an RR-construction or a coordinate construction which contains the frame が intrasententially. The semantic role of this coordinate construction seems to be similar to that of the English intrasentential NRR-construction.

In section (2.3), we have said the following.

(i) Japanese relativization is not a movement transformation but a deletion process.
(ii) As Japanese relativization does not involve a movement transformation, the Cross-over Condition is irrelevant to it.

(iii) CNPC is also irrelevant to it for the same reason.

(iv) Japanese examples do not support Ross's distinction between lexical head nouns and non-lexical head nouns in his CNPC.

(v) In most (but not all) cases, Ross's CSC is applicable to Japanese relativization. But that fact is not evidence for a reordering relativization hypothesis.
CHAPTER II

NOTES

1. Every particle is not deletable in relativization. Some particles like *kara 'from' are deletable in some cases, but not in others. Observe the following sentences.

(i) 
(a) Sono mado-kara-wa yama-ga mieru.
the window from mountain visible
(Lit.) '(As for) from that window, the mountain is visible.'
(b) [Yama-ga mieru] mado
(Lit.) 'the window from which the mountain is visible.'

(ii) 
(a) Vancouver-kara-wa Hanako-ga kita.
came
(Lit.) 'As for from Vancouver, Hanako came.'
(b) *[Hanako-ga kita] Vancouver
(Lit.) 'Vancouver from which Hanako came.'


6. Ibid., p. 363.

7. Ibid., pp. 365 f.

8. Ibid., p. 366.

9. Sentences (16.a) and (16.b) are from Loetscher. Ibid., pp. 361 & 366.


12. Ibid., p. 70.

13. Ibid., p. 89.

14. Ibid., p. 73.

15. Ibid., p. 70.

16. Ibid., p. 75.

17. Ibid., p. 76.


   The notion of 'peer' is due to Postal. He defines the NP's which are peers in the following way:

   "Two NP, NP₁ and NP₂, neither of which dominates the other nor is co-ordinate with the other in a phrase marker P are peers with respect to a node S, just in case the paths between each of these NP and S, are such that they contain no NP-nodes not separated from the starting point NP, NP₁ or NP₂, by a node S."


24. Ibid.

25. Ibid.
26. N.A. McCawley, op. cit., p. 4.

27. For example, Makino assumes that Japanese relativization is a movement transformation. His relativization rule is as follows:

\[
(T_{ob}) \left[ \begin{array}{c}
+ \text{DCL} \\
X - \text{NP} - Y
\end{array} \right]_{S_1} \left[ \begin{array}{c}
\text{+ declarative}
\end{array} \right]_{S_2}
\]

\[
1 \ 2 \ 3 \ \ 4 \ 5 \ 6
\]

\[
\Rightarrow \emptyset, \emptyset, \emptyset, 4, 1+2+3+5, 6
\]

\[
\Rightarrow \emptyset, \emptyset, \emptyset, 4, 1+\emptyset+3+2+5, 6
\]

\[
\Rightarrow \emptyset, \emptyset, \emptyset, 4, 1+\emptyset+3+\emptyset+5, 6
\]

where: \(2 = 5\)

\(T_{ob}\) = obligatory transformation


CHAPTER III

JAPANESE RELATIVIZATION

AND

MURAKI'S HYPOTHESES

3.1 POINTS OF DISCUSSION

In this chapter we will discuss Muraki's claims (1970) which are shown below.¹

a. The underlying structure of a Japanese relative clause is Chomsky-adjointed to the right of the head NP, exactly as in English.

b. Japanese relativization is a copying rule.

c. After copying, the Nearest NP Constraint applies to the relativized NP in the clause.

3.2 UNDERLYING RELATIVE CLAUSES AND THE NEAREST NP CONSTRAINT

Muraki rejects the usual P-marker of an under-
lying relative construction in Japanese which is represented as (1). Instead, he claims that (2) is the correct underlying structure.

\[ (1) \quad \text{NP} \quad \text{NP}_i \quad (2) \quad \text{NP}_i \quad \text{NP} \]

One of the main reasons for his underlying structure is connected with Ross's claims (1967) that Japanese relativization is a movement transformation and the **Crossover Condition** applies to Japanese relativization. Please refer to Ross's example again on p. 60 in chapter II of this thesis.

(3) \[ \emptyset \text{zibun-ga takai to itta} \quad \text{hito}_i \]

(Lit.) 'the person who said he is tall'

(4)
Suppose we accept Ross's hypothesis stated above. As we have already seen in the previous chapter, in order to generate sentence (3), the NP₂ in (4) must move to the right. But this is a violation of the Cross-over Condition because the NP₂ crosses over the identical NP₃ in its movement. In order to avoid this violation and generate (3), the only alternative way is to postulate that the NP₂ in S₁ moves not to the right but to the left, away from the matrix head NP. The relativization process would be:

(i) The leftward movement of NP₂, (which is vacuous here).

(ii) The deletion of the NP₂ under identity with the head NP₁.

This process, according to Muraki, involves two unnatural steps; (a) the movement of the NP₂ away from the identical head NP₁ and (b) the unnaturalness of "the identity deletion which operates leftward (that is, backward) across the constituent sentence." These two unnatural steps are his main reasons why he rejects the
underlying structure (1). He says that in order to avoid the unnaturalness of the above steps we must postulate (2) as the underlying structure of a Japanese relative construction. The remote structure of (3) will be represented as (5) if we follow Muraki.³

(5)

```
NP
  /\   |
 NP₁  S
 |    |
 hito₁  NP₂-ga  S-to  it-ta
    |       |
    hito₁  NP₃-ga takai
          |     |
          hito₁  zibun₁
```

The derivational process of (3) from (5) would be:

(i) The reflexivization of NP₃

(ii) The relativization of NP₂

(a) The leftward movement of NP₂ without a violation of the Cross-over Condition, here, vacuous

(b) The deletion of NP₂ by the Nearest NP Constraint
(iii) An obligatory relative clause preposing which makes the relative clause precede the head NP.

As you can see from the above example, even if we were to assume that Ross's claims are right, we could generate (3) without any violations of the Cross-over Condition. Here, Muraki proposes a constraint known as the Nearest NP Constraint. This constraint allows the deletion of an NP in a relative clause which is nearest to and coreferential with the head NP. This nearest NP should be "the nearest not only in the linear arrangement, but also in terms of the number of intervening nodes."^4

Now, let us examine his so-called unnatural steps. First, his argument that the relativized NP must move leftward away from the head NP is by no means persuasive because he himself admits the claim that "since relativization is not a movement transformation, this argument does not hold."^5 Relativization as a deletion process has nothing to do with the Cross-over Condition because we do
not have to move a relativized NP.

As for his second argument, he says that "the other argument that the backward deletion across the sentence is unnatural still holds" even if relativization is not a movement transformation. The reason why this backward deletion is unnatural is not clear to us. The only example he gives us is the following:

(6)

(a) *musume-ga zibun₁-o korosi-ta otoko₁
   daughter self killed man
   (Lit.) 'the person₁ whose₁ daughter killed him₁'

(b) *[zibun₁-no] musume-ga ₀ korosi-ta otoko₁
    self's daughter ₀ killed man
    (Lit.) 'the person₁ whose₁ daughter killed him₁'

He says the reason why sentences (6.a) and (6.b) are ungrammatical is that these sentences violate the Nearest NP Constraint. Note his underlying structure (7) of (6.a,b):

(7)

```
\[ \begin{array}{c}
  \text{NP₁} \\
  \text{NP₂} \\
  \text{otoko₁} \\
  \text{NP₃-ga} \\
  \text{NP₄-₀} \\
  \text{V} \\
  \text{otoko₁ korosi-ta} \\
  \text{NP₅} \\
  \text{NP₆-no} \\
  \text{musume} \\
  \text{otoko₁} \\
\end{array} \]
```
Neither NP\(_4\) nor NP\(_6\) can be deleted. This is because they do not meet the **Nearest NP Constraint**. Specifically NP\(_4\) is not nearest to NP\(_2\) in the linear arrangement, and NP\(_6\) is not nearest, either, in terms of the number of intervening nodes. But in spite of this failure to fulfill the **Nearest NP Constraint**, NP\(_6\) is deleted in (6.a), and NP\(_4\) is deleted in (6.b). Therefore, the derived sentences are unacceptable. According to Muraki, instead of (6), native speakers use (8) in their speech, where the co-referential NP\(_3\) which meets this constraint is relativized and deleted\(^9\). Figure (9) is his underlying structure of phrase (8).

(8) \[
S \quad [_{\text{szibun}_i\text{-no}} \text{musume-ni koros-are-ta}]_{\text{otoko}_i}
\]

self's daughter-by killed-be-past man

(Lit.) 'the man\(_i\) who\(_i\) was killed by his\(_i\) own daughter'

(9)
The above is his explanation for the necessity of the **Nearest NP Constraint**. As a conclusion, he says,

If the relative clause did not follow the head noun, the constraint would have to be more complicated. It would have to block the relativization of any noun unless it is linearly most distant from but hierarchically (that is, in terms of nodes) nearest to the coreferential head noun phrase. Since the Nearest NP Constraint is much simpler, it supports the argument that the relative clause should follow the head noun in the underlying structure.

Let us examine his argument.

To begin with, it can not be denied that (6) might be unacceptable for the following reasons.

