

The syntax of Japanese *tokoro*-clauses: Against control analyses

Abstract

The Japanese *tokoro*-clause construction has long been an intriguing topic in Japanese linguistics because of its mismatch between syntax and semantics. Syntactically, the *tokoro*-clause itself seems like an object of the matrix verb through being assigned an accusative particle, while semantically the subject of the *tokoro*-clause is interpreted as the object. It has been argued that this mismatch can be reconciled by assuming that there is a null thematic object in the matrix clause, and that backward object control is involved between the unpronounced object and the downstairs *tokoro*-clause subject: NP *ec_i* [NP_{*i*} V *tokoro*]-ACC V. By reconsidering the syntactic structures of less-known dative *tokoro*-clauses as well as accusative *tokoro*-clauses, it is argued that backward object control is not involved in this construction. More specifically, I will show that subordinate *tokoro*-clauses can be categorised into four types depending on the matrix predicate and particle attached to them, among which two are objects on their own, and the other two are vP-adjuncts. Even though there is an unpronounced matrix object in the latter case, I will show that it is *pro*, hence the referential relation involved in this construction is pronominal coreference rather than obligatory control.

Keywords: *Tokoro*-clauses; backward object control; adjuncts; pronominal coreference

1. Introduction

As a starting-point for discussion, let us consider the nature of control. Control is an obligatory referential relation between two thematic positions: one overt and the other covert. The covert anaphor, called the controllee, is coreferential with the overt antecedent, called the

controller. Over the past few decades in generative syntax, the main focus of interest has been placed on instances of *forward* control in which a controller is located in a position c-commanding a controllee that is typically the subject of a nonfinite complement clause. Forward control is instantiated by such sentences as the following; in (1a) the matrix subject *John* is the controller (subject control), and in (1b) the matrix indirect object *Mary* is the controller (object control).

- (1) a. John_i tried [PRO_i to find a new housemate]. (forward subject control)
 b. John persuaded Mary_i [PRO_i to find a new housemate]. (forward object control).

Since the seminal work of Polinsky and Potsdam (2002a,b), however, many attempts have been made to corroborate the existence of a *backward* instantiation of control. In backward control, the positions of controller and controllee are the reverse of those in forward control. As roughly schematised in (2), a controller is located in a lower position that is c-commanded by its controllee, whether it is a matrix subject as in (2a) (backward subject control) or a matrix (in)direct object as in (2b) (backward object control).

- (2) a. PRO_i V [controller_i V ...] (backward subject control)
 b. NP V PRO_i [controller_i V ...] (backward object control)

Though not exhaustively, backward subject control has so far been claimed to occur in Tsez (Polinsky and Potsdam, 2002a), Malagasy (Polinsky and Potsdam, 2002b), Telugu (Haddad, 2009), Romanian (Alboiu, 2007; Alexandou et al., 2010), Greek (Alexandou et al., 2010) and Spanish (Alexandou et al., 2010); and backward object control in Japanese (Kuroda, 1965, 1978, 1999; Harada, 1973; Fujii, 2004, 2006; Narita, 2007), Brazilian Portuguese (Farrell,

1995), Korean (Monahan, 2003) and Malagasy (Potsdam, 2006, 2009).¹ It is important to note that the presence of backward control casts doubt on the existing PRO-based analysis of obligatory control. First of all, the PRO-based analysis has as its prerequisite that a PRO subject in a complement clause has a c-commanding controller (Rosenbaum, 1967). Since a controller is situated structurally lower than a controllee in backward control configurations, the PRO-based analysis has nothing to say about how the controllee can establish an obligatory referential relation with the downstairs controller. Furthermore, backward control challenges previous studies on the distribution of PRO. Analyses based on the PRO theorem (Chomsky, 1981) and null Case (Chomsky and Lasnik, 1993; Martin 1996, 2001; Bošković, 1997) limit the distribution of PRO to the subject position in nonfinite clauses.² Therefore, it is surprising for these analyses to see that PRO is in the finite matrix clause, and what is more, in the object position that is inevitably governed.

Aside from these problems with the PRO-based analysis, backward control is often argued to support the movement theory of control (henceforth MTC) that has been proposed in different forms by Bowers (1981, 2008), O’Neil (1995) and Hornstein (1999); and argued for, among others, by Hornstein (2001, 2003), Boeckx and Hornstein (2003, 2004, 2006) and Boeckx, Hornstein and Nunes (2010). The MTC assumes that movement into θ -positions is admissible, and that it is possible to assimilate obligatory control to raising constructions with the only difference lying in the number of θ -roles a controller checks in the course of movement.³ Coupled with the copy theory of movement (Chomsky, 1995), therefore, backward control can be reduced to a matter of which copy of a given A-chain will be pronounced at PF. That is, although a controller moves out of the embedded clause into the

¹ See also Polinsky and Potsdam (2006) and Fukuda (2008) for an overview of existing backward control analyses.

² The PRO theorem (Chomsky, 1981) states that PRO must be ungoverned. Null Case analyses (Chomsky and Lasnik, 1993; Martin 1996, 2001; Bošković, 1997) state that PRO has a special ‘null’ Case that can only be checked by a tensed nonfinite T. Although the technicalities differ, both suppose that PRO is limited to the subject position of tensed nonfinite clauses (untensed nonfinite clauses being raising clauses) because this is the only position where it is not governed, and where it is assigned null Case.

³ Although Bowers does not adopt the position that movement into θ -positions is possible, I include his analysis as an instance of the MTC because of its basic similarity with others.

matrix clause in order to check a θ -role, the controller is forced to be pronounced in the base position, for independent reasons such as case (see Monahan, 2003; Potsdam, 2006, 2009; Boeckx, Hornstein and Nunes, 2010).

This paper discusses *tokoro*-clause (henceforth TC) constructions in Japanese exemplified by such sentences as follows.⁴

- (3) a. Keikan-ga *ec_i* [doroboo_i-ga nige-ru tokoro]-o tukamae-ta.
Policeman-NOM thief-NOM run.away-PRS tokoro-ACC catch-PST
‘The policeman caught the thief_i as he_i tried to run away.’
- b. John-ga *ec_i* [Mary_i-ga otikonde i-ru tokoro]-o nagusame-ta.
John-NOM Mary-NOM down be-PRS tokoro-ACC console-PST
‘John consoled Mary_i when she_i was down.’

Here, the clause headed by the noun *tokoro* – which literally means ‘place or scene’ – functions as giving background information of the circumstances in which the event denoted in the matrix clause takes place. Hence, the TC is most naturally interpreted as a circumstantial adverb introduced by conjuncts such as *as* or *when*, as the translation in (3) suggests. What is peculiar about this construction is that while the matrix verbs *tsukamae-ru* ‘catch’ in (3a) and *nagusame-ru* ‘console’ (3b) require a direct object, it does not surface in the matrix clause. Instead, this missing object appears in the TC, in most cases as the subject (*doroboo* ‘thief’ in 3a, and *Mary* in 3b). I shall henceforth refer to this argument within the TC which is understood as a thematic object of the matrix verb as the T(okoro)-pivot, following the terminology of Narita (2007). In addition, attention is directed to the seemingly

⁴ The abbreviations used in this article are as follows: ACC = accusative, C = complementiser, COP = copula, DAT = dative, *ec* = empty category, GEN = genitive, NOM = nominative, PASS = passive, PROG = progressive, PRS = present (non-past) tense, PRT = particle, PST = past tense, Q = question, RECIP = reciprocal, TOP = topic marker

accusative case particle *o* attached to the TC. Since in Japanese case value manifests as a particle following an NP, it appears at first glance as if the TC itself is the direct object of the matrix verb, in spite of its meaning as a circumstantial adverb. Accordingly, this anomalous behaviour of TC constructions leads us to ask (i) why the thematic object of the matrix verb appears as the T-pivot within the TC, and (ii) why the TC seems to be assigned case by the matrix verb.⁵ Putting aside the latter question for discussion in section 5, the answer to the first question may lie in the presence of an unpronounced matrix object, notated as *ec* in (3). Previous analyses assume that the T-pivot is interpreted as the thematic object of the matrix verb because there is a null matrix object obligatorily coreferential with it. In other words, the T-pivot controls the unpronounced matrix object backward. In fact, TC constructions are considered a pioneering instance of backward control tracing its origin to a series of works in the sixties and seventies (e.g., Kuroda, 1965, 1978; Harada, 1973; Ohso, 1976; Hale and Kitagawa, 1976-77), and some have recently tried to analyse it in terms of the MTC (Fujii, 2004, 2006; Narita, 2007). The primary purpose of this paper is to suggest that TC constructions do not involve obligatory control, let alone backward control, by reconsidering the structures of not only accusative but also dative TCs proposed by Kuroda (1999). By so doing, it will become clear that TCs are categorised into four types depending on the matrix predicate and the particle attached to them, among which two are objects of the matrix verb on their own, and the other two are *v*P-adjuncts. Even though there is an unpronounced matrix object in the latter case, I will show that it is *pro*, hence the referential relation between the

⁵ In relation to TC constructions, head-internal relative clauses (HIRC) should be mentioned here. HIRCs look similar to TCs with the only superficial difference being that HIRCs are headed by the nominaliser *no* instead of *tokoro*.

(i) Keikan-ga [yopparai-ga sawaide i-ta *no*]-o tukamae-ta.
Policeman-NOM drunk.person-NOM shout be-PST C-ACC catch-PST
‘The policeman caught the drunk shouting.’

Notwithstanding the superficial similarity, there is a big difference between the two. That is, unlike TCs, HIRCs can be passivised.

(ii) [Yopparai-ga sawaide i-ta *no*]-ga keikan-niyotte tukamae-rare-ta.
drunk.person-NOM shout be-PST C-NOM policeman-by catch-PASS-PST

For this reason, many researchers analyse HIRCs as complements (but see Mihara, 1994; Mihara and Hiraiwa, 2006 for an adverbial analysis). And it is true that some propose a sort of backward control analysis on the assumption that there is a null relative head (e.g., Ito, 1986; Ishii, 1989; Watanabe, 1992). The important thing to note, however, is that it seems no one has explicitly argued that HIRCs involve obligatory control. I will not follow up this point any further as it would carry us too far away from the purpose of this paper. The reader is referred to Shimoyama (1999), Kim (2004) among many others.

unpronounced matrix object and the T-pivot is pronominal coreference.

The structure of the paper is as follows. In section 2, I will outline previous analyses of TC constructions in order to provide an idea of why and how this particular construction has been analysed as an instance of backward control. In section 3, I will demonstrate that TCs can be divided into 4 types depending on the matrix predicate and particle, and that two of them are objects on their own and the other two are adjuncts. Section 4 extends previous studies and argues that the unpronounced matrix object in TC constructions is generally not controlled. Section 5 discusses the nature of the particles attached to adjunct TCs. Section 6 is a conclusion.

2. Backward control analyses

This section aims to account for why it is believed that there is an unpronounced matrix object in TC constructions and why it is considered controlled backward by the T-pivot. First, in section 2.1, I elucidate evidence for the presence of the unpronounced matrix object; then by outlining previous analyses in chronological order, I account for how and why this construction has been considered to involve backward control.

2.1 The unpronounced matrix object

The first piece of evidence for the unpronounced matrix object comes from Harada (1973) who proposes that the matrix verb can impose selection restrictions on the TC subject. First of all, it is not feasible for *keikan* ‘policeman’ to catch *ame* ‘rain’ in a simple sentence (except in a figurative meaning) as shown in (4).

(4) * *Keikan-ga ame-o tukamae-ta.*

Policeman-NOM rain-ACC catch-PST

‘The policeman caught rain.’

(Harada, 1973: his 31)

The same selection restriction can be observed if *ame* ‘rain’ is the subject of the TC as in (5).

This cannot be accounted for without assuming that there is an unpronounced matrix object *ec* coreferential with the TC subject *ame* ‘rain’, because normally the matrix verb cannot place selection restrictions on the embedded subject.

(5) *Keikan-ga *ec*_i [ame_i-ga fut-tei-ru tokoro]-o tukamae-ta.

Policeman-NOM rain-NOM fall-PROG-PRS tokoro-ACC catch-PST

‘The policeman caught rain when it was falling.’

(ibid.: his 30)

The second piece of evidence comes from Condition B of Binding Theory, which prohibits a pronoun from being bound by an antecedent in the designated binding domain.⁶

Let us first look at the example in (6) which shows that the pronoun *kare* ‘he’ cannot corefer with the clause-mate antecedent *John* due to Condition B.

