

# Reconstruction Effects and *Zibun*-Binding in Relative Head Position\*

Yukiko Ueda

## Summary

This paper discusses the reconstruction effects and binding of *zibun* in relative clause head positions. We propose two different structures for “*zibun no X*”: AGENT *zibun* is in Spec of DP; non-AGENT *zibun* (e.g. THEME *zibun*) is a sister position of the relative clause. We claim that the relative clauses with AGENT *zibun* are derived by IP scrambling at S-Structure. This structural relation between the scrambled relative clause and its head is very similar to non-restrictive relatives. Thus, we will conclude, at least, that a relative clause with AGENT *zibun* is non-restrictive one. By assuming our proposed structure of relative clauses and the obligatory undoing of the scrambled IP in the sense of Saito (1992), the disjoint interpretation between *zibun* and the subject in the relative clause results from the condition (C) type of reconstruction effects.

**\*reconstruction effects \*scrambling \*AGENT**

## 0. Introduction

In (1)–(2), an NP in a relative clause cannot bind an anaphoric expression in the head of the relative clause.

- (1) a. Taroo<sub>i</sub> -ga Ziroo<sub>j</sub> -no-tokoro-ni [John<sub>k</sub> -ga e taipu-sita] *zibun*<sub>i/\*j/\*k</sub>  
 -NOM -GEN -place -DAT -NOM typed SELF  
 -no ronbun-o mottekita  
 -GEN paper -ACC brought  
 ‘Taroo brought SELF’s paper which John typed to Ziroo.’
- b. Taroo<sub>i</sub> -ga Ziroo<sub>j</sub> -no-tokoro-ni [John<sub>k</sub> -ga e taipu-sita] *zibun-zisin*<sub>i/\*j/\*k</sub>  
 SELF-SELF
- no ronbun-o mottekita  
 -GEN paper -ACC brought

言語科学研究第1号(1995年)

c. Taroo<sub>i</sub> -ga Ziroo<sub>j</sub> -no-tokoro-ni [John<sub>k</sub> -ga e taipu-sita] *kare-zisin* <sub>i/j/k</sub>  
 HE-SELF

-no ronbun-o mottekita

-GEN paper -ACC brought

- (2) a. [John<sub>i</sub> -ga kesa e mituketa] *zibun*<sub>i</sub> ni tuite-no sinbunkizi  
 -NOM this morning found SELF about newspaper article  
 'the newspaper article about SELF which John found this morning.'
- b.??[John<sub>i</sub> -ga kinoo e taipu-sita] *zibun*<sub>i</sub> -no kizi  
 -NOM yesterday typed SELF -GEN article  
 'SELF's paper which John typed yesterday.'

We claim that a kind of AGENT *zibun* is base-generated in Spec of DP such as WH-phrases, whose and which (Fiengo (1988)), not under an NP. On the other hand, non-AGENT *zibun*, *zibun-zisin*, and *kare-zisin* are base-generated under an NP like *himself* in English. Furthermore, sentences such as (1a) are derived by IP scrambling. We will attempt to explain the contrast between (1a)–(1c) and between (2a)–(2b) by the condition (C) type reconstruction effects only for AGENT *zibun*.

Section 1 will point out problems in previous analyses of relative clauses with a head containing an anaphor (Ishii (1991) among others), which are based on LF anaphor raising (Katada (1991)) and Chain Binding (Barss (1986)) and reconstruction effects through Williams' predication. Section 2 will justify two distinct positions for *zibun* of 'zibun no X.' The proposed structure for AGENT *zibun* appropriately predicts the disjoint reading between the anaphor in the relative head position and the subject NP of the relative clause in terms of condition (c) type of reconstruction effects. In section 3, we will observe that relative clauses with Agent *zibun* behave structurally like non-restrictive relatives in terms of reconstruction effects and parasitic gap licensing. The final section will give the conclusion.

## 1.0. A Problem of Anaphor Binding in Relative Clause

### 1.1. Basics of Anaphor Binding in Japanese

Japanese has three types of anaphors, *zibun*, *zibun-zisin*, *kare-zisin*. *Zibun* is a long-distance anaphor, whose antecedent can be outside its Governing Category,

Reconstruction Effects and *Zibun*-Binding in Relative Head Position

and is subject oriented as illustrated in (3a). (3b-c), on the other hand, show that *zibun-zisin* and *kare-zisin* must be locally bound.