(i) When one speaks about a person, especially a sufferer, it is natural to talk about the person from the point of view of the victim, that is, to speak of him as the subject of a sentence. Therefore, in this case when we want to speak of 'the man' in the form of a relative construction, the relative clause will be naturally in the passive form with 'the man' as the subject.
(ii) Please refer back to sentences (6.a) and (6.b) and Muraki's tree diagram (7). Whether or not we follow his underlying structure, reflexivization in (7) is blocked anyway because it does not satisfy the Subject-antecedent Condition.\textsuperscript{11}

Now, we could explain the grammatical nature of (8) without the help of the Nearest NP Constraint. We consider that sentence (8) can be derived from (10) following the steps specified below.

(10)
The necessary steps

(i) The deletion relativization of \( NP_8 \)

(ii) The genitive formation in \( S_3 \) which converts \( zibun-ni \ aru \) into \( zibun-no \)

(iii) The reflexivization of \( NP_9 \) under the identity with \( NP_3 \), by the Subject-antecedent Condition

(iv) The equi-NP deletion of \( NP_6 \) under identity with \( NP_3 \)

(v) The verb-raising of \( korosu \), which combines \( korosu \) and \( rareta \)

(vi) The tree-pruning of \( S_2 \), which makes the complement subject \( zibun-no \ musume \) a constituent of the higher sentence \( S_1 \)

(vii) The backward deletion relativization of \( NP_3 \)

Secondly, we doubt the adequacy of the Nearest NP Constraint. Does the constraint constitute a support for his underlying structure of a relative clause? Observe my following sentences:
(11) \[[\text{zibun}_{i}-ga~\text{unda}]\text{kodomo-dake-ga}~\emptyset~\text{kawaii}\]

self gave-birth-to child only dear-is

Hanako_{i}

(Lit.) 'Hanako_{i}, to whom only the child she, bore is dear. / Hanako_{i}, who likes only the child she gave birth to.'

(12) \[[[\text{kaze-de netu}-ga~\emptyset~\text{atte}]-mo~\emptyset~\text{huro-ni}]\text{a cold-with fever is even bath}

hairu] koto-ga \emptyset~\text{sukina}]\text{Taro} oo

take that likable

(Lit.) 'Taro_{i}, to whom taking a bath is likable even if he, has a fever with a cold. / Taro_{i}, who likes taking a bath ...'

These sentences seem to be perfect to native speakers.

Take (11) as an example. The underlying structure would be represented as (13) if we follow Muraki.

(13)
In figure (13), $NP_4$ does not satisfy the Nearest NP Constraint linearly and $NP_6$ does not satisfy it hierarchically. Therefore, they can not be deleted by relativization if the Nearest NP Constraint is correct. But in fact, $NP_4$ must be deleted to generate phrase (11).

Similarly, observe (14). This represents the underlying structure of phrase (12) when we follow Muraki's argument.

(14)

In (14), none of the coreferential $NP_4$, $NP_7$, and $NP_8$ are deletable because of the failure to satisfy his con-
straint. In other words, the Nearest NP Constraint blocks grammatical phrases (11) and (12) incorrectly.

It must be noted that in figures (13) and (14), we do not postulate that the underlying relative clauses contain the thematic NP's. This is because Muraki argues against Kuno's hypothesis that a relativizable NP must be thematic, and he himself does not use the underlying relative structure with a thematic NP.

Now, if we admit that the underlying structure of (11) contains a thematic NP, we can generate phrase (11) without Muraki's structure and his constraint. Figure (15) is the usual underlying structure of phrase (11) and it contains thematic NP's, NP₃ and NP₆.

To generate (11) from figure (15), the necessary transformations would be as follows:

(i) The deletion of NP₈ under identity with NP₆.
(ii) The deletion of NP₆ by relativization.
(iii) The reflexivization of NP₇ under identity with a thematic NP₃ by the Theme-antecedent Condition proposed by M. Ohso, who says that the theme of a sentence can be the antecedent of a reflexive pronoun.¹²
(iv) The deletion of NP₃ by relativization.

(15)

Thus, we arrive at phrase (11).

It is true that the thematic NPᵢ is linearly most distant from, but hierarchically nearest to the head NP₂, as Muraki indicates, and that to delete this NPᵢ, the deletion operation applies backward across S₂ and S₃. But why is this kind of backward deletion unnatural? We are
not given sufficient justification for this kind of unnaturalness. Observe the following example where backward deletion across the sentence occurs.

(16)

(a) \[
\emptyset_1 \text{kensonsite} \ [\text{zibun}_1\text{-ga binboo da}] \text{ to humbly self poor is that Hanako-ni itta} \] \text{koto-ga kekkateki-ni-wa said that resultingly Taroo}_1\text{-no situren-ni tunagatte iru. disappointed-love-with connected-is}

(Lit.) 'That Taro humbly said to Hanako (that) he was poor is as the result related to his disappointed love.' / 'That Taro said humbly to Hanako that he was poor resulted in his failure to win her.'

(b) \[
\text{Taroo}_1\text{-ga kensonsite} \ [\text{zibun}_1\text{-ga binboo da}] \text{ to Hanako-ni itta} \] \text{koto-ga kekkateki-ni-wa kare}_1\text{-no situren-ni tunagatte iru.}

Figure (17) on the next page represents the underlying structure of sentences (16.a) and (16.b). The necessary operations for deriving (16.a) from (17) would be:

(i) The reflexivization of NP\textsubscript{10} under identity with NP\textsubscript{5} by the Subject-antecedent Condition.
(ii) The deletion relativization of NP$_8$.

(iii) The genitive formation in $S_3$ ($\text{ni aru} \rightarrow \text{no}$).

(iv) The deletion of NP$_5$ under identity with NP$_9$ Taroo-no.

Here, the backward deletion across sentence $S_4$ is supposed to occur in (iv). If we do not postulate the existence of this backward deletion, we derive only (16,b).
and not (16.a). Sentence (16.b) would be derived by the following transformations:

(i) ~ (iii) The same as (16.a).

(iv) The pronominalization of NP_9 under identity with NP_5.

In the above step (iv), reflexivization does not apply to NP_9 because the antecedent NP_5 does not satisfy the Command Condition of reflexivization which is proposed by N.A. McCawley. This condition requires that the antecedent of a reflexive not only be the subject of a sentence but must also command the reflexive. The above example shows that backward deletion across the sentence is used in Japanese.

Finally, besides a relative construction, we have another nominalizing construction, where a sentence precedes a set of non-abstract nominalizers (Makino's terminology) such as hazu 'inevitability; expectation', keikoo 'tendency', saityuu 'the midst of' etc., or a set of abstract nominalizers like no, koto 'thing'.
Observe the following sentence:

(18) \[ \text{Taroo-ga soko-e iku}_{S} \text{ hazu-ga}_{NP} \text{ nai.} \]

\[ \text{there go reason not-is} \]

(Lit.) 'There is no reason that Taro goes there. /Taro is not expected to go there.'

As Makino says,\textsuperscript{15} this kind of construction is not supposed to be a relative construction because a relative construction must meet the \textbf{identity condition} in the underlying structure, but in (18) this is not the case. That is, the embedded sentence in (18) does not have the identical NP \textit{hazu}.

However, in spite of this syntactic difference, this construction is similar to a relative construction in that both constructions constitute nominalizing constructions as a whole. Therefore, it is natural to postulate that the underlying structures of both constructions are similar in some respects, as in (19).

(19) (a) \[ \text{NP} \]

(b) \[ \text{NP} \]

\[ \text{S} \]

\[ \text{N} \]

\[ \text{no koto, hazu, etc.} \]

\[ \text{NP}_{i} \]
However, Muraki's underlying structures for these two constructions seem to be quite different. Observe (20).

\[(20) \quad (a) \quad (b)\]

\[
\begin{align*}
\text{NP} & \quad \text{S} \\
\text{N} & \quad \text{NP}_i \\
\text{NP}_i & \quad \text{S}
\end{align*}
\]

Therefore, his derivation of relativization requires an extra step — that is, a relative-clause preposing.

As a conclusion, we are inclined to reject his underlying structure for relative constructions and consider his Nearest NP Constraint vacuous. We would rather subscribe to the structure represented in (19.b) as the correct underlying structure for Japanese relative constructions.

3.3 COPYING RELATIVIZATION

In this section, we will examine Muraki's claim that relativization is a copying transformation.

He says in his dissertation, "Thematization and
relativization are both copying rules.\(^{16}\). Observe the following sentences which he uses to support his hypothesis.\(^{17}\)

\[(21) \text{hito}_i \left[ S \left[ S \text{ sono hito}_i\text{-no} \text{ hon-ga yoku ureru} \right] \right. \text{person the person's book well sell} \]

\[\Rightarrow \text{hito}_i \left[ S \left[ S \text{ zibun}_i\text{-no} \text{ hon-ga yoku ureru} \right] \right. \text{hito}_i \]

\[\Rightarrow \left[ S \text{ hon-ga yoku ureru} \right] \text{hito}_i \]

(Lit.) 'the person\(_i\)' whose\(_i\) books sell well'

\[(22) \text{hito}_i \left[ S \left[ S \text{ sono hito}_i\text{-no} \text{ hon-ga yoku ureru} \right] \right. \text{person the person's book well sell} \]

\[\Rightarrow \text{hito}_i \left[ S \left[ S \text{ zibun}_i\text{-no} \text{ hon-ga yoku ureru} \right] \right. \text{hito}_i \]

\[\Rightarrow \left[ S \text{ zibun}_i\text{-no} \text{ hon-ga yoku ureru} \right] \text{hito}_i \]

(Lit.) 'the person\(_i\)' whose\(_i\) books sell well'

Now, do the above derivations show that relativization is a copying rule? It seems that the answer is in the negative. Notice that relativization operates only when an embedded NP is coreferential with a matrix NP. The first hito 'person' in (21) or (22) is the NP which originally exists in each matrix sentence, and never the NP copied from the embedded sentence. For example, suppose (21) or
(22) is contained in a matrix sentence as in (23.c). Notice that the word-order of (23.c) is based on his argument.