(6) *John_i-ga kare_i-o nagusame-ta.

John-NOM he-ACC console-PST

‘*John_i consoled him_i.’

(Fujii, 2004: his 24)

⁶ Condition B (Chomsky, 1981: 188)

A pronominal is free in its governing category.

Governing category (ibid.)

α is the governing category for β if and only if α is the minimal category containing β and a governor of β , where α = NP or S.

Fujii (2004) observes that the same restriction holds if the pronoun *kare* ‘he’ is the TC subject as in (7a). This leads him to conclude that it is the null matrix object *ec* coreferential with the T-pivot *kare* ‘he’ that violates Condition B in the matrix clause, because if the antecedent *John* and the pronoun *kare* ‘he’ belong to different clauses, it would not yield a Condition B violation.⁷ In this light, compare (7a) with (7b) in which the pronoun *kare* ‘he’ in the complement clause does not induce a Condition B violation.

- (7) a. * *John_i-ga ec_i [kare_i-ga otikonde i-ru tokoro]-o nagusame-ta.*
 John-NOM he-NOM down be-PRS tokoro-ACC console-PST
 ‘*John_i consoled him_i when he_i was down.’
 (ibid.: his 25)
- b. *John_i-ga [kare_i-ga syoosinsu-ru koto]-o negat-ta.*
 John-NOM he-NOM promote-PRS C-ACC wish-PST
 ‘John_i wished that he_i would be promoted.’

In face of the unpronounced matrix object, however, we are led to ask about the status of TCs. These matrix verbs are not three-place verbs, and they already select the unpronounced matrix object. Hence, even though the particle attached to TCs disguises them as if they are true objects, it is reasonable to think that TCs are not the object of the matrix verb. In this light, previous studies analyse TCs either as adjuncts (circumstantial adverbs), or a sort of relative clauses adjoined to the unpronounced object, as shown by the list in (8).⁸

- (8) a. *TC as an adverbial clause*

⁷ In order to ensure this, it should be the case that the null matrix object always refers to the T-pivot. See section 5 for the argument that the null matrix object is supposed to refer to the T-pivot unless there are other possible antecedents than the T-pivot.

⁸ The term ‘relative clause’ is understood here as a cover term for two different but related analyses. One assumes that the null matrix object is a head of a relative clause (Kuroda, 1978, 1999; Narita, 2007). The other assumes that the noun *tokoro* functions like a head of a relative clause (Fujii, 2004; Sudo, 2008; Hiraiwa, 2010). But both analyses have in common that they assume that TCs are a complement.

Harada (1973), Ohso (1976), Kuroda (1978, 1999)

b. *TC as a relative clause*

Kuroda (1978, 1999), Fujii (2004), Narita (2007), Sudo (2008), Hiraiwa (2010)

It is important to mention that, whether an adverbial or a relative clause, the most of the analyses in (8) suppose that the T-pivot is c-commanded by the silent matrix object. To illustrate, the adverbial analyses (Harada, 1973; Kuroda, 1978, 1999) assume that TCs are adverbs situated structurally lower than the unpronounced matrix object as roughly schematised in (9a), and the relative clause analyses (Kuroda 1978, 1999; Naria 2007; Sudo 2008; Hiraiwa 2010) assume that TCs are somehow adjoined to the silent matrix object as shown in (9b).

- (9) a. NP [_{VP} *ec_i* [T-pivot_i V *tokoro*]-ACC V]
b. NP [_{VP} [_{NP} [_{NP} *ec_i*] T-pivot_i V *tokoro*]-ACC V]

The reason for their assuming this c-commanding relation is obvious; that is, they suppose the conference between the unpronounced object and the T-pivot is obligatory. As is well know, in obligatory control, a controllee requires a c-commanding controller (Rosenbaum 1967; Williams 1980; Bouchard 1984; Koster 1984; Hornstein 1999; 2001). This is exemplified by the contrast in English sentences in (10).

- (10) a. *John_i's campaign expects PRO_i to shave himself_i.
b. Clinton_i's campaign believes that *pro_i* keeping his sex life under control is necessary for electoral success.

(Hornstein 2001: 31-32)

This is also true in Japanese. Fujii (2006: 41) argues that in obligatory control in (11a) the embedded unpronounced subject requires a c-commanding controller whereas it does not in (11b) in which the null subject is not controlled.

- (11) a. * Sensei-wa sono kyoodaii-no hahaoya-ni [PRO_i otagai-o yoku
 Teacher-TOP that brother-GEN mother-DAT each.other-ACC often
 home-aw-u-yooni] tanonda
 praise-RECIP-PRS-C-ACC asked
 ‘The teacher asked these brothers’ mother to praise each other more often.’
- b. Sensei-wa sono kyoodaii-no hahaoya-ni [*pro*_i otagai-o yoku
 Teacher-TOP that brother-GEN mother-DAT each.other-ACC often
 home-{a-u/at-ta}-koto]-o kossori osieta
 praise-{RECIP-PRS/RECIP-PST}-C-ACC secretly informed
 ‘The teacher secretly told these brothers’ mother that they often {praise, had
 praised} each other.’

If obligatory control is involved in TC constructions, it is no wonder that they assume a c-command relation between the unpronounced matrix object and the T-pivot. Yet the question is why it is the c-commanded T-pivot, not the c-commanding null matrix object that is overt. The following subsections aim to answer this question.

2.2 The Double *o* Constraint

Let us begin by looking at the difference between (12a) and (12b).

(12) a. Keikan-ga ec_i [doroboo_i-ga nige-ru tokoro]-o tukamae-ta.

Policeman-NOM thief-NOM run.away-PRS tokoro-ACC catch-PST

‘The policeman caught the thief_i as he_i tried to run away.’

b. *Keikan-ga doroboo_i-o [ec_i nige-ru tokoro]-o tukamae-ta.

Policeman-NOM thief-ACC run.away-PRS tokoro-ACC catch-PST

(12a) is the example we saw in (3a) that involves backward control between *ec* and the T-pivot. (12b) is a forward instantiation of control in which contrary to (12a) the matrix object is overt and the T-pivot is covert, and this is ruled out. It follows from this that forward control in TC constructions is precluded for some reason. Harada (1973) ascribes the ungrammaticality of (12b) to the fact that both the matrix object and the TC are assigned the accusative particle *o*. In Japanese, it is independently known that the two occurrences of accusative-marked phrases are prohibited within a certain domain, and this is considered to hold because of the surface filter Harada (1973) characterises in terms of the following constraint:

(13) *The Double o Constraint* (henceforth DoC)

A derivation is marked as ill-formed if it terminates in a surface structure which contains two occurrences of NPs marked with *o* both of which are immediately dominated by the same VP-node.

(Harada, 1973: his 55)

For instance, the DoC prohibits movement of the genitive NPs in possessor raising (14) and light verb (15) constructions, because it would end up in structures with two NPs marked with *o*.

(14) a. Ken-ga [Naomi-no atama]-o tatai-ta.

Ken-NOM Naomi-GEN head-ACC hit-PST

‘Ken hit Naomi’s head.’

b.??Ken-ga Naomi-o [t_i atama]-o tatai-ta.

Ken-NOM Naomi-ACC head-ACC hit-PST

‘Ken hit Naomi on the head.’

(15) a. Ken-ga [Navajo-go-no kenkyuu]-o si-ta.

Ken-NOM Navajo-language-GEN research-ACC do-PST

‘Ken studied Navajo.’

b.??Ken-ga navajo-go-o [t_i kenkyuu]-o si-ta.

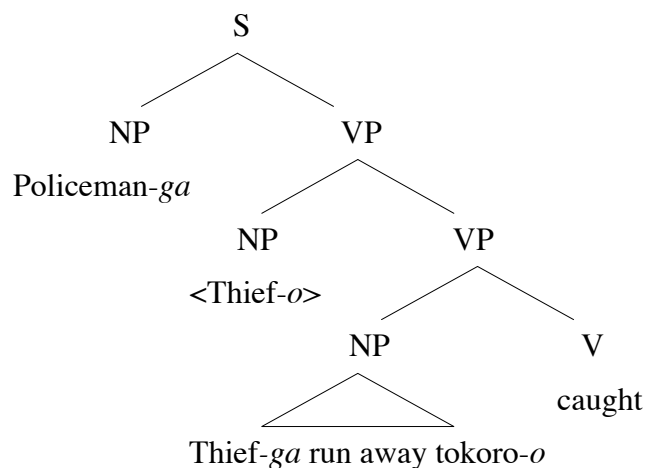
Ken-NOM navajo-language-ACC research-ACC do-PST

‘Ken studied Navajo.’

(Hiraiwa, 2010: 730)

While dismissing the accusative particle *o* as a postposition, Harada (1973) supposes that the TC is an adverb, but located below the null matrix object in order to ensure the c-command relation between the null matrix object and the T-pivot. The relevant structure of (12a) is shown in (16) (the deleted constituent is surrounded by angled brackets).

(16)

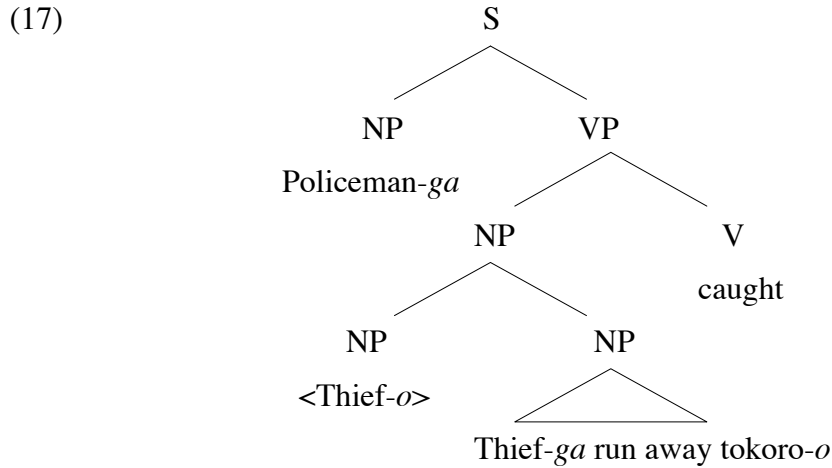


In (16), the object NP and the TC are marked with *o*, both of which are dominated by the same VP which I take to contain two segments.⁹ Since this configuration would be ruled out by the DoC, it is required to delete either the matrix object or the T-pivot under identity with each other by the operation known as Equi NP deletion. If the T-pivot is deleted by Forward Equi NP deletion (which is equivalent to forward obligatory control in current terms), there still remain the matrix object and the TC, both of which are marked with *o* within VP. Therefore, Forward Equi NP deletion does not salvage the DoC violation, and yields an ungrammatical sentence like (12b). In contrast, Counter Equi NP deletion (which is equivalent to backward obligatory control) deletes the matrix object under identity with the T-pivot. This makes it possible to delete one of the *o*-marked NPs within VP, and therefore the DoC violation can be circumvented as in (12a). In other words, Counter Equi NP deletion is a look-ahead apparatus (*peeking rule* in Harada's terminology) in that it is only called upon to rescue sentences that would otherwise be filtered out by the DoC.

Kuroda (1978) differs from Harada (1973) in that he assumes an NP-adjunction (relative clause) structure for the TC at least in Deep Structure. By assuming so, he argues that it is possible to capture the fact that the alleged case particle is assigned to the TC. In this

⁹ In the original structure of Harada (1973), it has a tripartite structure in which the TC is sister to both V and the object NP. But I have modified it here so that it can conform to binary branching, and to Harada's analysis that the TC is c-commanded by the matrix object.

connection, let us observe the relevant structure in (17) (the structure of 12a) in which he assumes that the TC is adjoined on the right to the unpronounced matrix object in order to be case-marked.



Notwithstanding technical differences, Kuroda's analysis can be regarded on a par with Harada (1973) because Kuroda assumes that Counter Equi NP deletion deletes the matrix object so as to rescue a sentence from a DoC violation.