- (3) a. Taroo<sub>i</sub> -ga Ziroo<sub>j</sub> -ni [John<sub>k</sub> -ga *zibun*<sub>i/\*j/k</sub> -o semeteiru] to itta  
 -NOM -DAT -NOM SELF -ACC blame COMP said  
 ‘Taroo said to Ziroo that John blamed SELF.’
- b. Taroo<sub>i</sub> -ga Ziroo<sub>j</sub> -ni [John<sub>k</sub> -ga *zibun-zisin*<sub>\*i/\*j/k</sub> -o semeteiru] to itta  
 -NOM -DAT -NOM SELF-SELF -ACC blame COMP said
- c. Taroo<sub>i</sub> -ga Ziroo<sub>j</sub> -ni [John<sub>k</sub> -ga *kare-zisin*<sub>\*i/\*j/k</sub> -o semeteiru] to itta  
 -NOM -DAT -NOM HE-SELF -ACC blame COMP said

Unlike *zibun* of *zibun-zisin*, *kare-zisin* does not show Subject Orientation as in (4).

- (4) a. Tanaka sensei<sub>i</sub> -ga Ziroo<sub>j</sub> -ni *kare-zisin*<sub>i/j</sub> -no ronbun-o riidingu  
 -NOM -DAT HE-SELF -GEN paper -ACC reading  
 asainmento tosite ataeta  
 assignment as gave  
 ‘Mr. Tanaka gave SELF’s paper to Ziroo as a reading assignment.’
- b. Tanaka sensei<sub>i</sub> -ga Ziroo<sub>j</sub> -ni *zibun*<sub>i/\*j</sub> -no ronbun-o riidingu  
 -NOM -DAT SELF -GEN paper -ACC reading  
 asainmento tosite ataeta  
 assignment as gave
- c. Tanaka sensei<sub>i</sub> -ga Ziroo<sub>j</sub> -ni *zibun-zisin*<sub>i/\*j</sub> -no ronbun-o riidingu  
 -NOM -DAT SELF-SELF -GEN paper -ACC reading  
 asainmento tosite ataeta  
 assignment as gave

Katada (1991)<sup>1</sup> proposes that *zibun* is an operator anaphor, which is raised and adjoined to VP to get an appropriate interpretation in LF, and that its licensing takes place at LF. Since *zibun* can raise by iterative VP adjunctions, it can extend its GC domain and find its subject antecedent outside its immediate clause. In her analysis,

言語科学研究第1号(1995年)

*zibun* of *zibun-zisin* raises locally due to the Empty Category Principle (henceforth ECP), but *kare* of *kare-zisin* does not move at any level of syntax. However, examples like (5) in Section 1.2 are much more complicated.

1.2. Antecedent of *zibun* and *kare-zisin* in a Relative Head Position

In (5), the relative clause head contains an anaphor.

- (5) a. Bill<sub>i</sub> -ga [John<sub>j</sub> -ga e taipu-sita] *kare-zisin* <sub>i/j</sub> -no ronbun-o  
           -NOM       -NOM   typed       HE-SELF     -GEN paper -ACC  
       mottekita  
       brought
- b. Bill<sub>i</sub> -ga [John<sub>j</sub> -ga e taipu-sita] *zibun* <sub>i/\*j</sub> -no ronbun-o  
           -NOM       -NOM   typed       SELF       -GEN paper -ACC  
       mottekita  
       brought

In (5b), *zibun* cannot take the subject *John* of the relative clause as its antecedent unlike *kare-zisin* in (5a). Ishii (1991) and others insist that *kare-zisin* exhibits reconstruction effects (henceforth REs), whereas *zibun* does not. However *zibun*, in fact, exhibits REs in scrambled sentences like (6) (Hoji 1985, Saito 1985/1989, Ishii 1991, among others).