(23)

(a) \textit{Hito}_{1}-wa uresii. \ (matrix sentence) 
   \small{person happy-is}
   \textit{(Lit.) }' \textit{(The) person is happy.}'

(b) \[\text{Sono hito}_{1}-no\] hon-ga yoku ureru. \ \small{(constituent sentence)}

(c) \textit{Hito}_{1} \small{[[sono hito}_{1}-no\] hon-ga yoku ureru]-wa} 
   \small{person the person's book well sell}
   \small{uresii.}
   \small{happy-is}
   \textit{(Lit.) }' \textit{The person whose books sell well is happy.}'

The underlined head NP \textit{hito} exists originally in the matrix sentence and is not derived by copying. If we considered relativization to be copying, we would have the following structural change (23.d) from (23.c):

(23)

(d) \textit{*Hito}_{1} \underline{hito}_{1} \small{[[sono hito}_{1}-no\] hon-ga yoku}
   \small{ureru]-wa uresii.}
   \textit{(Lit.) }' \textit{The person, the person, whose books sell well is happy.'}
However, his derivations do not have such a derivational string as is shown in (23.d).

It is unlikely that he would propose the same underlying structure that is claimed by Schachter.\textsuperscript{18} If we follow Schachter, the underlying structure of (23.c) would be roughly represented as (24).

\begin{itemize}
  \item [(24)]
  \begin{figure}
    \begin{center}
      \begin{tikzpicture}
        \node (root) [text=black,fill=white] {S\textsubscript{1}};
        \node (np) [text=black,fill=white] {NP} child { node (the) [text=black,fill=white] {the} } child { node (nom) [text=black,fill=white] {Nom} child { node (dum) [text=black,fill=white] {Dum} } child { node (np1) [text=black,fill=white] {NP\textsubscript{1}} child { node (sonohito) [text=black,fill=white] {sono hito} } child { node (np2ga) [text=black,fill=white] {NP\textsubscript{2}-ga} } } child { node (np3o) [text=black,fill=white] {NP\textsubscript{3}-o} } };
        \node (v) [text=black,fill=white] {V} child { node (uresii) [text=black,fill=white] {uresii} } child { node (ureru) [text=black,fill=white] {ureru} child { node (sonohito) [text=black,fill=white] {sono hito} } child { node (hon) [text=black,fill=white] {hon} } child { node (kaita) [text=black,fill=white] {kaita} } };
      \end{tikzpicture}
    \end{center}
  \end{figure}
\end{itemize}

According to Schachter's analysis, the NP\textsubscript{2} in S\textsubscript{3} \textit{sono hito} 'the person' must "promote" to the place of the head NP by copying relativization and replace a dummy
symbol. Then the original NP\textsubscript{2} in S\textsubscript{3} is deleted or pronominalized.

However, Muraki's underlying relative constructions show that he does not argue that the head NP is a dummy symbol. He also does not say anything about the related problems which will naturally arise from the above Schachterian Promotion Analysis. Therefore, his underlying structure of (23.\textsc{c}) must be (25), which meets the identity condition.

(25)

\begin{center}
\begin{tikzpicture}

  \node (S1) {S\textsubscript{1}};
  \node (NP1) [below left of=S1] {NP\textsubscript{1}};
  \node (NP2-wa) [below left of=NP1] {NP\textsubscript{2}-wa};
  \node (hitot\textsubscript{1}) [below left of=NP2-wa] {hitot\textsubscript{1}};
  \node (S2) [below right of=NP1] {S\textsubscript{2}};
  \node (NP3-ga) [below left of=S2] {NP\textsubscript{3}-ga};
  \node (hon) [below left of=NP3-ga] {hon};
  \node (S3) [below right of=NP3-ga] {S\textsubscript{3}};
  \node (NP4-ga) [below left of=S3] {NP\textsubscript{4}-ga};
  \node (NP5-o) [below right of=NP4-ga] {NP\textsubscript{5}-o};
  \node (kaita) [below right of=NP5-o] {kaita};
  \node (uresii) [below right of=NP1] {uresii};

  \draw (S1) -- (NP1);
  \draw (NP1) -- (NP2-wa);
  \draw (NP2-wa) -- (hitot\textsubscript{1});
  \draw (S1) -- (S2);
  \draw (S2) -- (NP3-ga);
  \draw (NP3-ga) -- (hon);
  \draw (S2) -- (S3);
  \draw (S3) -- (NP4-ga);
  \draw (NP4-ga) -- (NP5-o);
  \draw (NP5-o) -- (kaita);
  \draw (NP1) -- (uresii);

\end{tikzpicture}
\end{center}

If (25) represents his underlying structure, how does his copying relativization apply to the NP\textsubscript{4} in S\textsubscript{3} and to
which node does it copy the embedded NP? There are no traces of copying in his derivations (21) and (22).

Thus, we can say that his relativization is not a copying transformation in Ross's sense of the term. Rather, judging from his derivations, his relativization is a kind of feature-changing rule because the head NP changes the identical embedded NP into a reflexive. But this reflexive in (21) and (22) is supposed to be derived by a different transformation and its antecedent is not the head NP. This problem will be discussed in the next chapter.

3.4 CONCLUSION

To summarize the observations in this chapter, we have discussed the following points.

a. Muraki's underlying structure of a relative clause.

b. His argument that Japanese relativization is a copying transformation.

c. The necessity of the Nearest NP Constraint.
With respect to point (a), we have detailed that his two arguments for his underlying structures do not hold. His first argument is not convincing because as he himself admits, Japanese relativization is not a movement transformation, and the deletion of the relativized NP has nothing to do with the Cross-over Condition.

His second argument that the backward deletion across the sentence is unnatural and that the Nearest NP Constraint is necessary for the block of unacceptable sentences is not persuasive, either. We have shown that the unacceptability of (6.a) and (6.b) does not arise from the violation of the Nearest NP Constraint but it is unacceptable for other reasons.

We have also observed that the Nearest NP Constraint is untenable since it blocks grammatical sentences incorrectly and that Japanese has the backward deletion across the sentence, in spite of Muraki's argument.

We have seen that in connection with a non-relative but nominalizing construction, his underlying relative structure is unnatural.
We assert in this chapter that the relativized NP is the nearest to the head NP only in terms of structural hierarchy.

Finally, we have discussed his copying relativization and have found that his relativization is not a copying rule, but seems more like a feature-changing rule.

We will demonstrate in the next chapter that it is not a feature-changing rule, either. Also, we shall discuss Kuno's hypotheses about Japanese relativization.
CHAPTER III
NOTES


2. Ibid., p. 42.

3. Ibid., p. 43.

4. Ibid., p. 51.

5. Ibid., p. 54.

6. Ibid.

7. Ibid., p. 51.

8. Ibid.

9. Ibid., pp. 51 f.

10. Ibid., p. 54.

11. See p. 62 in Chapter II of the present thesis.


15. Ibid., p. 106.


17. Ibid., pp. 50 f.


19. Schachter terms his own analysis Promotion Analysis, while he calls the usual transformational analysis of relativization Matching Analysis. Concerning the problems which will naturally arise from his Promotion Analysis, see Schachter, "Focus and Relativization," pp. 38~40.
4.1 AN EXAMINATION OF KUNO'S HYPOTHESES

In this chapter, we will discuss whether relativization is a feature-changing rule. Kuno claims that a relativizable NP sometimes leaves a (reflexive) pronoun behind. We will examine his examples and reject his claim, based on his another hypothesis about relativization and some knowledge of Japanese reflexivization. We will introduce a few conditions of Japanese reflexivization.

Kuno mentions the following in his paper:¹

a. Both themes and relative clauses can, under certain conditions, retain pronouns in the position formerly occupied by the original noun phrase that has been thematized or relativized.

b. It is not the case that the original noun phrase can remain as a (reflexive) pronoun unconditionally. It is not clear under what conditions original noun phrases can remain in the form of (reflexive) pronouns after thematization.
c. One thing that is clear is that such noun phrases must be left-branching noun phrases.

Kuno's statement above leads us to suspect that Japanese relativization is a kind of feature-changing rule as we have discussed in the preceding chapter. Let us examine whether or not he is right and whether relativization affects the reflexivization or the pronominalization of the original NP.

Before our investigation, it must be noted that the above mentioned left-branching NP's are defined by Kuno as:

d. For example; John's in John's brother, John's brother's wife, John's brothers wife's sister, etc., is a left-branching noun phrase. Similarly, John in John no ottoto no okusan no imooto "John's brother's wife's sister" is left-branching.²

Also, we must have Kuno's other hypotheses in mind. They are as follows:

e. Themes exist in the deep structure of thematic sentences.³

f. Relativization in Japanese applies, not to an ordinary noun phrase, but to the theme NP-wa of the relative clause.⁴
First, observe his following examples:

(1)

(a) Sono kodomo-ga Mary-o butta.
the child struck

(Lit.) 'The child struck Mary.'