It is important to note that these analyses predict that a forward instantiation of control can exist in configurations that would not violate the DoC. For instance, passivisation takes the matrix object out of VP and makes it nominative. Therefore, the resulting structure would not contravene the DoC. As predicted, in a passive sentence like (18b) (which is derived from the active counterpart in 18a), it is possible to delete the T-pivot instead of the matrix object:¹⁰

- (18) a. Keikan-ga ec_i [doroboo_i-ga nige-ru tokoro]-o tukamae-ta.
Policeman-NOM thief-NOM run.away-PRS tokoro-ACC catch-PST
'The policeman caught the thief_i as he_i tried to run away.'

¹⁰ Note that in section 3 we will see that the TC itself cannot be passivised because it is an adjunct.

- b. Doroboo_i-ga keikan-niyotte [*ec_i* nige-ru tokoro]-o tukamae-rare-ta.
 Thief-NOM policeman-by run.away-PRS tokoro-ACC catch-PASS-PST
 ‘The thief_i was caught by the policeman as he_i tried to run away.’

Likewise, clefting takes a constituent within VP and places it in the pre-copula position. Since the resulting structure would not violate the DoC, it should be able to delete the T-pivot instead of the matrix object. That this is true is shown by the following cleft sentences derived from (18a); in (19a) the matrix object is clefted, and in (19b) the TC is clefted.

- (19) a. [Keikan-ga [*t_i* [*ec_i* nige-ru tokoro]-o tukamae-ta]-no]-wa
 Policeman-NOM run.away-PRS tokoro]-ACC catch-PST-C-TOP
 doroboo_i-o-da.
 thief-ACC-COP
 ‘It was the thief_i that the policeman caught when he_i tried to run away.’
- b. [Keikan-ga [doroboo_i-o *t_j* tukamae-ta]-no]-wa
 Policeman-NOM thief-ACC catch-PST-C-TOP
 [*ec_i* nige-ru tokoro]-o_j-da.
 run.away-PRS tokoro-ACC-COP
 ‘It was when the thief_i tried to run away that the policeman caught him_i.’

(Based on Harada, 1973: his 10)

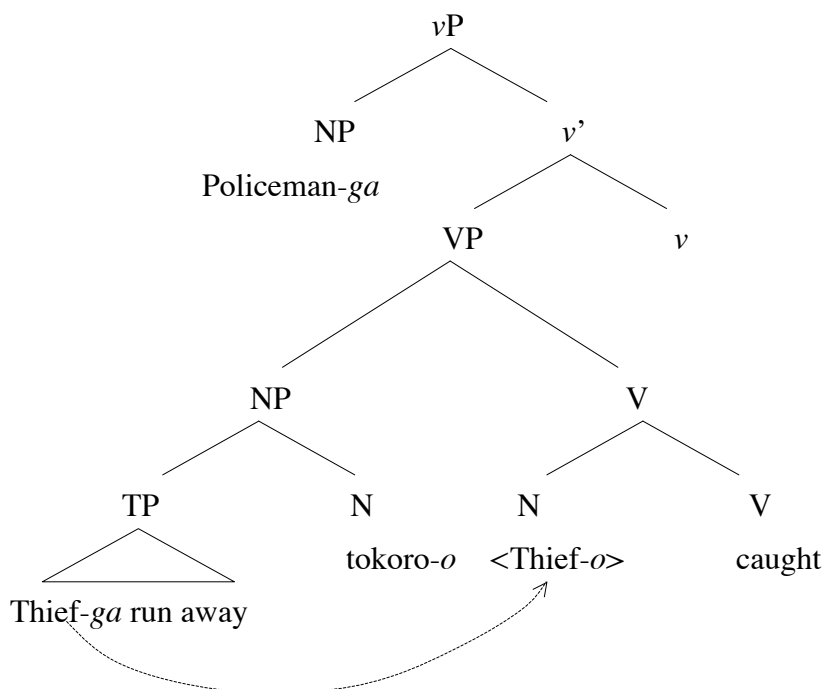
2.3 Backward control by movement

In the preceding subsection, we saw that backward control is captured in terms of Counter Equi NP deletion. In the current framework of syntactic theory, however, this counter-cyclic machinery is considered untenable, and so an alternative approach that fits the guidelines of

the Minimalist Programme (Chomsky, 1993, et. seq.) is called for. In this light, the MTC offers the advantage of accounting for backward control since the issue of counter-cyclicity boils down to an independent factor concerning phonetic realisation of movement chains.

As an example of analyses of TC constructions in terms of the MTC, let us first review Fujii (2004). Recall that the data from Condition B in section 2.1 suggest that the T-pivot behaves as if it is in the matrix clause. In order to account for this ‘high behaviour’ of the T-pivot, Fujii (2004) argues that a bundle of features of the T-pivot relevant for binding are attracted to the checking domain of the matrix verb for thematic reasons. More specifically, he assumes that θ -roles are features (Hornstein, 1999) and that they are weak in Japanese (Bošković and Takahashi, 1998). As a consequence of these assumptions, Counter Equi NP deletion is superseded by covert feature movement of the T-pivot. His structure for TCs is schematized in (20) (the structure of 12a).

(20)



While sharing the core assumptions of the movement approach to TC constructions, Narita (2007) differs from Fujii (2004) in denying movement into θ -positions. One of the

reasons for his assuming so is concerned with the position of the T-pivot within a TC.

Although the T-pivot is the subject of a TC in most cases, Narita (2007) suggests the possibility that it can also be a direct object within the TC like *John* in (21a) or an indirect object like *Mai* in (21b).¹¹

- (21) a. Sono omawari-ga [bookan-ga John_i-o naguritaositesimat-ta tokoro]-ni
 That cop-NOM thug-NOM John-ACC had.knocked.down-PST tokoro-DAT
ec_i ookyuusyoti-o si-ta.
 first.aid-ACC do-PST

‘That cop gave first aid to John_i when a thug knocked down him_i.’

(Based on Narita, 2007: his 6)

- b. Isao-ga [Tubasa-ga Mai_i-ni hanataba-o watasoo-to si-ta
 Isao-NOM Tubasa-NOM Mai-DAT bouquet-ACC about.to.give do-PST
 tokoro]-o *ec_i* (te-o hiite) turesat-ta.
 tokoro-ACC (hand-ACC taking) take.away-PST

‘Isao took away Mai_i by taking her hand when Tubasa was about to give a bouquet to her.’

(ibid: his 8)

If feature movement of the T-pivot to V is involved, this would pose a problem, because both

¹¹ If TC constructions involve obligatory control, this in turn leads us to expect that an indirect/direct object can be a controllee in other obligatory control configurations. However, a controllee in canonical obligatory control constructions is always an embedded subject.

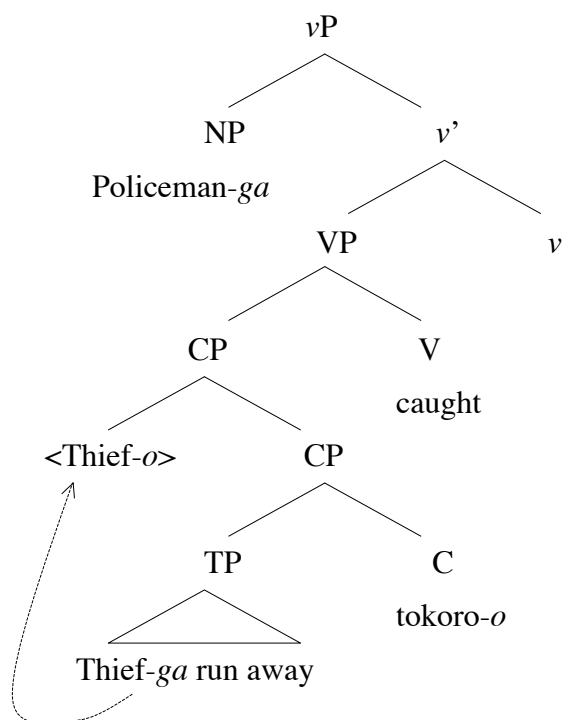
(i) a. John_i-ga [PRO_i Mary-o kaisya-ni suisensu-ru to] kime-ta.
 John-NOM PRO Mary-ACC company-DAT recommend-PRS C decide-PST
 ‘John_i decided PRO_i to recommend Mary to the company.’
 b. * John_i-ga [Mary-ga PRO_i kaisya-ni suisensu-ru to] kime-ta.
 John-NOM Mary-NOM PRO company-DAT recommend-PRS C decide-PST
 ‘Lit. John_i decided that Mary would recommend him_i to the company.’
 c. * John_i-ga [Mary-ga kaisya-o PRO_i syookaisu-ru to] kime-ta.
 John-NOM Mary-NOM company-ACC PRO introduce-PRS C decide-PST
 ‘Lit. John_i decided that Mary would introduce the company to him_i.’

This would indicate that TC constructions do not involve obligatory control. See section 5 where I argue that the null object in TC sentences is not controlled.

the direct object and indirect object must skip the TC subject before reaching the checking domain of the matrix verb. Since the TC subject asymmetrically c-commands the direct/indirect object of the TC, it is a closer goal for the matrix verb. Thus, movement of the direct/indirect object should be blocked by minimality.

According to Narita, this problem can be overcome if movement of the T-pivot is not driven by a θ -feature checking. Instead, he proposes that movement of the T-pivot is induced by checking an EPP feature on the head noun *tokoro* which resides on C. This amounts to saying that the T-pivot is adjoined to C, and if this adjunction constitutes a segment of C, as Narita contends, the T-pivot can receive a θ -role when the TC merges with the matrix verb. The structure posited by Narita is shown in (22) (the structure of 12a).

(22)



Narita assumes that the (in)direct object first moves to the edge of the vP phase within the TC. Hence viewed from C, the TC subject in the Spec vP position (given the vP -internal subject hypothesis) and the (in)direct object are equidistant. Accordingly, minimality can be obviated.

Aside from these intricate technicalities, of most importance in Narita's analysis is that he proposes that this movement is an instance of pre-Spellout Covert movement in line with Bobaljik (2002), Bošković (2002) and Kato (2004). At the heart of these approaches is the idea that a chain head copy is rendered silent due to certain PF conditions. Here, the condition at issue is cited in (23).

(23) *The Economy Principle of A-chain Pronunciation*

An A-chain is pronounced at the case-marked position.

(Narita, 2007: 194)

Given (23), the movement chain of the T-pivot is forced to be pronounced in the base position, because the adjunction site at C is not a case-marked position. This way, Counter Equi NP deletion is captured not as covert feature movement as in Fujii (2004), but as movement without phonological outcome in Narita (2007).

Summarising the discussion in this section, it is assumed by these analyses that an obligatory control relation holds between the matrix object and the T-pivot, and that the matrix object c-commands the T-pivot. The matrix object is not overtly realised because if the T-pivot is deleted, the resulting structure would yield a structure with two *o*-marked NPs, which is filtered out by the DoC. This backward instantiation of control is captured in terms of Counter Equi NP deletion in the Standard Theory, and in terms of the MTC in minimalism. It is important to note, however, that these analyses of backward control are based on the TC marked by the accusative particle *o*, but it is true that there are other less-studied TCs marked by the dative particle *ni* (Kuroda, 1999). Since the DoC is only relevant to the accusative particle *o*, the presence of TCs marked by the dative particle *ni* would potentially be a problem for the existing analyses based on the DoC. Nevertheless, Kuroda (1999) contends

that TCs marked by *ni* also contravenes the DoC and therefore Counter Equi NP deletion is called for to delete the matrix object.

In fact, the primary aim of this paper is to reconsider the structure of dative TC constructions. Although they have not been studied well thus far, if subjected to closer scrutiny, it will become clear that neither dative TCs nor accusative TCs are instances of obligatory control. For this purpose, I shall introduce types of TCs in the next section including dative TCs, and investigate the nature of each TC.

3. Types of *tokoro*-clauses: an adjunct or an object

Kuroda (1999) argues that TCs marked by the accusative particle *o* have a widespread distribution because they can occur with most transitive verbs if the appropriate context is met. He argues that this state of affairs can be explained if accusative TCs (other than those who are direct object themselves, which will be discussed later) are adverbs in line with Harada's (1973) structure discussed in section 2.2, with the particle *o* being default case. On the other hand, the distribution of TCs marked by the dative particle *ni* is rather limited because they can only occur with a restricted set of verbs that assign dative case to its internal argument. According to Kuroda (1999), the distribution of dative TCs is so limited because they are relative clauses adjoined to the matrix object in Deep Structure in line with the structure in (17), whereby it is assigned dative case by the matrix verb. In either case, he assumes that Counter Equi NP deletion is involved because the resulting structure would contravene the DoC. As noted, however, dative TC constructions must be called into question as it is dubious to assume that the dative particle *ni* is relevant to the DoC. In the following subsection, I first outline four types of subordinate TCs building on Kuroda (1999), and then the remainder of

this section investigates the nature of each TC.¹²

3.1 Four types of subordinate *tokoro*-clauses

The first type which I dub Type A is the most common TC we have seen thus far. They cooccur with most transitive matrix verbs such as *tukamae-ru* ‘catch’, *nagusame-ru* ‘console’, *tasuke-ru* ‘help’, *home-ru* ‘praise’ and *sikar-u* ‘scold’ etc., and are assigned the accusative particle *o*. Let us reiterate the examples of Type A we saw in (3) as (24).