- (6) a. [<sub>NP</sub> sono *zibun* <sub>i</sub> -ni tuite-no hon]<sub>j</sub> -o John<sub>i</sub> -ga e<sub>j</sub> suteta  
       the     SELF     about     book -ACC     -NOM threw away  
       ‘John<sub>i</sub> threw away the book about himselfi.’
- b. [<sub>NP</sub> [<sub>S</sub> Mary-ga *zibun* <sub>i</sub> -ni kureta] hon]<sub>j</sub> -o John<sub>i</sub> -ga e<sub>j</sub> suteta  
           -NOM SELF -DAT gave   book -ACC     -NOM threw away  
       ‘John<sub>i</sub> threw away the book that Mary gave to SELF<sub>i</sub>.’

(Ishii: 1991, 26)

These studies suggest that REs with *zibun* show up only when the movement is literally undone. This indicates that scrambling can be literally undone in LF, where-





Reconstruction Effects and *Zibun*-Binding in Relative Head Position

- b. \*[Taroo<sub>i</sub> -ga e sengensita] *zibun*<sub>i</sub> -no yuushoo-wa mokuzenda.  
 -NOM declared SELF<sub>i</sub> -GEN victory -TOP is about to come true  
 ‘SELF<sub>i</sub>’s victory that Taroo<sub>i</sub> declared is about to come true.’
- (10) a. [John<sub>i</sub> -ga e kesa mituketa] *zibun*<sub>i</sub> nituite no shinbunkiji-wa  
 -NOM this morning found SELF<sub>i</sub> about newspaper article -TOP  
 hotondo detarame datta.<sup>5</sup>  
 almost nonsensical PAST  
 ‘The newspaper article about SELF<sub>i</sub> that John<sub>i</sub> found this morning was almost nonsensical.’
- b. [John<sub>i</sub> -ga e kiita] *zibun*<sub>i</sub> -no uwasa-wa omotta izyoo ni hidokatta.  
 -NOM heard SELF<sub>i</sub> -GEN rumor -TOP expected much worse  
 ‘SELF<sub>i</sub>’s rumor that John<sub>i</sub> heard was much worse than he expected.
- c. [John<sub>i</sub> -ga e gakusei-sho-ni hatteiru] *zibun*<sub>i</sub> -no syasin-wa  
 -NOM student ID -on puts SELF<sub>i</sub> -GEN picture -TOP  
 zissaiyorimo wakaku mieru.  
 than younger looks  
 ‘SELF<sub>i</sub>’s picture that John<sub>i</sub> puts on his student ID looks younger than he is.’

The analysis that I mentioned above predicts that (10) should be unacceptable due to incomplete predicational relation between the head NP containing the anaphor and the operator. The examples in (10) are, however, significantly better than (9). We would like to claim in the following section that only (9), but not (10)–(12), should be categorized as ungrammatical because of the violation of condition (C) of the Binding Theory.

If *zibun* of *zibun-zisin* also raises in the LF component as in Katada (1991), (11), which contains *zibun-zisin* in the relative head, should be ungrammatical or have the same degree of marginality as (9), but (11) is perfectly acceptable.

- (11) [Taroo<sub>i</sub> -ga e syoosetu ni kakiorosita] *zibun*<sub>i</sub> -zisin -no oitati-ga  
 -NOM novel wrote SELF<sub>i</sub> -SELF-GEN personal history -NOM

言語科学研究第1号(1995年)

eigakasareru kotoninatta.

be-made into a movie became

'SELF<sub>i</sub> -SELF's personal history that Taroo<sub>i</sub> wrote as a new novel will be made into a movie soon.'

*Zibun-zisin* of (11) is replaced with *zibun* in (12), but (12) is quite acceptable.

- (12) a. [Taroo<sub>i</sub> -ga e syoosetu ni kakiorosita] *zibun*<sub>i</sub> -no oitati-ga  
           -NOM novel wrote SELF<sub>i</sub> -GEN personal history -NOM  
 eigakasareru kotoninatta.  
 be-made into a movie became

Therefore, the marginality of (9) is not due only to incomplete predication by anaphor raising in LF, as the high acceptability of (10), (11), and (12) indicate.