(b) *Sono kodomo-wa \{ \underline{zibun} \} -ga Mary-o butta.
    \{ \underline{self} \}
    \{ \underline{kare} \}
    \{ \underline{he} \}

(c) *\{ \underline{Zibun} \} -ga Mary-o butta kodomo
    \{ \underline{Kare} \}

(Lit.) 'the child who himself struck Mary'

(2)

(a) Sono kodomo-no sensei-ga kootuuziko-de
the child's teacher traffic accident-in
sinda.
died

(Lit.) 'The child's teacher was killed in a traffic accident.'

(b) Sono kodomo-wa \underline{zibun-no} sensei-ga kootuuziko-de
sinda.

(Lit.) 'Speaking of the child, his teacher was killed in a traffic accident.'

(c) \underline{zibun-no} sensei-ga kootuuziko-desinda kodomo

(Lit.) 'the child whose (his own) teacher was killed in a traffic accident'
(3)  
(a) Zoo-no hana-ga nagai.
    elephant's trunk long-is

    (Lit.) 'An elephant's trunk is long.'

(b) Zoo-wa (sono (its; the) ) hana-ga nagai.
        (*sore-no (that's) )
        (*zibun-no (self's))

    (Lit.) 'Speaking of an elephant, its trunk is long.'

(c) (sono )
    (*sore-no )
    (*zibun-no )
    hana-ga nagai zoo

    (Lit.) 'an elephant whose (its) trunk is long.'

(4)  
(a) Sono kodomo-ga kawaigatte ita inu-ga
    the child petting-was dog
    sine simatta.
    died

    (Lit.) 'The dog that the child was petting died.'

(b) Sono kodomo-wa zibun-ga kawaigatte ita
    self
    inu-ga sine simatta.

    (Lit.) 'As for the child, the dog that (he) himself was petting died.'
(c) zibun-ga kawaigatte ita inu-ga

sinde simatta kodomo

(Lit.) ' the child who the dog that (he) himself was petting died '

(5) Watakusi-ga (sono hito (that person))-no
    I (kare (he))
    (so (that))

    name-o wasurete simatta okyaku-san
    name have-forgotten guest

    (Lit.) ' a guest whose name I have forgotten '

Now, Kuno's hypotheses (e) and (f) are crucial for our examination of his other hypotheses (a) ~ (c), which are concerned here. If his hypothesis (e) is correct, then each sentence (b) in his examples (1) ~ (4) can not be derived from its corresponding sentence (a). If hypothesis (f) is correct, then an underlying relative clause must contain a thematic sentence.

Take (2,b) and (2,c). The underlying structure of (2,b) would be represented as (6):
As is shown in (6), the thematic NP₁ has an identical NP₇ in the comment-part. Similarly, NP₅ has an identical NP₆. As the hypothesis (e) shows, these thematic NP's should exist originally in the underlying structure of (2,b). And this underlying structure (6) must be the underlying relative clause of (2,c) by virtue of hypothesis (f). Thus, (2,c) would look like (7).
NP₁ is a relative construction, where NP₂ is the head NP and S₁ is the relative clause. In S₁, NP₃ is the theme and S₂ is the comment-part. In S₂, there is another relative construction, where NP₆ is the head NP and S₃ is the relative clause which contains the thematic NP₇ and the comment sentence S₄. Thus, from (7), we can get (2.c) in the following way.
(i) The deletion of NP₈ under identity with NP₇.

(ii) The deletion relativization of NP₇.

(iii) The genitive transformation, which converts *ni aru* 'exist' to *no' — 's'.

(iv) The reflexivization of NP₉ under identity with NP₃.

We now have the following structure.

(8)

```
NP₁
  |  NP₂
S₁  | kodomo₁
  |  NP₃-wa
    |  kodomo₁
NP₄-ga  NP₅-de
  |  V
 NP₆-no  kootuuiko  sinda
    |  sensei  zibun₁
```

The final process will be the following:

(v) The deletion relativization of NP₃.

The derived sentence is (2.c). Notice in (8) that in S₁
cycle, NP₆ has already changed into zibun before the relativization of the thematic NP₃ and that the relativization of NP₃ only requires its deletion, and has nothing to do with the reflexivization of NP₆. That is, step (iv) generates a reflexive zibun and the final relativization is only a deletion and it does not leave its own reflexive behind.

In spite of his first statements, if we follow his other hypotheses (e) and (f) consistently, we find that his hypothesis (a) that relativization leaves the relativized NP as a (reflexive) pronoun is incorrect. Rather, we would say that before relativization the underlying relative clause has already undergone the application of reflexivization, and that relativization is neither copying nor feature-changing.⁶

In the preceding chapter, we have observed that Muraki's relativization is not a copying rule but it seems more like a feature-changing rule. But here we must re-examine the example in question to see whether Japanese relativization is a real feature-changing rule.
Based on Kuno's two hypotheses (e) and (f), we could postulate that the following example (9) has its underlying structure (10).

(9) Zibun₁-no hon-ga ureru hito₁-wa uresii.
    self's book sell person happy-is

   (Lit.) 'The person whose book sells (well) is happy.'

(10)
The process of derivation would be as follows.

(i) The deletion of $NP_8$ under identity with $NP_6$.

(ii) The deletion relativization of $NP_6$.

(iii) The genitive formation in $S_5$.

(iv) The reflexivization of $NP_7$ under identity with $NP_3$. 
(v) The deletion relativization of NP₃.

We notice from the above that we already have a reflexive pronoun by step (iv) and after that we have a deletion relativization. Therefore, it is not the case that the head NP₂ affects the reflexivization of NP₇.

Thus, we may say that Japanese relativization is never a feature-changing rule. It seems that relativization operates to delete the thematic NP in the underlying relative clause, which is hierarchically the nearest NP to the head NP.

Let us return to Kuno's examples. First, observe
the remote structure of (4.c).

(12)

We have the following transformations to derive (4.c) from (12).

(i) The deletion of NP₈ under identity with NP₆.

(ii) The deletion relativization of NP₆.

(iii) The reflexivization of NP₇ under identity of NP₃.

This reflexivization would be optional because we can delete NP₇ instead of a reflexivization transformation.
(iv) The deletion relativization of NP₃.

In this case, too, reflexivization applies to the deeply embedded NP₇ under identity with the thematic NP₃ before the deletion relativization of NP₃.

Here, we must note that Kuno's hypothesis (c) is not clear to us that the retained pronoun after relativization is a left-branching NP like John's in John's brother or John-no in John-no otōoto. If he means by it that a left-branching NP is restricted to a genitive NP, his hypothesis does not fulfill the generalization it is claimed to have. Because as zibun-ga the subject NP in the relative clause in (4. c) shows, this ostensibly retained pronoun does not always have a genitive form. Rather, we should say that at some stage of derivation, some deeply embedded NP gets reflexivized or pronominalized under certain conditions. The reason why a left-branching genitive NP undergoes reflexivization is that the genitive NP itself is originally an embedded sentence.

Then, what are the conditions of reflexivization? In the next section, we will examine some conditions of
4.2 SOME CONSTRAINTS OF JAPANESE REFLEXIVIZATION

In this section, we will have only the introductory and brief exposition of Japanese reflexivization which is necessary for our further examination of Kuno's examples. We will discuss some salient points of Japanese reflexivization.

The Subject-antecedent Condition

The reflexive refers back to the subject in the same simplex sentence or the subject in any higher sentence.8

In English, the antecedent NP can be either the subject or some other element in the same simplex sentence, but N.A. McCawley claims that in Japanese the antecedent NP must be the subject.

(13) (a) Bill talked to Mary₁ about herself₁.

(b) *Bill-wa Mary-ni zibun₁-no koto-ni tuite
    to self 's thing about
    hanasita.
    talked
(Lit.) 'Bill talked to Mary about herself.'

By virtue of the **Subject-antecedent Condition**, the only acceptable reading of (13.b) is: Bill talked to Mary about himself.

In Japanese, the antecedent NP and its reflexive do not have to be in the same simplex sentence.

(14) Taroo-wa zibun-ga kaita tegami-o self wrote letter

yomi kaesita.
read again

(Lit.) 'Taro re-read the letter which self wrote.'

As N.A. McCawley puts it, Japanese reflexivization seems to operate in the same way as English pronominalization in that it can enter into an embedded sentence, though in reality they do not operate exactly in the same manner. This will soon be discussed.

As we can see in (13) and (14), the Japanese reflexive takes one form zibun 'self', regardless of person, gender, and number.

The **Humanness Condition**

The antecedent must be human.
The Command Condition

The antecedent of the reflexive not only must be the subject but must also command the reflexive.

To explain the above condition, N.A. McCawley's following example may be considered.

(15)
(a) Hirosi₁-ga ima gesyuku site iru ie-ni now board house-in

   Hirosi₁-wa moo go-nen-mo sunde iru.
   already 5 years live

   (Lit.) 'In the house where Hirosi₁ boards now Hirosi₁ has been living as long as five years.'

(b) Zibun₁-ga ima gesyuku site iru ie-ni self now board house-in

   Hirosi₁-wa moo go-nen-mo sunde iru.
   already five years live

   (Lit.) 'In the house where self₁ boards now Hirosi₁ has been living as long as five years.'

(c) *Hirosi₁-ga ima gesyuku site iru ie-ni now board house-in

   zibun₁-wa moo go-nen-mo sunde iru.
   self already five years live

   (Lit.) 'In the house where Hirosi₁ boards now self₁ has been living as long as five years.'
The notion of command was proposed by R.W. Langacker in his "on Pronominalization and the Chain of Command" in such a way that:

a node A "commands" another node B if (1) neither A nor B dominates the other; and (2) the S-node that mostly immediately dominates A also dominates B.