- (24) a. Keikan-ga *ec_i* [doroboo_i-ga nige-ru tokoro]-o tukamae-ta.
Policeman-NOM thief-NOM run.away-PRS tokoro-ACC catch-PST
‘The policeman caught the thief_i as he_i tried to run away.’

¹² It is worth mentioning that Kuroda (1999) also discusses nominative TCs in the subject position other than subordinate accusative and dative TCs (the existence of nominative TCs is also hinted at in Kuroda, 1978: 45). Nominative TCs are exemplified by such sentences as the following.

- (i) [Kono koma-ga mawat-tei-ru tokoro]-ga kirei-da.
This top-NOM spin-PROG-PRS tokoro-NOM beautiful-COP
‘This top is beautiful when it is spinning.’

According to Kuroda (1999), nominative TCs have a relative clause structure on a par with dative TCs in that they contain a null relative head that is controlled in a backward manner by a downstairs T-pivot. So (i) has a structure like (ii).

- (ii) [_{NP} [_{NP} *ec_i*] kono koma]-ga mawat-tei-ru tokoro]-ga kirei-da.
this top-NOM spin-PROG-PRS tokoro-NOM beautiful-COP

A motivation for Kuroda (1999) to posit the structure in (ii) comes from cleft sentences. If nominative TCs have the structure in (ii), there would be two possible ways of creating a cleft sentence out of it; one is to dislocate the null subject to the pre-copular position, and the other is to dislocate the TC itself to the pre-copular position. As shown below, both cleft sentences are permitted.

- (iii) a. [[Kono koma]-ga *t_j* kirei-na-no]-wa [*ec_i* mawat-tei-ru tokoro]-ga-da.
This top-NOM beautiful-COP-C]-TOP spin-PROG-PRS tokoro-NOM-COP
‘It is when spinning that this top is beautiful.’
b.? [*t_i* [*ec_j* mawat-tei-ru tokoro]-ga kirei-na-no]-wa [kono koma]-ga-da.
spin-PROG-PRS tokoro-NOM beautiful-COP-C-TOP this top-NOM-COP
‘It is this top that is beautiful when spinning.’

However, this alone cannot be decisive evidence for the structure in (ii) because the cleft sentences in (iii) can independently be derived by multiple nominative constructions like those in (iv).

- (iv) [Kono koma]-ga [mawat-tei-ru tokoro]-ga kirei-da.
This top-NOM spin-PROG-PRS tokoro-NOM beautiful-COP
‘It is this top that is beautiful when spinning.’

Rather than positing a null subject for the structure in (i) as in (ii), I suggest that what functions as the subject of the sentence is the TC itself. This is because semantically the subject of *kirei-da* ‘is beautiful’ is not *koma* ‘top’ but the situation [*kono koma-ga mawat-tei-ru tokoro*] ‘that this top is spinning’. As an anonymous reviewer points out, this becomes clearer if we look at a predicate that only selects a situation. In this connection, let us observe (v).

- (v) a. ?* Kono koma-ga tuzui-ta.
This top-NOM continue-PST
‘This top continued.’
b. [Kono koma-ga mawat-tei-ru tokoro]-ga tuzui-ta.
This top-NOM spin-PROG-PRS tokoro-NOM continue-PST
‘This top continued spinning.’

The verb *tuzuk-u* ‘continue’ cannot select *koma* ‘top’ as its subject, therefore it is apparent that *kono koma* ‘this top’ is not a T-pivot in (vb). Rather, the subject in (vb) is the situation depicted by the TC itself. Furthermore, in the face of the nominative case marker *-ga* that is irrelevant to the DoC, there is nothing to force the application of Counter Equi NP deletion. Accordingly, these considerations lead us to a plausible conclusion that nominative TCs do not contain a null constituent.

- b. John-ga *ec_i* [Mary_i-ga otikonde i-ru tokoro]-o nagusame-ta.
 John-NOM Mary-NOM down be-PRS tokoro-ACC console-PST
 ‘John consoled Mary_i when she_i was down.’ (Type A)

Type B TCs are assigned the dative particle *ni*. They cooccur with two-place predicates such as *oituk-u* ‘catch up with’, *tadorituk-u* ‘reach’, *mania-u* ‘catch, make it’ and *osoikakar-u* ‘attack’, and three-place predicates such as *osie-ru* ‘teach, tell’, *watas-u* ‘hand’, *todoke-ru* ‘deliver’ etc. These verbs have in common that the *ni*-phrase they take is typically understood as a goal/recipient. The examples are shown in (25).

- (25) a. John-ga *ec_i* [densya_i-ga syuppatusu-ru tokoro]-ni maniat-ta.
 John-NOM train-NOM depart-PRS tokoro-DAT catch-PAST
 ‘John made it to the train_i when it_i was about to depart.’
 b. John-ga *ec_i* [Mary_i-ga komatte i-ru tokoro]-ni
 John-NOM Mary-NOM troubled be-PRS tokoro-DAT
 kane-o kasi-ta.
 money-ACC lend-PST
 ‘John lent Mary_i money when she_i was in trouble.’ (Type B)

Type C TCs are assigned the accusative particle *o*. They cooccur with subset of perception verbs such as *kansatusu-ru* ‘watch, observe’, *kirokusu-ru* ‘record’, *hakkensu-ru* ‘discover’, and some verbs of cognition such as *soozoosu-ru* ‘imagine’, *yumemi-ru* ‘dream’. These verbs can be characterised as selecting a situation as its complement.¹³ The relevant examples are (26).

¹³ Since these verbs take a situation as their complement, perception verbs such as *kikoe-ru* ‘hear’, *kanzi-ru* ‘feel’ that do not select a situation do not usually cooccur with Type C TCs.

- (26) a. John-ga [Mary-ga tabe-ru tokoro]-o kansatusi-ta.
 John-NOM Mary-NOM eat-PRS tokoro-ACC observe-PST
 ‘John watched Mary eating.’
- b. John-ga [Mary-ga yuusyooosu-ru tokoro]-o soozoosi-ta.
 John-NOM Mary-NOM win-PRS tokoro-ACC imagine-PST
 ‘John imagined that Mary would win.’ (Type C)

Type D TCs are assigned the dative particle *ni*. They cooccur with verbs of meeting such as *dekuwas-u* ‘come across’, *dea-u* ‘meet’, *butukar-u* ‘bump into’, and few idiomatic verbs that take a *ni*-object like *hara-o tate-ru* ‘get angry’, *heikoosu-ru* ‘be weary’, *hekiekisu-ru* ‘be bothered’. Similar to Type C TCs, predicates that take Type D TCs can select a situation. Type D TCs are exemplified by sentences such as those in (27).

- (27) a. John-ga [Mary-ga mise-kara deteku-ru tokoro]-ni dekuwasi-ta.
 John-NOM Mary-NOM shop-from come.out-PRS tokoro-DAT come.across-PST
 ‘John came across Mary coming out of the shop.’
- b. John-ga [Mary-ga oto-o tatete tabe-ru tokoro]-ni heikoosi-ta.
 John-NOM Mary-NOM sound-ACC make eat-PRS tokoro-DAT be.weary-PST
 ‘John was weary of Mary making noise while eating.’ (Type D)

In the following, I will demonstrate that Type A and Type B TCs are adjuncts, while Type C and Type D TCs are objects on their own. By so doing, it will become clear that at least Type C and Type D TCs are exempt from control because there is no null constituent in the matrix clause.

3.2 Selection restrictions

Recall that in subsection 2.1 we saw that selection restrictions reveal the presence of a null object in the matrix clause. The relevant examples from Type A TCs are reproduced here as (28).

- (28) a. * *Keikan-ga ame-o tukamae-ta.*
Policeman-NOM rain-ACC catch-PST
'The policeman caught rain.'
- b. * *Keikan-ga ec_i [ame_i-ga fut-tei-ru tokoro]-o tukamae-ta.*
Policeman-NOM rain-NOM fall-PROG-PRS tokoro-ACC catch-PST
'The policeman caught rain when it was falling.' (Type A)

Given that the verb *tukamae-ru* 'catch' cannot select *ame* 'rain' in a simplex sentence in (28a), the same restriction in the TC sentence in (28b) suggests that there is a null thematic object in the matrix clause coreferential with the T-pivot. This is because if there is no such null object in the matrix, the matrix verb cannot impose selection restrictions on the embedded subject.

I propose that the same argument can be applied to Type B TCs. Let us observe that the verbs *oituk-u* 'catch up with' and *osie-ru* 'teach' cannot select *tosyokan* 'library' in simplex sentences as shown in (29).

- (29) a. * *John-ga tosyokan-ni oitui-ta.*
John-NOM library-DAT catch.up.with-PST
'John caught up with the library.'

- b. *John-ga tosyokan-ni eigo-o osie-ta.
 John-NOM library-DAT English-ACC teach-PST
 ‘John taught English to the library.’

The same restriction holds if the *ni*-phrases above are replaced by Type B TCs as shown below.

- (30) a.* John-ga *ec_i* [tosyokan_i-ga ak-u tokoro]-ni oitui-ta.
 John-NOM library-NOM open-PRS tokoro-DAT catch.up.with-PST
 ‘John caught up with the library_i when it_i was about to open.’
 b. *John-ga *ec_i* [tosyokan_i-ga ak-u tokoro]-ni eigo-o osie-ta.
 John-NOM library-NOM open-PRS tokoro-DAT English-ACC teach-PST
 ‘John taught English to the library_i when it_i was about to open.’ (Type B)

This suggests that there is a null thematic object in the matrix clause coreferential with the T-pivot, and selection restrictions hold between the matrix predicate and the null matrix object.

In contrast, Type C TCs do not exhibit similar selection restrictions. Verbs such as *kansatusu-ru* ‘watch, observe’ and *soozoosu-ru* ‘imagine’ do not select an abstract concept like *GB riron* ‘GB theory’, but it can occur as the subject in Type C TCs as shown below:

- (31) a.??John-ga GB-riron-o kansatusi-ta/soozoosi-ta.
 John-NOM GB-theory-ACC observe-PST/imagine-PST
 ‘John observed/imagined GB theory.’
 b. John-ga [GB-riron-ga saikoosu-ru tokoro]-o kansatusi-ta/soozoosi-ta.

John-NOM GB-theory-NOM revive-PRS tokoro-ACC observe-PST/imagine-PST

‘John observed GB theory’s revival (at the conference)/John imagined that GB theory would revive.’

(Type C)

This suggests that there is no null thematic object in the matrix clause of Type C TC sentences on which the matrix verb imposes selection restrictions.

Likewise, I propose that Type D TCs do not exhibit selection restrictions either. Let us observe that selection restrictions in a simplex sentence are not preserved in a Type D TC sentence in the following.

(32) a. *John-ga tosyokan-ni dekuwasi-ta.

John-NOM library-DAT come.across-PST

‘John came across the library.’

b. John-ga [tosyokan-ga sima-ru tokoro]-ni dekuwasi-ta.

John-NOM library-NOM close-PRS tokoro-DAT come.across-PST

‘John came across the scene in which the library was being closed.’ (Type D)

Thus it is plausible to consider that there is no null thematic object in the matrix clause of Type D TC sentences.

3.3 Condition B

The discussion in the preceding subsection suggests that Type A and Type B TC sentences contain a null thematic object in the matrix clause whereas Type C and Type D TC sentences

do not. That this is so is further supported by the diagnostic of Condition B proposed by Fujii (2004). As noted in subsection 2.1, the null matrix object coreferential with the T-pivot gives rise to a Condition B violation in the matrix clause of Type A TC sentences. The relevant sentence is repeated here as (33).