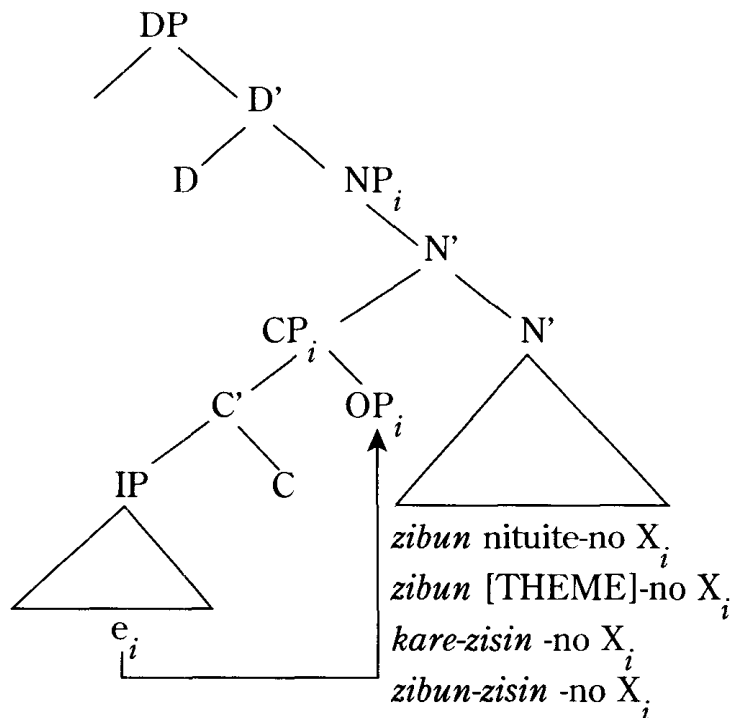
## 2.2. AGENT *zibun* vs. Non-AGENT *zibun*

The contrast suggests that *zibun* in (9) is different from that in (10)–(12). In (9), *zibun* of “*zibun* no X” is assigned AGENT theta-role by X or *no*, whereas *zibun* in (10)–(12) is not. *Zibun* in (9a-b) refers to (a) the person who retires from his job and (b) the person who wins a race, while those in (10)–(12) are interpreted as “THEME of X” or “X about *zibun*.” *Zibun* in (9) is generated in a higher position than in (10)–(12). In addition, non-AGENT *zibun* in (10b-c) and (12) are generated under an NP like other anaphors *zibun*-nituite, *zibun-zisin*, and *kare-zisin* in (8b), (10a), and (11). (13) shows the structure of the relative clause in (10)–(12).



Reconstruction Effects and *Zibun*-Binding in Relative Head Position

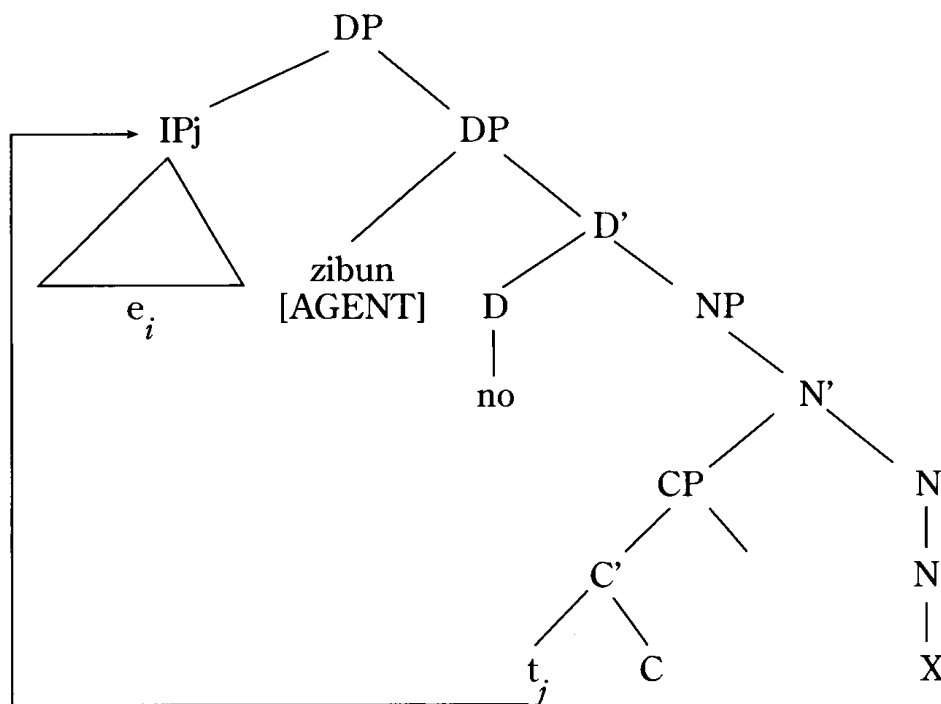
(13)