If we follow N.A. McCawley, the remote structure of the above sentence would be roughly represented as (16):

(16)

Now, NP2 commands NP5, but not vice versa. Therefore, NP5 cannot be the antecedent of NP2 in reflexivization. (15.c) is ungrammatical because it violates this condition.

We have seen that English pronominalization and
Japanese reflexivization operate in the same way in the sense that both can enter into embedded sentences. However, as sentence (15.c) shows, their behavior is not exactly the same in that in Japanese reflexivization, the notion of precede relation does not play so much an important role as in English pronominalization. Precede relation was also proposed by R.W. Langacker in his above cited paper. This means that the antecedent NP precedes the pronominalized NP in terms of linear ordering of constituents.\textsuperscript{14}

The Like-NP constraint\textsuperscript{15}

From the preceding facts, I would like to propose that Japanese has a syntactic constraint, the Like-NP Constraint, which discards the sentences as ungrammatical if the reflexive and its antecedent are in peer relationship. The notion of 'peer' is due to Postal (1970).

Postal defines the NP's which are peers in the following way.\textsuperscript{16}

Two NP, NP\textsubscript{1}, and NP\textsubscript{2}, neither of which dominates the other nor is co-ordinate with the other in a phrase marker P are peers with respect to a node S\textsubscript{i}, just in case the paths between each of these NP and S\textsubscript{i} are such that they contain no NP-nodes not separated from the starting point NP, NP\textsubscript{1} or NP\textsubscript{2}, by a node S.

The following two examples explain the like-NP constraint:
(17)
(a) *Taroo\textsubscript{i}-wa zibun\textsubscript{i}-o tataita.
   self    hit
   (Lit.) 'Taroo\textsubscript{i} hit himself\textsubscript{i}.'

(b) Taroo\textsubscript{i}-wa zibun\textsubscript{i}-no atama-o tataita.
   self's    head    hit
   (Lit.) 'Taroo\textsubscript{i} hit his\textsubscript{i} head.'

Sentences (17.a) and (17.b) would be represented as (18.a) and (18.b) if we follow N.A. McCawley's analysis.

(18)
(a) \[
\begin{array}{c}
S \\
/ \quad \\
NP\textsubscript{1} \\
Taroo\textsubscript{i} \\
/ \quad \\
V \\
tataita
\end{array}
\]
(b) \[
\begin{array}{c}
S \\
/ \quad \\
NP\textsubscript{1} \\
Taroo\textsubscript{i} \\
/ \quad \\
NP\textsubscript{2} \\
tataita
\end{array}
\]

In (18.a), NP\textsubscript{1} and NP\textsubscript{2} are peers, while NP\textsubscript{1} and NP\textsubscript{3} of (18.b) are not. Therefore, NP\textsubscript{2} in (18.a) can not be reflexivized but NP\textsubscript{3} in (18.b) can be a reflexive.

The Highest NP Condition

The antecedent of the reflexive for Backward
Reflexivization must be the highest NP which satisfies the humanness condition. ... We have to add a restriction for Backward Reflexivization within sententially-complex NP subjects that if the head NP is human, Backward Reflexivization is blocked. 17

'The highest NP which satisfies the humanness condition' means here the highest human noun in the structural hierarchy in a given structure. 'A sententially-complex NP subject' is a relative construction which functions as a subject in a sentence. 18 The following sentence is T. Oyakawa's example: 19

(19) Hosyuseitoo-no ooboosa to zibun1-no conservative party's self's unreasonableness sizisi-te ki-ta seito-no huhai-ga sono supported-had party's corruption the gakusei-no ootoo-no sinyuu1-no sisoo-o student's brother's best friend's thought museihusyugi-e katamuk-ase-ta. anarchism-to lean-cause-past

(Lit.) 'The unreasonableness of the Conservative Party and the corruption of the Party that self1 had supported made the thought of the student's younger brother's best friend1 lean towards anarchism.'

He says the relevant NP's in (19) have the following surface
In (20), the highest NP is NP_a sinyuu 'best friend', which can be the antecedent of backward reflexivization.

**The Theme-antecedent Condition**

This condition seems to be a kind of the Subject-antecedent Condition because M. Ohso herself says that the Subject-antecedent Condition might have to be changed to the Theme-antecedent Condition. This condition requires that the antecedent of a reflexive be the theme of a sentence. She explains the ungrammaticality of Kuno's example (l.c) cited above in the following way.
In the underlying structure of (1.c), NP₃ and NP₄ are in a peer relationship and so NP₄ can not be reflexivized. However, in (1.c), NP₄ is reflexivized with the result that the derived sentence is ungrammatical. Instead of reflexivization, NP₄ must undergo the obligatory deletion.

The above six conditions are used for our examinations of Kuno's remaining examples in the following section.
4.3 THE SUBJECT-ANTECEDENT CONDITION AND THE THEME-ANTECEDENT CONDITION

In section 4.1, we observed that Kuno's retained (reflexive) pronoun is not the one which is relativized but the one which has already been reflexivized or pronominalized before the deletion relativization of the nearest thematic NP.

Let us return to his two remaining examples, where reflexivization does not apply. Take Kuno's example (3.c) first.

\[
\begin{align*}
\text{(sono) hana-ga nagai zoo} & \\
\text{(*sore-no) trunk long-is elephant} & \\
\text{(*zibun-no)} & \\
\text{(Lit.) ' an elephant whose(its) trunk is long } &
\end{align*}
\]

(22)
The simplified underlying structure (22) represents (3.c). NP\textsubscript{3} and NP\textsubscript{5}, which are identical, are not peers. The antecedent NP\textsubscript{3} is the theme of S\textsubscript{1}, but it does not meet the Humanness Condition. Therefore, NP\textsubscript{5} can not be reflexivized and is pronominalized.

Sentence (5) which is Kuno's last example has the following remote structure:

```
(23)
```

```
watakusi-ga (sono hito (that person)) -no
        \[ (\text{kare} \ (he)) \quad \text{'s} \]
        \[ (\text{so} \ (that)) \quad \text{so} \]
        \[ (*\text{zibun} \ (self)) \quad \text{so} \]

namae-o wasurete simatta okyaku-san
name forgotten have guest

(Lit.) 'a guest whose name I have forgotten'
```
Figure (23) shows that $NP_3$ and $NP_6$ are identical and not peers. $NP_3$ meets the **Theme-antecedent Condition** and the **Humanness Condition**. Therefore, $NP_6$ should be reflexivized, but in fact, it can not be. It can only be pronominalized or deleted. The possible answer to it is that if $NP_6$ is reflexivized, the reflexive causes a reading to the effect that 'I have forgotten my name' because $NP_4$ occurs exactly in the position which satisfies the **Subject-antecedent Condition**. It is the same case with my following example.

\[
(24) \quad [\text{boku-ga} (\text{sono}_1 \text{ (the)}) (\text{kare}_1 \text{-no} \text{ (his)}) \text{ I} (\text{*zibun}_1 \text{-no} \text{ (self's)}) \text{ godfather}
\]

\[
\text{natta \_ kodomo}_1 \text{ became }
\]

(Lit.) 'the child whose godfather I became'

(25)
In (25), NP3 meets both the Humanness Condition and the Theme-antecedent Condition but NP6 cannot be reflexivized. However, observe the following two other examples below:

(26) ya-ga (zibun1-no) ude-ni atatta samurai
    (karei1-no) arm-at shot warrior
    (sono1)

(Lit.) 'the samurai1 at whose1 arm an arrow shot'

(27) Kodomotati-no booru-ga (zibun1-no) atama-ni
    (karei1-no) head
    children's ball

atatta otoko-wa okotte simatta.
hit man got angry

(Lit.) 'The man whose head the children's ball hit got very angry.'

(28)
Figure (28) is the underlying structure of (27). NP₃ and NP₈ are identical. NP₃ can be the antecedent of NP₈ in reflexivization, though there is an intervening subject NP₄ between them.

The above observation suggests that:

(i) The **Subject-antecedent Condition** takes precedence over the **Theme-antecedent Condition**.

(ii) The **Theme-antecedent Condition** is suspended, by virtue of the **Subject-antecedent Condition**, when the subject which intervenes between a thematic NP and its identical NP is human.

(iii) If the intervening subject is not human, reflexivization applies.

Kuno's example (5) and mine (24) fall under the above case (ii), while sentences (26) and (27) under the case (iii).

4.4 SUMMARY

In this chapter, we have introduced various conditions of Japanese reflexivization and discussed Kuno's hypotheses summarized below.
a. A relativized NP leaves a (reflexive) pronoun behind.

c. Such an NP must be a left-branching NP.

f. A relativizable NP is a thematic NP.

When we analyze his examples based on his hypothesis (f), we find that his hypothesis (a) is false — that is, an ostensibly retained pronoun is not derived by relativization but prior to deletion relativization it has been reflexivized, or pronominalized by identification with some coreferential NP in the underlying relative clause.

Concerning his hypothesis (c), we should restate his hypothesis to the effect that such an NP is not restricted to a left-branching genitive NP. It involves a deeply embedded NP and the reflexivization of such an NP is determined by various conditions.