- (33)* John_i-ga *ec*_i [kare_i-ga otikonde i-ru tokoro]-o nagusame-ta.
 John-NOM he-NOM down be-PRS tokoro-ACC console-PST
 ‘John_i consoled him_i when he_i was down.’ (Type A)

Without the null matrix object, the subject does not induce a Condition B violation since *John* and *kare* ‘he’ belong to different clauses.

I suggest that Type B TC sentences also contravene Condition B as shown in the following sentence, which suggests the presence of a null object in the matrix clause.

- (34) a. * John_i-ga *ec*_i [kare_i-ga hasi-ru tokoro]-ni oitui-ta.
 John-NOM he-NOM run-PRS tokoro-DAT catch.up.with-PST
 ‘John_i caught up with him_i running.’
 b. * John_i-ga *ec*_i [kare_i-ga komatte i-ru tokoro]-ni
 John-NOM he-NOM troubled be-PRS tokoro-DAT
 kane-o kasi-ta.
 money-ACC lend-PST
 ‘John_i lent him_i money when he_i was in trouble.’ (Type B)

In contrast, Fujii (2004) argues that Type C TC sentences do not induce a Condition B violation. In this connection, let us observe (35).

(35) a. John_i-ga [kare_i-ga ne-tei-ru tokoro]-o bideo-de kansatusi-ta.

John-NOM he-NOM sleep-PROG-PRS tokoro-ACC video-by observe-PST

‘John_i observed the scene in which he_i was asleep by the video.’

(Fujii 2004)

b. John_i-ga [kare_i-ga yuusyoosu-ru tokoro]-o yumemi-ta.

John-NOM he-NOM win-PRS tokoro-ACC dream-PST

‘John_i dreamed that he_i would win.’

(Type C)

This can be accounted for if there is no null matrix object, so a Condition B violation does not occur in the matrix clause.

Likewise, I propose that a Condition B violation is obviated in Type D TC sentences as well, as shown in (36).

(36) a. John_i-ga [kare_i-ga terebi-ni utut-tei-ru tokoro]-ni dekuwasi-ta.

John-NOM he-NOM TV-on appear-PROS-PRS tokoro-DAT come.across-PST

‘John_i came across the scene in which he_i appeared on TV.’

b. John_i-ga [kare_i-ga terebi-ni utut-tei-ru tokoro]-ni heikoosi-ta.

John-NOM he-NOM TV-on appear-PROG-PRS tokoro-DAT be.weary-PST

‘John_i was weary of his_i appearing on TV.’

(Type D)

Thus, like Type C TC sentences, Type D TC sentences do not contain a null thematic object in the matrix clause. From the discussion so far, it has become clear that there is a null matrix object in Type A and Type B TC sentences while there is no null matrix object in Type C and Type D TC sentences. Hence, it is reasonable to conclude that Type C and Type D TCs serve

as an object on their own. However, we are not sure yet about the status of Type A and Type B TCs because they can be an adjunct in Harada's (1973) sense or a relative clause adjoined to a null matrix object as in Kuroda (1978, 1999). In order to clarify this, we need to test with passivisation in the next subsection.

3.4 Passivisation

Let us begin by investigating what can be passivised. As shown below, an object can be passivised whether it is accusative or dative.

- (37) a. John-ga Mary-o home-ta.

John-NOM Mary-ACC praise-PST

'John praised Mary.'

- b. Mary-ga John-niyotte home-rare-ta.

Mary-NOM John-by praise-PASS-PST

'Mary was praised by John.'

- (38) a. John-ga Mary-ni hana-o watasi-ta.

John-NOM Mary-DAT flower-ACC hand-PST

'John gave Mary flowers.'

- b. Mary-ga John-niyotte hana-o watas-are-ta.

Mary-NOM John-by flower-ACC hand-PASS-PST

'Mary was given flowers by John.'

- c. Hana-ga John-niyotte Mary-ni watas-are-ta.

Flower-NOM John-by Mary-DAT hand-PASS-PST

'Flowers were given to Mary by John.'

Likewise, both accusative and dative relative clauses can be passivised as shown in (39) and (40).

- (39) a. John-ga [Mary-ga tukut-ta keeki]-o tabe-ta.

John-NOM Mary-NOM make-PST cake-ACC eat-PST

‘John ate the cake that Mary had made.’

- b. [Mary-ga tukut-ta keeki]-ga John-niyotte tabe-rare-ta.

Mary-NOM make-PST cake-NOM John-by eat-PASS-PST

‘The cake that Mary had made was eaten by John.’

- (40) a. John-ga [yuusyoosi-ta Mary]-ni hana-o watasi-ta.

John-NOM win-PAST Mary-DAT flower-ACC hand-PST

‘John gave flowers to Mary who won.’

- b. [Yuusyoosi-ta Mary]-ga John-niyotte hana-o watas-are-ta.

win-PST Mary-NOM John-by flower-ACC hand-PASS-PST

‘Mary who won was given flowers by John.’

On the other hand, adjuncts cannot be passivised since they are not an argument of a verb.

This is illustrated in (41).

- (41) a. John-ga [Mary_i-ga otikonde i-ta toki] kanozyo_i-o nagusame-ta.

John-NOM Mary-NOM down be-PST when she-ACC console-PST

‘John consoled Mary_i when she_i was down.’

- b. * [Mary_i-ga otikonde i-ta toki]-ga John-niyotte kanozyo_i-o

Mary-NOM down be-PST when-NOM John-by she-ACC

nagusame-rare-ta.

console-PASS-PST

Accordingly, by passivisation test, it will become clear whether or not a given TC is an adjunct.

As discussed in subsection 2.2, a Type A TC sentence like that in (42a) has the passive counterpart in (42b) in which the matrix object is passivised; yet the TC itself cannot be passivised as in (42c) (Harada, 1973).

- (42) a. Keikan-ga *ec_i* [doroboo_i-ga nige-ru tokoro]-o tukamae-ta.
Policeman-NOM thief-NOM run.away-PRS tokoro-ACC catch-PST
‘The policeman caught the thief_i as he_i tried to run away.’
- b. Doroboo_i-ga keikan-niyotte [*ec_i* nige-ru tokoro]-o tukamae-rare-ta.
Thief-NOM policeman-by run.away-PRS tokoro-ACC catch-PASS-PST
‘The thief_i was caught by the policeman as he_i tried to run away.’
- c. * [Doroboo_i-ga nige-ru tokoro]-ga keikan-niyotte *ec_i* tukamae-rare-ta.
Thief-NOM run.away-PRS tokoro-NOM policeman-by catch-PASS-PST
- (Type A)

On the basis of the argument that there is a null object in Type A TC sentences, (42b) is naturally accounted for if we suppose that the null object is passivised. On the other hand, the ungrammaticality of (42c) suggests that the TC is neither an object nor a relative clause, but an adjunct.

I suggest that the same argument can be applied to Type B TCs. As noted, Type B TC sentences can be divided into cases in which a predicate is a two-place predicate and those in

which a predicate is a three-place predicate. In either case, an active sentence has a passive counterpart which, coupled with the argument above, is naturally accounted for in the presence of a null thematic object. But the Type B TC itself cannot be passivised. In this connection, let us observe (43) (with a two-place predicate) and (44) (with a three-place predicate).¹⁴

(43) a. Keikan-ga *ec_i* [doroboo_i-ga nige-ru tokoro]-ni oitui-ta.

Policeman-NOM thief-NOM run.away-PRS tokoro-DAT catch.up.with-PST

‘The policeman caught up with the thief_i as he_i was running away.’

b.? Doroboo_i-ga (keikan-niyotte)[*ec_i* nige-ru tokoro]-ni oituk-are-ta.

Thief-NOM (policeman-by) run.away-PRS tokoro-DAT catch.up.with-PST

‘The thief_i was caught up with by the policeman as he_i was running away.’

c. * [Doroboo_i-ga nige-ru tokoro]-ga keikan-niyotte *ec_i* oituk-are-ta.

Thief-NOM run.away-PRS tokoro-NOM policeman-by catch.up.with-PASS-PST

(44) a. John-ga *ec_i* [Mary_i-ga komatte i-ru tokoro]-ni kane-o kasi-ta.

John-NOM Mary-NOM troubled be-PRS tokoro-DAT money-ACC lend-PST

‘John lent Mary_i money when she_i was in trouble.’

b.? Mary_i-ga (John-niyotte) [*ec_i* komatte i-ru tokoro]-ni kane-o

Mary-NOM (John-by) troubled be-PRS tokoro-DAT money-ACC

kas-are-ta.

lend-PASS-PST

‘Mary_i was lent money by John when she_i was in trouble.’

c.* [Mary_i-ga komatte i-ru tokoro]-ga John-niyotte *ec_i* kane-o

¹⁴ An anonymous reviewer points out that (43b) and (44b) are unacceptable. But my informants agree that they are far better, if not perfect, than (43c) and (44c), and moreover, their acceptability improves if we omit the by-phrase.

Mary-NOM troubled be-PRS tokoro-NOM John-by money-ACC
kas-are-ta.
lend-PASS-PST

(Type B)

Given the argument about Type A TCs, (43b) and (44b) can be straightforwardly accounted for by assuming that the null matrix objects are passivised. On the other hand, the ill-formedness of (43c) and (44c) indicates that Type B TCs are neither objects nor relative clauses, but adjuncts.

In contrast, Kuroda (1999) argues that Type C TCs can be passivised. In this light, let us look at (45).

- (45) a. John-ga [Mary-ga tabe-ru tokoro]-o kansatusi-ta.
John-NOM Mary-NOM eat-ACC tokoro-ACC observe-PST
‘John watched Mary eating.’
b. [Mary-ga tabe-ru tokoro]-ga John-niyotte kansatus-are-ta.
Mary-NOM eat-PRS tokoro-NOM John-by observe-PASS-PST
‘Mary was watched by John while eating.’

(Type C)

If there is no null matrix argument in Type C TC sentences, it is natural to think that the Type C TC itself serves as a direct object of a verb, and therefore it can be passivised.

This state of affairs naturally lead us to think that Type D TCs can be passivised as well because we have just seen by the evidence from selection restrictions and Condition B that there is no null matrix object in Type D TC sentences. Contrary to this prediction, Type D TCs cannot be passivised as shown in (46).

- (46) a. John-ga [Mary-ga nige-ru tokoro]-ni
 John-NOM Mary-NOM run.away-PRS tokoro-DAT
 dekuwasi-ta/heikoosi-ta.
 come.across-PST/be.weary-PST
 ‘John came across Mary running away/John was weary of Mary running away.’
- b. * [Mary-ga nige-ru tokoro]-ga John-niyotte
 Mary-NOM run.away-PRS tokoro-NOM John-by
 dekuwas-are-ta/heikoos-are-ta.
 come.across-PASS-PST/be.disgusted-PASS-PST (Type D)

The key to understanding this may lie in the fact that matrix predicates in Type D TC sentences cannot be passivised in a simplex sentence either as shown in (47).

- (47) a. John-ga Mary-ni dekuwasi-ta/heikoosi-ta.
 John-NOM Mary-DAT come.across-PST/be.weary-PST
 ‘John caught up with/was weary of Mary.’
- b. ?*Mary-ga John-niyotte dakuwas-are-ta/heikoos-are-ta.
 Mary-NOM John-by come.across-PASS-PST/be.weary-PASS-PST

It is therefore plausible to consider that (46b) is ruled out since the verb itself cannot be passivised.

To recapitulate, the argument so far leads us to conclude that Type A and Type B TCs are neither objects nor relative clauses, but adjuncts while a null argument serves as a direct object of the verb in the matrix clause. On the other hand, Type C and Type D TCs serve as

direct objects themselves, and there is no null argument in the matrix clause. Accordingly, we are aware now that Type C and Type D TC sentences do not involve control as there is no null constituent to be controlled. As far as Type A and Type B TC sentences are concerned, however, we are not completely sure at this point whether or not they involve control. Recall the structure (16) in section 2.1 in which Harada (1973) assumes that Type A TCs are adjuncts, but situated structurally lower than the unpronounced matrix object in order to guarantee the c-command relation between them. Therefore, it is necessary to examine where exactly Type A and Type B TCs are adjoined.