In this construction, unless *zibun* raises to the matrix VP, *zibun* can be coreferential with the subject NP in the relative clause through predication in the sense of Ishii (1991). It follows that we observe reconstruction effects in them, even though the relative head contains *zibun*, when the relative clause itself is the matrix subject. Namely, when there is no other candidate for its antecedent in the matrix clause, non-AGENT *zibun* in the relative head position can be coreferential with the subject in the relative clauses. On the other hand, *zibun* in (9), which is an AGENT *zibun* is placed in SPEC of DP, at least in the LF component as illustrated in (14)<sup>6</sup>.

言語科学研究第1号(1995年)

(14)



It is claimed that sentences in (9) are derived by IP scrambling. AGENT *zibun* has nothing to do structurally with the subject NP in the relative clause at S-structure. It follows, thus, that reconstruction effects with AGENT *zibun* are not observed. If scrambling is undone in LF as in Saito (1992), (9) are ruled out by the Condition (C) type of reconstruction effects, but not by incomplete predication. The subject Taroo in (9) is bound by *zibun* after the obligatory undoing of scrambling in LF, if *zibun* is coreferential with the relative clause subject.

Further evidence is provided by the set (15), which are more acceptable than (9). In (15), X of “*zibun* no X” are “*situgyoo*” (unemployment) and “*syoosin*” (promotion) and are unaccusative, that is, subjects are in a lower position than an agentive subject. Their acceptability is almost as high as (10)–(12).

- (15) a. [[John<sub>i</sub>-ga e<sub>i</sub> naganen yumemitekita] [*zibun*<sub>i</sub>-no syoosin]<sub>j</sub>]-ga Mary  
 -NOM for years hes dreamed SELF -GEN promotion -NOM  
 tono rikon-no ookina gen'in-ni natta.  
 from divorce -GEN big reason became  
 ‘SELF<sub>i</sub>’s promotion that John<sub>i</sub> has dreamed for years was one of the

Reconstruction Effects and *Zibun*-Binding in Relative Head Position

biggest reason for his divorce from Mary.’

- b. [[John<sub>i</sub> -ga e<sub>i</sub> osoreteita] [*zibun*<sub>i</sub> -no situgyoo]<sub>j</sub>]-ga genzitu to natta.  
 -NOM worried SELF -GEN unemployment -NOM be-realized  
 ‘SELF<sub>i</sub>’s unemployment that John<sub>i</sub> had been afraid of was realized.’

### 3.0. AGENT *zibun* in the head of Non-Restrictive Relative Clauses

We have, so far, observed that there are two distinct positions for *zibun* of “*zibun* no X”. AGENT *zibun* does not allow coreferential reading with the relative clause subject unless *zibun* raises and adjoins to a higher VP. We propose a structure like (14) derived by IP scrambling for relative clauses with AGENT *zibun*. This is reminiscent of the structural relation between a non-restrictive relative clause and its head.

#### 3.1. Reconstruction Effects and Non-Restrictive Relative Clause

Non-restrictive relatives do not exhibit reconstruction effects even with *kare-zisin*, because non-restrictive relatives in Japanese do not involve any movement, even operator movement (Ishii, 1991; Safir, 1986). Their head-clause relation is a simple predication.

- (16) ?\*Mary-wa [John<sub>i</sub> -ga taipu-sita] ano *kare-zisin*<sub>i</sub> -no ronbun-o  
 -TOP -NOM typed that HE-SELF -GEN paper -ACC  
 sutete-simatta.

threw away

‘Mary threw away that paper of his<sub>i</sub> own, which John<sub>i</sub> typed’

(Ishii, 1991, p.49, with some modifications)

Similar phenomena have been observed in relative clauses with AGENT *zibun*. The reading “AGENT *zibun* = rel.cl. Subj. *Taroo*” in (9) is impossible. The structure suggested in (14) also appropriately predicts that the coreferential reading “*zibun* = John” is implausible, where the head *zibun* no X does not c-command the relative clause; thus the predicational relation is not possible. If our proposed structure is appropriate for AGENT *zibun*, sentences such as (9) must exhibit the properties of non-restrictive relatives.