The conditions of reflexivization are necessary to account for whether or not reflexivization is applicable to a given structure. However, we have seen that the Theme-antecedent Condition is suspended in certain cases. This fact leads us to suspect that it may be the case that there are some exceptions to the condition.
CHAPTER IV

NOTES

2. Ibid., Chap. 19, p. 5.
3. Ibid., Chap. 19, p. 11.
5. Ibid., Chap. 18, p. 4 & Chap. 19, p. 4 f.
7. See example (23) on p.103 of the present thesis.
9. Ibid., p. 5.
11. N.A. McCawley, op. cit., p. 12.
12. Ibid., pp. 10 f.
15. N.A. McCawley, op. cit., p. 30.
19. Ibid., p. 112.

CHAPTER V
RELATIVIZATION OF NOUN PHRASES
IN
ADVERBIAL CLAUSES

5.1 INTRODUCTION

In this chapter, we will examine another hypothesis of Kuno's, especially with respect to the possibility that an NP in an adverbial clause can be relativized under some conditions. We will analyze this hypothesis based on his claim that a relativizable NP is a thematic NP immediately followed by wa. We will reject his hypothesis and conclude that a relativized NP is the thematic NP which is structurally highest in the relative clause.

5.2 KUNO'S HYPOTHESES

5.2.1 Let us examine Kuno's claim which follows:

a. An element of an adverbial clause can be relativized.
b. It is not clear, however, that relativization is freely applicable to elements in adverbial clauses, complex noun phrases and sentential subjects. Although it is not clear under what conditions it is possible or under what condition it is not, it is clear that when thematization is possible, then relativization is also possible.\(^2\)

Since Ross himself admits that Japanese relativization is not subject to his Sentential Subject Constraint,\(^3\) we will discuss here the possibility of relativization of the NP in an adverbial clause.

Before our examination of Kuno's hypothesis cited above, we must recall Kuno's important hypothesis which we used for our analysis in Chapter IV. We will cite it again and call it hypothesis (c).

c. Relativization in Japanese applies, not to an ordinary noun phrase, but to the theme NP - wa of the relative clause.\(^4\)

Now, observe Kuno's example below which he gave us as evidence for his hypothesis (a).\(^5\)

(1)

(a) Sono hito-wa, sinda node, minna-ga kanasinda,

    the person died because all were-saddened

    (Lit.) 'Speaking of that person, everyone was saddened because he died.'
(b) Sinda node minna-ga kanasinda hito

If Kuno's hypothesis (c) is correct, relative construction (1.b) contains sentence (1.a) as the relative clause because (1.a) is a thematized sentence. The underlying structure of (1.b) would be roughly represented as (2).

(2)

\[
\begin{array}{c}
\text{S}_1 \\
\text{NP}_1 \\
\text{NP}_3\text{-wa} \\
\text{sono hito}_1 \\
\text{S}_3\text{-node} \\
\text{NP}_5\text{-ga} \\
\text{sono hito}_1 \\
\text{sinda} \\
\text{V} \\
\text{minna} \\
\text{kanasinda} \\
\text{NP}_4\text{-ga} \\
\text{hito}_1 \\
\text{NP}_2 \\
\end{array}
\]

Notice that in (2), \( S_1 \), which is a relative clause, represents the thematized sentence (1.a). The head noun phrase \( NP_2 \), the thematic noun phrase \( NP_3 \) and the NP in the adverbial clause, that is, \( NP_5 \) are all identical. To generate (1.b) from figure (2), we would have the following derivational process:
(i) The equi-NP deletion of \( NP_5 \) under identity with \( NP_3 \)

(ii) The deletion relativization of \( NP_3 \).

The above example shows that at step (i), the NP in an adverbial clause is deleted not by relativization but by equi-NP deletion. At step (ii), the thematic NP of a relative clause undergoes deletion relativization. In other words, when we analyse Kuno's example, based on his hypothesis (c) that a relative clause contains a thematic NP, we will have to say that an NP in an adverbial clause is not relativized. What is relativized is a thematic NP.

We will examine one more example of Kuno's. Observe the following.6

(3) hara-ippai tabetara geri-o site simatta okasi cookies-with belly-full when-I-ate diarrhea doing ended-up

(Lit.) "*cookies which, when we had glutted ourselves with (them), we ended up with diarrhea *"

According to Kuno, in (3) \textit{okasi} in the adverbial
clause *hara-ippai tabe-ta-ra* is deleted by relativization.

His claim seems incorrect. If we follow his hypothesis (c), the remote structure of (3) would look like (4), which contains a thematized sentence $S_1$ as the relative clause.

(4)

The relevant transformations here are:

(i) The equi-NP deletion of $NP_8$ under identity with the thematic noun phrase $NP_3$. (This transformation deletes the identical NP in an adverbial clause.

(ii) The deletion relativization of $NP_3$, which is thematic.
This example also shows that a relativized NP is never an element in an adverbial clause, but a thematic NP which is structurally highest in a relative clause. Notice that when the relativization of the theme occurs, the identical NP in an adverbial clause has already been deleted.

5.2.2 Now, let us examine Kuno's hypothesis (b).
First, observe his example below.

(5)
(a) Sono hito-ga dekinakereba, watakusi-ga yaru.
    the person if-cannot-do I do

    (Lit.) ' If that man can not do it, I will do it.'

(b) *Sono hito-wa, dekinakereba, watakusi-ga yaru.

    (Lit.) ' Speaking of that man, if he can not do it,
    I will do it.'

(c) *dekinakereba, watakusi-ga yaru hito

    (Lit.) ' the person who, if (he) con not do it,
    I will do it.'

Why is (5.c) ungrammatical? It is easy to answer this question, because the underlying relative clause, that is, the thematized sentence (5.b) is unacceptable. In order
to verify this, we will give the underlying structure of (5.b), which is represented as figure (6).

(6)

As Kuno points out in (6), the comment-sentence \( S_2 \) dekinakereba wakakusi-ga yaru 'if (he) can not do it, I will do it.' does not constitute an appropriate statement about the thematic noun phrase \( NP_1 \) sono hito 'the person'. Rather, it is a statement about something that the speaker says he will do if \( NP_1 \) sono hito can not do it.

When the thematized sentence (5.b) is anomalous, (5.c), which contains (5.b) as the relative clause, is also unacceptable. Thus, Kuno's claim is correct that if thematization is possible, then relativization is also possible. Notice that this means that relativization is applicable to
the highest thematic NP in the relative clause, only when
the thematized relative clause is acceptable. Notice
again that relativization never applies to an NP in an
adverbial clause.

5.3 SUMMARY

In this chapter, we have observed the following:

a. When we consistently assume that a relative
clause contains a thematized sentence, we must
reject Kuno's hypothesis that an NP in an ad­
verbial clause is relativizable. The NP in
an adverbial clause undergoes equi-NP deletion
before the deletion relativization of the highest
thematic NP in the relative clause.

b. The difference of relativizability between
Kuno's examples, that is, between (1.b) and
(5.c) can be accounted for by referring to
whether or not their embedded thematic sentences
are anomalous.
CHAPTER V

NOTES

2. Ibid., Chap. 19, pp. 6 f.
3. See Ross, "Constraints on Variables in Syntax," p. 134. He defines the Sentential Subject Constraint in the following way:

   "No element dominated by a S may be moved out of that S if that node S is dominated by an NP which itself is immediately dominated by S."

   He says on p. 134,

   "the constraint, though operative in the grammars of many languages other than English, can not be stated as a universal, because there are languages whose rules are not subject to it."

   He gives a Japanese sentence to support his view that the Sentential Subject Constraint is not applicable to some languages.

5. Ibid., Chap. 19, p. 6.
6. Ibid., Chap. 18, p. 5.
8. Ibid., Chap. 19, p. 5.
CHAPTER VI

RELATIVIZABLE NOUN PHRASES
AND
THEMATIC NOUN PHRASES

6.1 INTRODUCTION

In this chapter, we will discuss whether or not Kuno is right in saying that a relativizable NP is an NP immediately followed by the thematic particle wa.

In the second section, we will introduce Muraki's counter-examples to Kuno's claim. We will demonstrate in conclusion that we must revise Kuno's hypothesis to the effect that the relativizable NP is thematic, regardless of the existence of an intervening particle between the NP and the thematic particle wa.

In the third section, we will examine whether or not a non-thematic NP is relativizable. In connection with this problem, we will briefly discuss Kuno's classification of ga and wa. We will conclude that there are some
cases where a non-thematic NP is relativizable, and therefore, we can not but discard both Kuno's hypothesis and our revision of his hypothesis.

6.2 THE REVISION OF KUNO'S HYPOTHESIS

Kuno's claim about a relativizable NP is as follows:

What is relativized in a relative clause is not an ordinary noun phrase, but a noun phrase immediately followed by the thematic particle wa.

What he gives as evidence for this claim is the following type of sentences:

(1) syuusyoku-ga taihen na buturigaku

employment difficult is physics

(Lit.) ' physics, where finding a job is difficult.'

(2) (a) [buturigaku {*no} syuusyoku-ga taihen da]_{*de}

{*ni} {*no-naka-de}

buturigaku

(b) [[buturigaku-wa] theme syuusyoku-ga taihen da]_{s}

buturigaku

Phrase (1) is a relative construction which is acceptable.
In order to generate (1), we must assume that (1) is derived from the underlying structure (2.b) and not from (2.a), because (2.a) is ungrammatical. (2.b) contains a thematic NP immediately followed by wa, while (2.a) does not. Thus, he concludes that a relative clause must involve a thematized sentence, where a thematic NP is immediately followed by wa.