3.5 The attachment site of adjunct *tokoro*-clauses

This subsection aims to elucidate the attachment site of Type A and Type B TCs. In fact, some have proposed that Type A TCs are VP-adjuncts (e.g. Ohso, 1976; Mihara, 1994; Fujii, 2006). But, since they only assume so without providing empirical proof as to the attachment site of TCs, there still remains a possibility that Type A TCs are adjoined in a position structurally lower than the null matrix object as Harada (1973) suggests. What is more, as far as I know, no one has discussed the attachment site of Type B TCs which I claim to be adjuncts on a par with Type A TCs. Inspired by the taxonomy of adjuncts proposed by Nakajima (1982) and Koizumi (1993), I will demonstrate that not only Type A but also Type B TCs are vP-adjuncts situated above the null matrix object.

For this purpose, it is useful to introduce Nakajima's (1982) classification of English clausal adjuncts according to their attachment sites:

- (48) a. Group IV: because (non-restrictive), although, for, so that (result), etc.
 b. Group III: while (contrast), whereas, though, if, unless, since (reason), etc.

- c. Group II : because, when, after, before, while (duration), since (time), so that (purpose), etc.
- d. Group I : as if (as in *He treated us as if we were beasts.*)

(Nakajima, 1982: 359)

Applying the current notations of phrase structures, Group I is VP-adjuncts adjoined to the inner projection of the VP-shell, and Group II is vP-adjuncts adjoined to the outer projection of the VP-shell. Group III is TP-adjuncts.¹⁵ Building on Koizumi's (1993) classification of Japanese adjuncts, I suggest here that the attachment sites of English adjuncts proposed by Nakajima (1982) is applicable to Japanese adjuncts.¹⁶¹⁷ The classification of Japanese adjuncts is shown in (49) and their attachment sites are illustrated in (50).

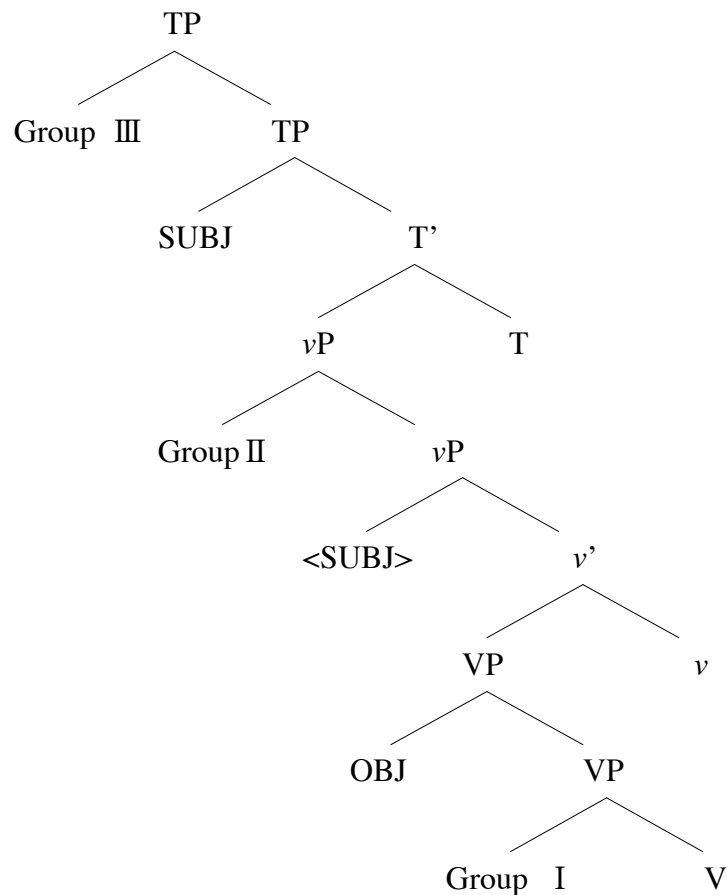
- (49) a. Group III: *-kagiri* 'as long as', *-to* 'if', *-node* 'because', *-toki* 'when', etc.
- b. Group II : *-nagara* 'while', *-tutu* 'while', *toki-ni* 'when', etc.
- c. Group I : *-yooni* 'like, as if', *-mitaini* 'like, as if', *-de* 'with', etc.

¹⁵ I do not discuss Group IV adjuncts here because they are irrelevant to investigating the attachment site of TCs.

¹⁶ To be more concrete, Koizumi (1993) argues that adjuncts in Japanese can be divided into VP-adjuncts, IP (=TP) adjuncts and MP-adjuncts. But, coupled with the argument of Nakajima (1982), I suggest here that VP-adjuncts can be divided into two. One is adjoined to the inner projection of the VP-shell (which I dub VP-adjuncts) and the other is adjoined to the outer projection of the VP-shell (which I dub vP-adjuncts).

¹⁷ See also Ura (2000) for the argument that temporal adverbs are adjoined to the outer projection of the VP-shell and manner or instrumental adverbs are adjoined to the inner projection of the VP-shell in Japanese.

(50)



One may wonder why a Group I adjunct is situated below the object. Ochi (2009) argues on independent grounds that the object in Japanese is obligatorily moved out of VP in overt syntax. If so, it is not surprising if a Group I adjunct is situated lower than the object. Moreover, these adjuncts typically appear on the right of the object for the intended interpretation as in (51), which also implies the low position of Group I adjuncts.

- (51) John-ga Mary-o [kodomo-no yooni] ayasi-ta.
John-NOM Mary-ACC kid-GEN like pacify-PST
'John pacified Mary as if she was a child.'

What is relevant to the discussion of this paper is that Group I is the adjuncts that are placed in the lowest position such that they could possibly be c-commanded by the object. Putting

this another way, if Type A and Type B are adjuncts c-commanded by the object as Harada (1973) suggests, they should belong to Group I. Contrary to this prediction, I will show that they actually belong to Group II, that is, they are *v*P-adjuncts that are located structurally higher than the object.

3.5.1 Scope of negation

Nakajima (1982: 361) argues that when a main clause is negated, the aforementioned groups of clausal adjuncts show a difference as to whether or not they are understood as taking scope under negation. More specifically, Group I is understood clearly within the scope of negation while Group II is ambiguous. Group III only has a reading outside the scope of negation. In this connection, let us observe (52).

- (52) a. They didn't treat us as if we were babies. (in)
 b. They have not been living here since their father died. (in/out)
 c. She is not beautiful whereas her sister is beautiful. (out).

(Nakajima, 1982: 361)

Nakajima argues that the lower an adjunct is located in the hierarchical structure, the more clearly it takes scope under negation.¹⁸ Adapting the diagnostic by Koizumi (1993), I suggest that the same observation can be made with regard to adverbs in Japanese. Specifically, Japanese adjuncts corresponding to Group I only have a reading in which the adjunct is clearly under the scope of negation, while those corresponding to Group II both have a

¹⁸ If NegP is situated between *v*P and TP (Pollock, 1989), one may wonder why a *v*P-adjunct can take scope outside negation. I cannot say for certain why this is so, but the important thing is that there is a tendency that a *v*P-adjunct is ambiguous. See Kishimoto (2008) for a suggestion that in Japanese Neg can be overtly head-raised to T.

reading such that the adjunct is inside and outside the scope of negation. Group III adjuncts in Japanese do not have an interpretation such that the adjunct is negated. In this light, let us observe (53) (53b is based on Koizumi, 1993).

- (53) a. John-wa [Mary-o [kodomo-no yooni] ayasi-wa si]-nakat-ta.
 John-TOP Mary-ACC kid-GEN like pacify-TOP do-NEG-PST
 ‘John didn’t pacify Mary as if she was a child.’ (Group I)
- b. John-wa [[terebi-o mi-nagara] benkyoosi-wa si]-nakat-ta.
 John-TOP TV-ACC watch-while study-TOP do-NEG-PST
 ‘John didn’t study while watching TV.’ (Group II)
- c. John-wa [gakkoo-ga owat-ta-node] [benkyoosi-wa si]-nakat-ta.
 John-TOP school-NOM finish-PST-because study-TOP do-NEG-PST
 ‘John didn’t study because the school was over.’ (Group III)

As the translations suggest, (53a) only has an interpretation such that the adjunct is under the scope of negation. That is, it only means that it was not like a child John pacified Mary. (53b) can be ambiguous. The salient reading of (53b) is that John did not study watching TV in which case the adjunct is under the scope of negation. The less salient reading of (53b) would be that John may have done something else while watching TV but what he did was not studying, in which case the adjunct is not negated. (53c) only has the interpretation in which the adjunct is outside the scope of negation. More specifically, it means that it was because the school was over that John did not study, but it does not mean that it was not because the school was over that John did not study.

With this in mind, let us examine each type of TC illustrated below.¹⁹

(54) a. John-wa [Mary_i-ga nai-tei-ru tokoro]-o *ec*_i nagusame-wa

John-TOP Mary-NOM cry-PROG-PRS tokoro-ACC console-TOP

si-nakat-ta.

do-NEG-PST

A. ‘When Mary was crying, John did not console her.’ (out)

B. ‘John may have consoled Mary at some other time, but he did not console her when she was crying.’ (in)

b. Keikan-wa [doroboo_i-ga nige-ru tokoro]-o *ec*_i tukamae-wa

Policeman-TOP thief-NOM run.away-PRS tokoro-ACC catch-TOP

si-nakat-ta.

do-NEG-PST

A. ‘When the thief tried to run away, the policeman did not catch him.’ (out)

B. ‘?The policeman may have caught the thief at some other time, but he did not do so when the thief tried to run away.’ (in)

(Type A)

(55) a. Keikan-wa [doroboo_i-ga oyog-u tokoro]-ni *ec*_i

Policeman-TOP thief-NOM swim-PRS tokoro-DAT

oituki-wa si-nakat-ta.

catch.up.with-TOP do-NEG-PST

A. ‘When the thief was swimming, the policeman did not catch up with him.’
(out)

B. ‘?The policeman may have caught up with the thief at some other time, but

¹⁹ So far, I have placed *ec* before a TC because we were not sure about the attachment site of the TC. However, I will place *ec* after a TC from now on because it will become clear in this section that the TC is situated above *ec*.

he did not do so when the thief was swimming.’ (in)

- b. John-wa [Mary_i-ga komatte i-ru tokoro]-ni *ec_i*

John-TOP Mary-NOM troubled be-PRS tokoro-DAT

kane-o kasi-wa si-nakat-ta.

money-ACC lend-TOP do-NEG-PST

A. ‘When Mary was in trouble, John did not lend her money.’ (out)

B. ‘?John may have lent Mary money at some other time, but he didn’t do so when she was in trouble.’ (in) (Type B)

- (56) John-wa [Mary-ga ne-tei-ru tokoro]-o kansatusi-/soozoosi-wa

John-TOP Mary-NOM sleep-PROG-PRS tokoro-ACC observe/imagine-TOP

si-nakat-ta.

do-NEG-PST

A. ‘?*When Mary was asleep, John did not watch/imagine her’ (out)

B. ‘John may have watched/imagined Mary at some other time, but he did not do so when she was asleep.’ (in) (Type C)

- (57) John-wa [gakusei-ga sake-o non-dei-ru tokoro]-ni

John-TOP student-NOM sake-ACC drink-PROG-PRS tokoro-DAT

dekuwasi-/heikoosi-wa si-nakat-ta.

come.across/be.weary-TOP do-NEG-PST

A. ‘??When his students were drinking, John did not come across/was not weary of them’ (out)

B. ‘John may have come across/been weary of his students at some other time, but he didn’t/wasn’t when they were drinking.’ (in)

What is important here is that there is a contrast between Type A/Type B TCs on the one hand and Type C/Type D TCs on the other. It is difficult for Type C and Type D TCs to have an interpretation in which they are outside the scope of negation. On the other hand, Type A and Type B TCs can have such interpretations. Given that Type C and Type D TCs are objects, it is not surprising that they are only interpreted under the scope of negation, if the lower a clause is located the clearer it takes scope under negation. That Type A and Type B TCs are ambiguous indicates that they are not categorised as either Group I or Group III adjuncts, but rather as Group II adjuncts that are considered *vP*-adjuncts in line with (49b).

3.5.2 The focus particle *sae* ‘even’

Another diagnostic Koizumi (1993) uses in testing the attachment site of adjuncts is the focus particle *sae* ‘even’. It is argued that *sae*, when attached to a verb, can focus constituents within *vP* (see Aoyagi, 1994, 1998). It is important to notice that adjuncts give rise to a different behaviour with respect to this diagnostic. In this respect, let us observe (58).