## Reconstruction Effects and *Zibun*-Binding in Relative Head Position

The parasitic gap  $e_j$  in (17b) can be licensed even though the acceptability is a little marginal, whereas that in (18b) cannot. The contrast indicates that the relative clauses with AGENT *zibun* share some structural properties with non-restrictive relative clauses, but not with restrictive clauses in terms of gap licensing.

### 4.0. Conclusion

This paper has discussed binding of anaphor in the head of the relative clauses. We have suggested, at least two distinct positions of “*zibun* no X;” one being the SPEC of DP for AGENT *zibun*, the other being the sister position of the relative clause for non-AGENT *zibun*. We have claimed that the former, which is derived by IP scrambling, shares some structural properties of non-restrictive relative clauses; and have shown evidence in terms of reconstruction effects and parasitic gaps.

\*Thanks are due to Kazuko Inoue, Nobuko Hasegawa, Masatake Muraki, Misato Tokunaga, Akira Watanabe, Kazuma Fujimaki, Noriko Kamata, Sumiko Tonosaki, Kazuto Murayama, and Keiji Ogawa.

### Notes

1. Katada (1991) does not discuss anaphors in genitive case. Ishii (1991) expands her idea to genitive construction, [<sub>NP</sub> ANAPHOR's N] as a relative head.
2. Schachter (1973) proposed to directly raise the head NP from the relative clause.
3. He extends the term “reconstruction effects” as follows: An anaphor which is not c-commanded by its antecedent at S-structure is well-formed, if it or a phrase related to a phrase that contains it through predication is c-commanded by the antecedent at D-structure.
4. Some (Ishii (1991)) judge the coreferential readings in (8b)-(9b) to be impossible.
5. Akira Watanabe suggested this example in personal communication.
6. As for interpretation of *zibun* as POSSESSOR, the reading of *zibun* = Subj. in the relative clause is highly acceptable, as illustrated in (i).
  - (i) *zibun* = Possessor reading
    - a. [Taroo<sub>i</sub> ga tuyoku syutyooosita] *zibun*<sub>i</sub> no aribai ga kaette tatiba-o warukusita.
    - b. [Taroo<sub>i</sub> ga konkai no zisin de nakusita] *zibun*<sub>i</sub> no osiego wa 20-nin o koeta.
 This paper, however, leaves the problem of POSSESSOR *zibun* open to further study.

言語科学研究第1号(1995年)

**References**

- Abe, J. (1990) "On Anaphor Binding," Univ. of Connecticut.
- Fiengo, R. (1988) "The Syntax of WH-in-situ," *WCCFL* 7, 81-98.
- Hoji, H. (1985) *Logical Form Constraints and Configurational Structures*, Doctoral Dissertation, Univ. of Massachusetts, Amherst.
- Hoshi, K. (1994) "The Syntax of the Head-Internal Relative Clause Construction in Japanese," ms., Univ. of Rochester.
- Ishii, Y. (1991) *Operator and Categories in Japanese*, Doctoral Dissertation, The Univ. of Connecticut.
- Katada, F. (1991) "The LF-Representation of Anaphors," *Linguistic Inquiry* 22, 287-313.
- Nakamura, T. (1991) "Yuui-joken to Sokubaku Genri (c)," *The Rising Generation Vol. CXXXVII. No. 2*, 2-9.
- Safir, K. (1986) "Relative Clause in a Theory and Levels," *Linguistic Inquiry* 17, 663-689.
- Saito, M. (1985) *Some Asymmetries in Japanese and Their Theoretical Implications*, Doctoral Dissertation, MIT.
- . (1992) "Long-Distance Scrambling in Japanese," *Journal of East Asian Linguistics* 1, 69-118.
- Schachter, P. (1973) "Focus and relativization," *Language*, 49, 19-46.
- Tonoike, S. & Ohishi, M. (1992) "Saishin Chomsky riron no gaiyoo (1)-(5)," *The Rising Generation, CXXXVIII. No. 5-9*.
- Williams, E. (1980) "Predication," *Linguistic Inquiry*, 11, 203-238.