Nevertheless, there is a counter-argument against this claim. Muraki gives us a set of counter-examples to Kuno's above generalization. According to Muraki, we must assume that in some cases there is an intervening particle between a thematic NP and wa for deriving a grammatical relative clause construction. There is a relative clause construction for which a corresponding NP + wa - sentence does not exist, while only an NP + particle + wa -sentence exists. Muraki's counter-examples involve the particle de in its various usages and the dative ni. The following sentences are only part of Muraki's counter-examples.

(3) de(as an instrumental particle)
   (a) *Sono ink-wa kono tegami-o kai-ta.
       that ink this letter wrote
       (Lit.) ' (I) wrote this letter in that ink.'
(b) Sono ink-de-wa kono tegami-o kai-ta.

(c) kono tegami-o kai-ta ink

(Lit.) 'the ink in which (I) wrote this letter.'

(4) de (as a reason particle)\(^5\)

(a) *Sono riyuu-wa John-ga kesseke si-ta.
the reason absent-was

(Lit.) 'For that reason John was absent.'

(b) ?Sono riyuu-de-wa John-ga kesseki si-ta.

(c) John-ga kesseki si-ta riyuu

(Lit.) 'the reason why John was absent'

(5) de (as an indirect object particle)\(^6\)

(a) *Sono isya-wa John-ga Mary-o syookai si-ta.
the medical doctor introduced

(Lit.) 'To that doctor, John introduced Mary.'

(b) Sono isya-ni-wa John-ga Mary-o syookai si-ta.

(c) John-ga Mary-o syookai si-ta isya

(Lit.) 'the doctor to whom John introduced Mary'

In the above examples (3) ~ (5), each (a) sentence is a thematic sentence with a thematic NP immediately followed by wa. Each (b) is also a thematic sentence,
but it has an intervening particle de or ni between the thematic NP and wa. (a) is unacceptable, while (b) is acceptable. Thus, in order to generate each relative construction (c), the grammatical sentence (b) must be included in the underlying relative clause.

The existence of these counter-examples calls for the revision of Kuno's hypothesis that a relativizable NP is a thematic NP immediately followed by wa. In my opinion the most important point of Kuno's hypothesis is that a relativizable NP is thematic. Whether or not there is an intervening particle like de or ni, the NP preceding wa is a thematic NP. Therefore, we will revise Kuno's hypothesis temporarily to the effect that what is relativizable in a relative clause is an NP + wa, regardless of an intervening particle.

This revision of Kuno's hypothesis does not seem to change his original claim completely because his claim that a relativizable NP is thematic is still valid. However, if there is a case in which thematicization is impossible and yet relativization is possible, it will constitute a stronger counter-example both to Kuno's original hypothesis
and to our revision mentioned above. We will present some counter-examples of this type in the next section.

6.3 COUNTER-EXAMPLES TO KUNO'S HYPOTHESIS AND ITS REVISION

In the preceding section, we revised Kuno's hypothesis. In this section, we will examine whether or not a relativizable NP must be thematic.

6.3.1

Before the examination, however, we must have in mind Kuno's other hypotheses about the use of the subject particle ga and the thematic particle wa. The following are his hypotheses about ga and wa?

(6) Kuno's hypotheses about ga and wa

a. Wa marks either the theme or the contrasted element of the sentence. The theme must be either anaphoric or generic, while there is no such constraint for the contrasted element.

b. Ga as subject case marker is either for neutral description (as in Oya, ame-ga hutte iru 'Oh, look! It is raining.') or for exhaustive listing (as in John-ga dokusin desu '(Among those under discussion,) John and only John is single.') When the predicate represents
a state (but not existence) or a habitual-generic action, only the exhaustive-listing interpretation is obtained.

c. The most natural way to introduce an entirely new event in conversation seems to be to talk about the existence, or coming into existence toward the place of the speaker, of something.

Since we have already observed the use of the thematic particle wa in Chapter I, we will introduce the use of ga for neutral description. Suppose that two men are working in a room. Then one of them happens to look outside and finds it is snowing. He says:

\[(7) \quad \text{Oya, yuki-} \{\text{ga}_w{a}\} \text{ hutte iru.} \]
\[\quad \text{oh snow falling} \]

(Lit.) 'Oh, it is snowing.'

The whole sentence above conveys entirely new information. To explain this situation, Kuno says:

The entire event is presented out of the blue, so to speak, by the speaker. These sentences are not sentences about something. They are themeless sentences.

This kind of sentence is named neutral description and its subject NP is followed by ga. It is used to introduce new
information into a discourse. Once introduced into the discourse, it is "recorded in the registry of the discourse," and can become the theme of the following sentences in conversation.

*Ga* used for exhaustive listing is explainable by the following interrogative sentence and its answer.

\[(8)\]

(a) Kimitati-no naka-de dare-ga itiban wakai desu ka?

you(pl.) among who the youngest is

(Lit.) 'Who is the youngest among you?'

(b) Taro \textit{(ga \{itiban wakai\) desu.}}

(Lit.) 'Taro (and only Taro) is the youngest.'

In (8.b), *Taro* is new information, which can be the focus of the sentence, while *itiban wakai' desu,'is the youngest' is old information. Kuno says this NP, which can be translated to the effect that 'Taro (and only Taro)', as in (8.b), is used for exhaustive listing. Exhaustive listing means listing exhaustively all the names of the entities.
which are concerned to convey new information. The subject NP in this use is also followed by \textit{ga} and not by \textit{wa}. This subject NP + \textit{ga} is often used as the real answer-part to an interrogative sentence.

6.3.2 With the above knowledge of \textit{ga} and \textit{wa}, let us return to the fundamental topic of this section. I will present three types of counter-examples to the hypothesis that a relativizable NP is thematic and is followed by \textit{wa}.

My first counter-examples are sentences (10) and (11).

(9) Taihenda! John\textsubscript{ga} zisatusita.  
good heavens \textsubscript{*wa} killed-self  

(Lit.) 'Oh, my goodness! John has committed suicide.'

(10) Taihenda! tiisai kodomo\textsubscript{ga} yane-no  
little child \textsubscript{*wa} roof-on  
ue-ni iru.  
is  

(Lit.) 'Oh, gosh! A little child is on the roof.'

(11) A: mekura-no hito\textsubscript{ga} kuruma-ni haner\textsubscript{wa}reta'.  
oh blind person \textsubscript{*wa} car-by hit-was  

(Lit.) 'Oh, a blind man was hit by a car !'
Sentence (9) is an example of neutral description given by Kuno. Our examples (10) and (11) also have *ga for neutral description. Here we have the same situation as we have in sentence (7). In other words, looking out of the window, one of the two men sees something and utters something about it which is entirely new information in the form of (10) or (11). Here, *wa is not allowed to be used.

The noun phrases *kodomo 'child' and *hito 'person' are modified respectively by *tiisai 'little' and *mekura-no 'blind', which is the attributive adjective and the genitive form of *mekura. The usual transformational account in Japanese of these attributives is that they are derived from relative clauses by the application of relative clause reduction. This account gives us the following underlying structure for *tiisai *kodomo 'a little child'.

(12)
As is shown in the above tree diagram, NP₃ kodomo must be followed by ga and not by wa, because the entire sentence itself is brand-new information. Therefore, NP₃ kodomo is non-generic and non-anaphoric. In other words, the relativizable noun phrase in (12), that is, NP₃ is never thematic.

Similarly, the attributive mekura-no in (11) is a reduced relative clause. Mekura-no in mekura-no hito has hito^-jga ^ mekura desu 'A man is blind' in the underlying relative clause. The relativizable NP in this underlying structure is a non-thematic noun phrase hito-ga.

The above sentences for neutral description constitute one kind of counter-example both to Kuno's hypothesis and our revision in the previous section, because these sentences contain reduced relative clauses in which there are no thematic NP's. This type of counter-example would be representable as:

(13) \[
\begin{array}{c}
\left[\begin{array}{c}
\text{NP}_i \quad \text{ga} \\
\text{NP}_i \quad \text{ga}
\end{array}\right] \\
\left[-\text{thematic}\right]
\end{array}
\quad \text{neutral description}
\]
Another type of counter-example is shown in the following conversation between A and B.

\[(14)\] A: Dare-ga gakkoo-ni hi-o tuketa ka?

who school to set-fire

(Lit.) 'Who set fire to the school-building.'

B: Gakkoo-ni urami-o idaku dareka ga yatta.

grudge bear somebody did

(Lit.) 'Somebody did it who bears a grudge against the school.'

In (14), it is supposed that between the two persons (A and B) there is a presupposition, something like 'Somebody seems to have set fire to the school building.' Speaker A wants to get information about the criminal but speaker B does not know definitely who he is. He only gives a conjectural answer, indicating that it was probably an incendiary bearing a grudge against the school who started the fire. The phrase at issue is gakkoo-ni urami-o idaku dareka 'somebody who bears a grudge against the school'.

The head NP dareka 'somebody' must be non-generic and non-anaphoric. It will be classified as an NP for exhaustive listing. This judgement is supported by the fact that
dareka does not allow wa to follow it in (14.B).

Moreover, the relative clause in (14.B) contains an identical indefinite pronoun dareka. This dareka also must be non-anaphoric and non-generic, because even if the underlying relative clause is used as an independent sentence, only ga follows this dareka.

For ease of explanation, we will give the rough underlying structure of the phrase in question:

(15)

```
S
/ \              /
NP₁  {ga}        NP₂
/\               /\   ^
{wa} NP₃  -ni  NP₄  -o  V
         ^\        |
         |          |
         dareka   -      generic
         \          -anaphoric
          \        -
           \      - generic
            \    - anaphoric
        gakkoo urami idaku
```

Notice that both NP₁ and NP₃ are followed by ga. In other words, they are never thematic.