(58) a. John-wa [Mary-o [kodomono-no yooni] ayasi]-sae si-ta.

John-TOP Mary-ACC kid-GEN like pacify-evendo-PST

‘John even pacified Mary as if she was a child.’ (Group I)

b. John-wa [[terebi-o mi-nagara] benkyoosi]-sae si-ta.

John-TOP TV-ACC watch-while study-even do-PST

‘John even studied while watching TV.’ (Group II)

c. John_i-wa [sensei-ga *pro*_i okot-ta-node]

John-TOP teacher-NOM *pro* get.angry-PST-because

[naki]-sae si-ta

cry-even do-PST

‘John even cried because the teacher got angry with him.’ (Group III)

(58a) only has an interpretation in which the adjunct is under the scopal domain of *sae*. That is, it only means that John may have pacified Mary in some other ways but he even pacified her like a child. On the other hand, (58b) is ambiguous. When the adjunct is understood under the scopal domain of *sae*, it can mean that among all the things John did while studying, watching TV was the least expected; whereas if it is understood outside of the focus, it can mean that among all the things John did while watching TV, studying was the least expected. (58c) only has an interpretation in which the adjunct is outside the scopal domain of *sae*. It means that it was because the teacher got angry with him that John even cried, but it does not mean that it was even because the teacher got angry with him that John cried. Accordingly, this suggests that the lower a clause is situated in the hierarchical structure, the more readily the clause has a focused interpretation.

Bearing this in mind, let us examine the attachment site of each TC as illustrated below:

(59) a. John-wa [Mary_i-ga nakiyan-da tokoro]-o *ec_i*

John-TOP Mary-NOM stop.crying-PRS tokoro-ACC

nagusame-sae si-ta.

console-even do-PST

A. ‘?Among all the things John could do to Mary when she stopped crying, to console her was the least expected.’ (out)

B. ‘Among all the situations in which John could console Mary, for John to do so

when Mary stopped crying was the least expected.’ (in)

- b. Keikan-wa [doroboo_i-ga oyog-u tokoro]-o *ec_i*
Policeman-TOP thief-NOM swim-PRS tokoro-ACC
tukamae-sae si-ta.
catch-even do-PST

A. ‘?Among all the things the policeman could do to the thief when he was swimming, to catch him was the least expected.’ (out)

B. ‘Among all the situations in which the policeman caught the thief, to catch him when he was swimming was the least expected.’ (in)

(Type A)

- (60) a. Keikan-wa [doroboo_i-ga kuruma-de nige-ru tokoro]-ni *ec_i*
Policeman-TOP thief-NOM car-by run.away-PRS tokoro-DAT
oituki-sae si-ta.
catch.up.with-even do-PST

A. ‘?Among all the things the policeman could do to a thief when he was running away by a car, to catch up with him was the least expected.’ (out)

B. ‘Among all the situations in which the policeman caught up with a thief, it was the least expected for the policeman to do so when the thief was running away by a car.’(in)

- b. John-wa [Mary_i-ga komatte i-na-i tokoro]-ni *ec_i*
John-TOP Mary-NOM troubled be-NEG-PRS tokoro-DAT
kane-o kasi-sae si-ta.
money-ACC lend-even do-PST

A. ‘?Among all the things John could do to Mary when she was not in trouble, to

lend her money was the least expected.’ (out)

B. ‘Among all the situations in which John lent Mary money, to do so when she was not in trouble was the least expected.’ (in) (Type B)

(61) John-wa [Mary-ga ne-tei-ru tokoro]-o kansatusi-/soozoosi-sae

John-TOP Mary-NOM sleep-PROG-PRS tokoro-ACC observe-/imagine-even

si-ta.

do-PST

A. ‘??Among all the things John could do to Mary while she was asleep, to watch/imagine was the least expected.’ (out)

B. ‘Among all the situations in which John could watch/imagine Mary, to watch/imagine her asleep was the least expected.’ (in)

(Type C)

(62) John-wa [gakusei-ga sake-o non-dei-ru tokoro]-ni

John-TOP student-NOM sake-ACC drink-PROG-PRS tokoro-DAT

dekuwasi-/heikoosi-sae si-ta.

come.across-/be.weary-even do-PST

B. ‘??Among all the things John could do to his students while they were drinking, to come across/be weary of them was the least expected.’ (out)

A. ‘Among all the situations in which John could come across/be weary of his students, it was the least expected for John to do/was so when his students were drinking.’

(in)

(Type D)s

If not ungrammatical, it is difficult for Type C and Type D TCs to have a reading such that they are outside the scopal domain of *sae*. This is expected if they are objects and situated lower down in the hierarchical structure. On the other hand, Type A and Type B TCs are ambiguous in that they can have a reading either inside or outside the scopal domain of *sae*. Given the parallelism with Group II adjuncts, it follows therefore that Type A and Type B TCs are categorised as Group II adjuncts, which are considered vP-adjuncts.

3.6 Summary

This section has shown that subordinate TCs are categorised into four types according to the matrix verb and particle attached to them. The classification of these TCs is summarised in the table below.

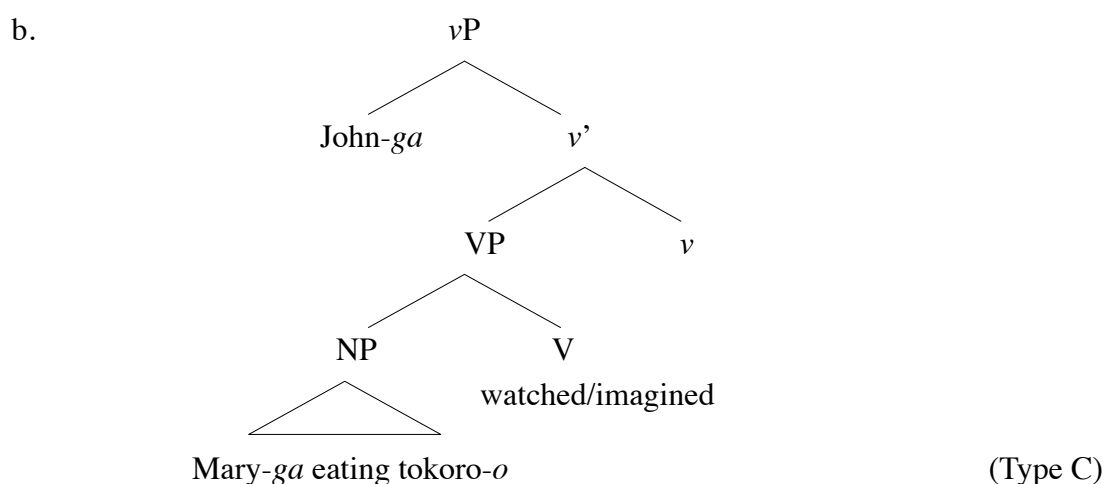
(63)

| | particle | matrix predicate | status |
|--------|---------------------|--|---------|
| Type A | accusative <i>o</i> | tukamae-ru ‘catch’, nagusame-ru ‘console’, tasuke-ru ‘help’, home-ru ‘praise’, sikar-u ‘scold’, etc. | adjunct |
| Type B | dative <i>ni</i> | oituk-u ‘catch up with’, tadorituk-u ‘reach’, mania-u ‘catch, make it’, osoikakar-u ‘attack’, kas-u ‘lend’, osie-ru ‘teach, tell’, todoke-ru ‘deliver’, syookaisu-ru ‘introduce’, etc. | adjunct |
| Type C | accusative <i>o</i> | kansatusu-ru ‘watch, observe’, kirokusu-ru | object |

| | | | |
|--------|------------------|--|--------|
| | | ‘record’, soozoosu-ru ‘imagine’, yumemi-ru ‘dream’, etc. | |
| Type D | dative <i>ni</i> | dekuwas-u ‘come across’, dea-u ‘encounter’, butukar-u ‘bump into’, hara-o tate-ru ‘get angry’, heikoosu-ru ‘be weary’, hekiekisu-ru ‘be bothered’, etc. | object |

As for Type C TCs, we saw from the evidence of selection restrictions and Condition B that there is no null argument in the matrix clause. Together with the evidence that Type C TCs can be passivised and they are consistently under scope of negation and *sae*, they are reasonably considered a direct object as Kuroda (1999) suggests. The structure of the Type C TC sentence in (64a) is shown in (64b).²⁰

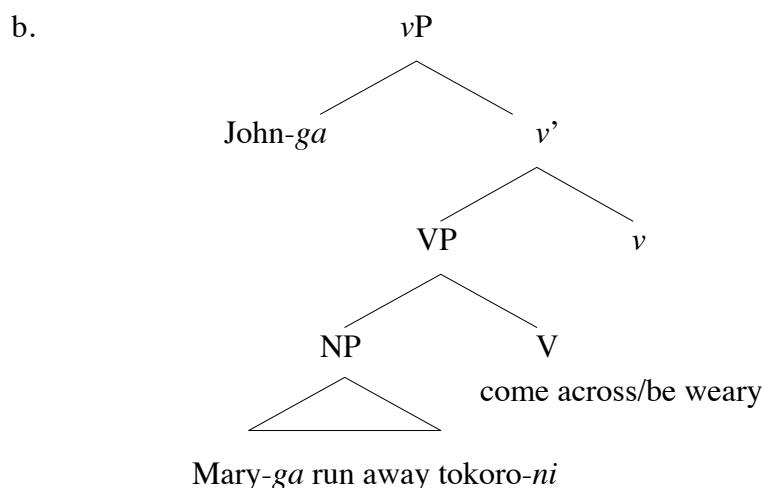
- (64) a. John-ga [Mary-ga tabe-ru tokoro]-o kansatusi-ta/soozoosi-ta.
 John-NOM Mary-NOM eat-PRS tokoro-ACC observe-PST/imagine-PST
 ‘John watched/imagined Mary eating.’



²⁰ The structure above vP is omitted for ease of exposition.

As far as Type D TCs are concerned, the results from selection restrictions and Condition B indicate that there is no null object in the matrix clause. They cannot be passivised, but we saw that this is because the matrix verb itself cannot be passivised. Furthermore, they are consistently under scope of negation and *sae*. Accordingly, I suggest that Type D TCs are object themselves²¹ The structure of the Type D TC sentence in (65a) is shown in (65b).

- (65) a. John-ga [Mary-ga nige-ru tokoro]-ni
 John-NOM Mary-NOM run.away-PRS tokoro-DAT
 dekuwasi-ta/heikoosi-ta.
 come.across-PST/be.weary-PST



(Type D)

Since matrix verbs that occur with Type C and Type D TCs can select a situation, it is not

²¹ Hale and Kitagawa (1976-77: 53) independently argue that Type D TCs are a complement to the matrix verb by citing the following example.

(i) John-wa [ookii otoko-ga roozin-o naguri, roozin-ga himei-o age, toorikakat-ta onna-ga
 John-TOP big man-NOM old.man-ACC hit old.man-NOM scream-ACC raise passing.by-PST woman-NOM
 tasuke-o yon-dei-ru tokoro]-ni dekuwasi-ta.
 help-ACC call-PROG-PRS tokoro-DAT come.across-PST
 'John ran into a scene in which a big man was beating an old man, the old man was screaming, and a woman passing by was calling for help.'