The following conversations can be explained in a similar way.
(16) A: Ano soto-no sawagi-wa nan da?
that outside noise what is

(Lit.) 'What is that noise outside?'

B: Yopparatta gakusei-gal sawaide iru n
drunk-are students making a noise-are
daroo.
perhaps

(Lit.) 'Maybe some drunken students are making a noise.'

(17) A: Ano ki-no ue-no mono-wa nan da?
that tree's on thing what is

(Lit.) 'What is the thing on the tree over there?'

B: Ki-ni kakatta tako rashii.
tree-in caught-is kite look

(Lit.) 'It looks like a kite caught in the tree.'

In (16), the noise was heard in the room. As an answer to speaker A's question, speaker B imagines that some students are drunk and they are being boisterous. In the room neither A nor B knows anything about the real state of affairs. Therefore, the students in question are never generic nor anaphoric. It may be that speaker B himself has no idea who is making the noise, though he gives a
conjectural answer. Therefore, the underlying relative clause also contains an indefinite and non-thematic NP like 'some students' followed by ga. This non-thematic NP is relativized in (16.B).

The situation of (17) is similar. A kite, which is caught in the tree, is brought into existence as new information in the discourse. The relativizable identical NP tako 'kite' in the underlying relative clause is also non-thematic.

As is shown in the above examples (14) ~ (17), we have a type of sentence containing a relative construction, whose head NP is classified as an NP for exhaustive listing and whose embedded coreferential NP is non-thematic. These examples constitute the second type of counter-example to the hypothesis that a relativizable NP is thematic. It will be formulated as:

\[
(18) \left[ \left[ \text{NP}_i \text{ ga X Y} \right] \text{NP}_i \text{ ga} \right]_\text{-thematic} \right] \text{exhaustive listing}
\]

6.3.4 The third type of counter-example is shown in the following conversations:
(19) A: [Mado-o kowasita] no-[wa] dare desu ka?  
window broke person who is  

(Lit.) 'Who was it that broke the window?'  

B: [Kowasita] no-[wa] watakusi desu. 
one I  

(Lit.) 'The one who broke (it) was I.'

(20) Gakkoo-de nani-ga atta ka? [Atta] koto-wa  
school-at what happened happened thing  
kakusazu-ni hanasi nasai.  
openly speak  

(Lit.) 'What happened at school? Tell me exactly what happened there.'

Sentences (19.A) and (20) show that the questioner infers that 'Somebody broke the window', or 'Something happened at school'. But he does not know who broke the window or what happened at school. More specifically, 

Mado-o kowasita no 'the one who broke the window' in (19.A) is to be regarded as related to something like 'Somebody_i broke the window — that somebody_i'. In this case, the first'somebody' is indefinite and non-thematic. This 'somebody' is relativized in the underlying relative clause.
It is followed by ga and not by wa. It is the same case with (20).

On the other hand, the head noun phrases in (19) and (20) are thematic based on the presupposed sentences. The basic meaning of (19.A) involves a presupposition and the overt meaning carried by the surface form. The presupposition may be considered 'Somebody broke the window'. The overt meaning of (19.A) is 'As for the one who broke the window, who is it?' In this case, 'it' presupposes 'the one who broke the window'. Therefore, no 'the one' in the surface form is followed by wa.

The observation mentioned above is supported by two linguists, though their analyses of pseudo-cleft sentences are different from each other.

According to Muraki, the underlying structure of (19.B) would be postulated, something like (21).

\[
(21) \ [S [Dum \ mado \ kowasita]_{S_1} [watakushi \ mado \ window \ broke \ I \ kowasita]_{S_2} \ Prsp]_S
\]

where: Dum = dummy

\[
[S_1 \ S_2 \ Prsp] \text{means that } S_1 \text{ is presupposed for } S_2
\]
In (21), Dum represents 'somebody'. It is non-anaphoric and non-thematic.

Also according to Nakada\textsuperscript{13}, sentence (19.B) would have the following logical structure (22).

(22) I Assume that you Want to Request us to Tell you \(S_1\) (who broke the window) and I Tell you that \(S_2\) (who broke the window) was 'I'.

In (22), 'who' in \(S_1\) represents \textsc{no} (the one who) in (19.B). This WH-word is non-anaphoric and non-thematic.

Our concern is not to argue for or against Nakada's or Muraki's analysis, nor to observe their derivational processes of pseudo-clefting. What I want to indicate here is that Muraki's dummy symbol in \(S_1\) and Nakada's WH-word in \(S_1\) are both indefinite, non-generic, non-anaphoric and non-thematic.

The above observation of sentences (18) and (19) tells us that there is a type of sentence which contains a relative construction whose head NP can be thematic but whose embedded coreferential NP must be non-thematic. I will formulate this type of relative construction in the
following way:

(23) \[
\left[ [\text{NP} -\text{ga} \ x \ y] \text{NP} -\text{wa} \right] \\
[-\text{thematic}] \quad [+\text{thematic}]
\]

Now, based on the above three types of counter-examples (13), (18) and (23), we can not but discard both Kuno's hypothesis and our revision. Those hypotheses block our counter-examples incorrectly because they require that relative clauses contain thematic NP's followed by \text{wa}. We conclude that there are some cases where relativization is applicable to a non-thematic NP in the relative clause.

6.4 SUMMARY

The following is the recapitulation of the significant points discussed in this chapter.

a. There are some counter-examples to Kuno's hypothesis that a relativizable NP is an NP immediately followed by \text{wa}. Therefore, we revised Kuno's hypothesis to the effect that a relativizable NP is thematic.
b. However, in section 3, we presented some crucial counter-examples to our revision of Kuno's hypothesis. There are three types of counter-examples which do not contain the themes in the underlying relative clauses. Therefore, we cannot but reject both Kuno's hypothesis and our revision.
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SUMMARY AND CONCLUSIONS

The main points of our discussion may be restated as follows:

a. Ross's claim that the CNPC, the Cross-over Condition, and the CSC apply to Japanese relativization is not always true. Rather, we should say that Ross's CNPC and Postal's Cross-over Condition are mostly irrelevant to Japanese relativization.

b. Japanese relativization is neither a chopping rule nor a copying rule nor a feature-changing rule.

c. It is a deletion transformation by which an identical embedded NP is deleted without any movement.

d. Because his Nearest NP Constraint blocks grammatical sentences in some cases and also because
Japanese has the backward deletion across the sentence, Muraki's argument for his underlying structure of a relative construction does not hold.

e. We have discussed Kuno's following claims.

(i) The relativized NP leaves a (reflexive) pronoun in the original position under a certain condition.

(ii) An NP in an adverbial clause is relativizable under some conditions which are quite unknown.

If we must base our reasoning on his other hypothesis that a relativizable NP is an NP immediately followed by a thematic particle wa, we will have to reject (e.i) and (e.ii). Here, what is relativized should be the thematic NP.

f. In the first half of Chapter VI, we have revised Kuno's above hypothesis to the effect that a relativizable NP is thematic whether or not there is an intervening particle between the thematic NP and wa.
g. However, in the latter half of the same chapter, we have observed that there are some cases where non-thematized NP's are relativized. Thus, we can not but discard the above hypothesis (f).

h. As a natural consequence of the above conclusions, Kunō's two hypotheses (e.i) and (e.ii) would arise again and claim our re-examination. If (g) is correct, we lose the ground for the rejection of these two hypotheses (e.i) and (e.ii).

i. However, if we abandon hypothesis (f), we can not explain why an NP in an adverbial clause is relativizable in some cases and it is not in others. We can not account for the conditions of reflexivization of a relativized NP, either.

I do not know at present how to reconcile these contradictory phenomena. However, one possible solution may be found in Lewkowicz's observation. Lewkowicz says
that in Arabic only subject-initial (including topic-initial) sentences can be used as relative clauses. This means that there are two types of underlying structures for relative clauses, that is, non-thematized subject initial sentences and theme-initial sentences.¹

This may be useful for our analysis of Japanese relative clauses. In other words, though Japanese and Arabic are different, this leads me to speculate on the possibility that there may also be two types of underlying structures for Japanese relative constructions. One of these involves a thematic NP and the other would not.

In fact, each of the examples given by Kuno concerning (e.i) and (e.ii) is supposed to contain a thematic NP in its underlying structure. Each sentence requires that an embedded relative clause be a complex sentence which contains in it a deeply embedded sentence and that an NP in this deeply embedded constituent sentence be identical to the head NP in a matrix sentence.

On the other hand, our counter-examples do not in-
volve the deeply embedded constituent sentences. Our counter-examples contain exhaustive listing or neutral description. The exhaustive listing and neutral description involve new information-part in conversation. A new information-part must be simple and also clear. It must be expressed in the form of a simplex sentence or in the form of a complex sentence which has one embedded sentence. It must not be too complex and complicated. When one has much new information to convey, one can divide the information into a set of simplex sentences or a sequence of conjoined sentences. One will not change it into one complex sentence which contains a complicated structural hierarchy. Thus, I conjecture that there may be two types of relative clauses; one involves a thematic NP and the other does not.

The above extremely tentative solution has not yet been fully examined, and the question of how many deeply embedded sentences are possible in each sentence is quite unknown in Japanese. That seems to be closely related to the problem of style. It may also require some related
research in the field of psychology which lies beyond the scope of our present study. We will have to leave the solution of this problem for the future.
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BIBLIOGRAPHY