(Hale and Kitagawa, 1976-77: 53)

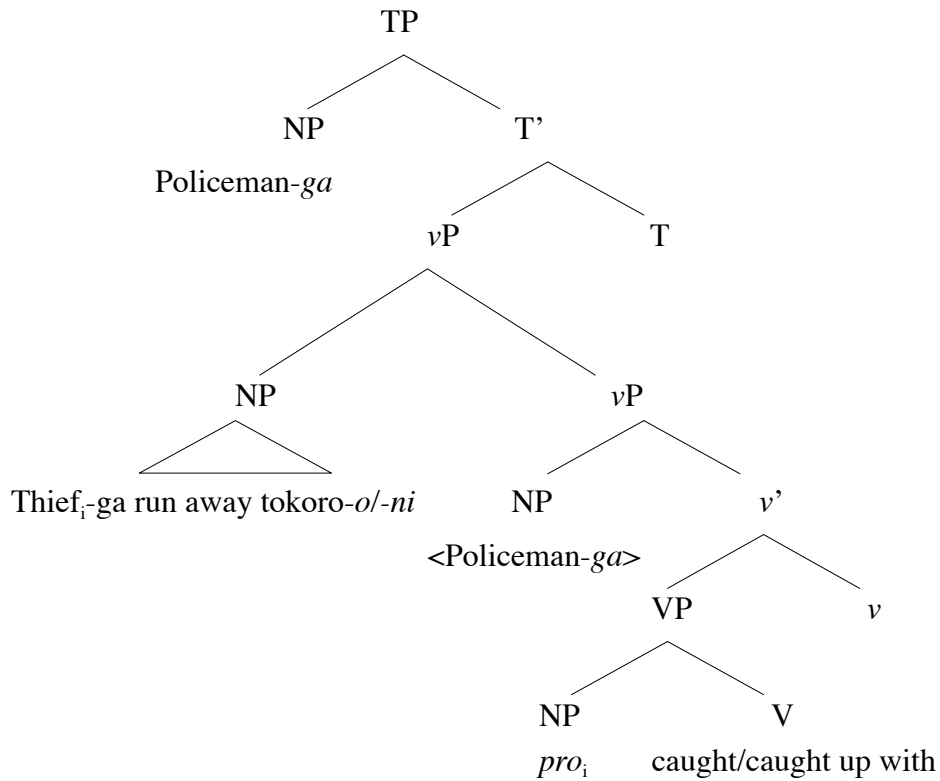
They argue that, if there is a matrix object, there is no known rule that deletes it under identity with these conjoined sentences within the TC. Rather, they assume that it is natural to think that this TC is a dative argument of the verb *dekuwas-u* 'come across'.

peculiar to think that those predicates can take a circumstantial TC as their object. Now that we have confirmed that Type C and Type D TCs are objects on their own and there is no null argument in the matrix clause, it can be concluded that these TCs are not relevant to control.

On the other hand, we have seen that Type A and Type B TCs are neither objects nor relative clauses, but adjuncts. This is because the results from selection restrictions and Condition B suggest that there is a null object in the matrix clause, and the TC cannot be passivised. Furthermore, the diagnostics of scope interaction suggest that they are *v*P-adjuncts situated structurally higher than the object. To illustrate, the Type A TC sentence in (66a) and the Type B TC sentence with a two-place predicate in (66b) have the structure in (66c) in which the TC is adjoined to *v*P.

- (66) a. Keikan-ga [doroboo_i-ga nige-ru tokoro]-o *ec_i*
 Policeman-NOM thief-NOM run.away-PRS tokoro-ACC
 tukamae-ta.
 catch-PST
 ‘The policeman caught the thief as he tried to run away.’ (Type A)
- b. Keikan-ga [doroboo_i-ga nige-ru tokoro]-ni *ec_i*
 Policeman-NOM thief-NOM run.away-PRS tokoro-DAT
 oitui-ta.
 catch.up.with-PST
 ‘The policeman caught up with the thief when he was running away.’ (Type B)

c.



The Type B TC sentence with a three-place predicate in (67a) has the structure in (67b) in which the TC is adjoined to vP.

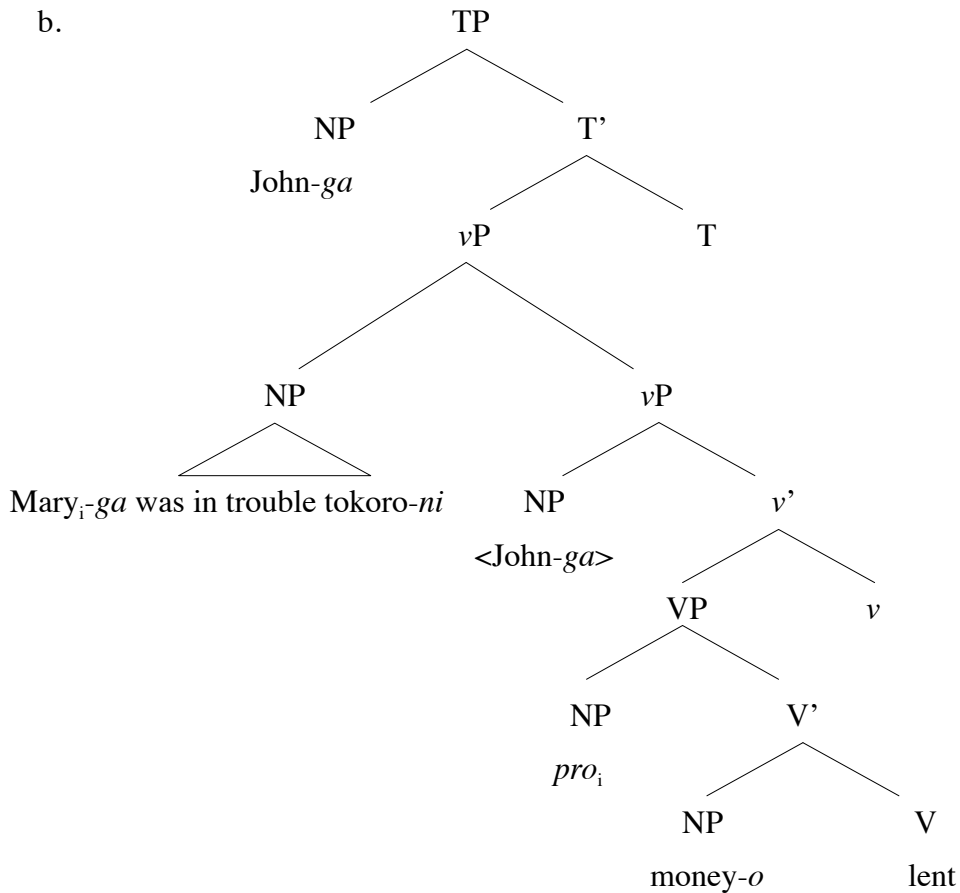
(67) a. John-ga [Mary_i-ga komatte i-ru tokoro]-ni *ec*_i

John-NOM Mary-NOM troubled be-PRS tokoro-DAT

kane-o kasi-ta.

money-ACC lend-PST

‘John lent Mary money when she was in trouble.’ (Type B)



What is apparent by looking at the structures of Type A and Type B TC sentences in (66c) and (67b) is that the unpronounced matrix object does not c-command the T-pivot contained in the vP-adjunct, nor the T-pivot does not c-command the unpronounced matrix object. Recall that as noted in section 2.1 the existing analyses of TC constructions assume a c-command relation between them in order to capture an obligatory control relation. Against previous analyses, therefore, the lack of the c-command relation points to the conclusion that obligatory control, let alone backward control, may not be involved in Type A and Type B TC sentences.

Nevertheless, an anonymous reviewer points out that a c-command relation is not a pre-requisite for obligatory control anymore once we take a view of the MTC that movement is derived simply by Copy and Merge of identical noun phrases. Especially, this radical view on movement has been applied to obligatory control into adjuncts (Hornstein 2001; Haddad

2009, 2011) under the operation called sideward movement (Nunes 2001, 2004). Sideward movement is an operation by which a noun phrase in one subtree is merged to a position in another unconnected subtree. By way of example, let us consider obligatory control into an adjunct based on Hornstein (2001):

- (68) John_i heard Mary_j [without PRO_{i/*j} entering the room].
- (69) a. [_{adjunct} without John entering the room].
 b. [_{VP} heard Mary]
 c. [_{VP} John heard Mary] [without John entering the room]

The structure of the sentence (68) consists of two unconnected subtrees; the adjunct and VP. The subject of the adjunct *John* in (69a) is copied and merged with the VP in (69b), resulting in (69c). Note that in (69c) *John* is merged in a position that does not c-command its base position, because Spec VP does not c-command the adjunct. If sideward movement out of an adjunct is tenable, one may wonder if the same can be applied to Type A and Type B TC sentences because their structures are very similar to the one in (68). This is all the more so because Haddad (2009) suggests that backward control into adjuncts can also be explained by sideward movement.

In order to argue against this possibility, I will demonstrate in the next section that the referential relation between the unpronounced matrix object and the T-pivot in Type A and Type B TC sentences is pronominal coreference, rather than obligatory control. Since sideward movement is premised on the assumption that two noun phrases are exactly identical (hence obligatory control), pronominal coreference will ultimately disprove the possibility of sideward movement.

4. Pronominal coreference

4.1 Properties of obligatory control

I begin by elucidating the properties of a controlled null argument that is generally notated as PRO. Well-known properties of PRO are summarized below (see e.g., Koster, 1984; Bouchard, 1985; Higginbotham, 1992; Hornstein, 1999; Landau, 2000).²²

- (70) a. Long-distance control is impossible.
b. A non-c-commanding antecedent is impossible.
c. A strict reading under ellipsis is impossible.

If a null argument does not have those properties listed in (70), it is plausible to think that the null argument is a *pro* whose referent is determined by pronominal coreference. That (70) holds in Japanese control structures has been observed by Aoshima (2001), Nemoto (1993), Uchibori (2000) and Fujii (2006, ch.1) among others. In the absence of agreement morphology in the language, obligatory control in Japanese is established in those complement clauses that do not permit a past/non-past tense alternation (Fujii, 2006). For instance, complements to verbs like *kessinsu-ru* ‘decide’, *i-u* ‘tell’ are untensed and hence the embedded null subject is PRO, whereas complements to verbs such as *soozoosu-ru* ‘imagine’ are tensed (in the sense that they permit a past/non-past tense alternation) and therefore the embedded null subject is *pro*. Below, I illustrate differences between PRO and *pro* in Japanese in accordance with the properties shown in (70). Observe that the (a) sentences show the properties of obligatory control whereas the (b) sentences do not.

²² One may wonder whether split antecedents can be used as a relevant diagnostic. An anonymous reviewer points out however that split antecedents cannot be a test for this in Japanese because the exhortative mood marker *-yoo* can force split antecedents even in obligatory control configurations (see Fujii, 2006: chapter 2).

(71) *Long-distance antecedent*

- a. * Karera_i-wa [kantoku-ni [PRO_i otagai_i-o hihansia-u/*-tta koto]-o
 They-TOP director-DAT PRO each.other-ACC criticise-PRS/-PST C-ACC
 kessinsite] hosikat-ta.
 decide want-PST
 ‘They_i wanted the director to decide PRO_i to criticise each other_i (in the next
 movie)’.

(Fujii, 2006: 37)

- b. Karera_i-wa [kantoku-ni [*pro*_i otagai_i-o hihansi-ta koto]-o
 They-TOP director-DAT *pro* each.other-ACC criticise-PST C-ACC
 okotte] hosiku nakat-ta.
 get.angry want NEG-PST
 ‘They_i did not want the director to get angry that they_i had criticised each other_i.’

(72) *Non-c-commanding antecedent*

- a. [Mary_i-no hahaoya]_j-ga John_k-ni [PRO_{*i/j/k} zibunzisin_{*i/j/k}-o home-ru/*-ta
 Mary-GEN mother-NOM John-DAT PRO self-ACC praise-PRS/-PST
 yooni] it-ta.
 C tell-PST
 ‘Mary_i’s mother_j told John_k PRO_{*i/j/k} to praise himself_k/herself_{*i/j}.’
- b. [Mary_i-no sensei]_j-ga [[*pro*_{i/j/k} sono ronbun-o hyookasi-ta koto]-ga
 Mary-GEN teacher-NOM *pro* that paper-ACC evaluate-PST C-NOM
 daizi-da to] it-ta.
 important-COP C say-PST
 ‘Mary_i’s teacher_j said that it was important that they_{i/j/k} had evaluated that paper.’

(73) *Strict reading under ellipsis*

- a. A: Mary_i-wa [PRO_i zibun-no peesu-de sigoto-o tuzuke-ru/*ta koto]-o
Mary-TOP PRO self-GEN pace-at work-ACC continue-PRS/-PST C-ACC
kessinsi-ta.
decide-PST

‘Mary_i decided PRO_i to continue to work at her own pace.’

B: Butyoo-mo da.

Manager-also COP

Sloppy reading: ‘The manager_i decided to work at his_i/her_i own pace’

Strict reading: ‘*The manager decided that Mary_i should continue to work at her_i own pace.’

- b. A: Mary_i-wa [*pro*_i zibun-no peesu-de sigoto-o tuzuke-ta koto]-o
Mary-TOP *pro* self-GEN pace-at work-ACC continue-PST C-ACC
tegami-ni kai-ta.
letter-in write-PST

‘Mary_i wrote in the letter that she_i had continued working at her_i own pace.’

B: Butyoo-mo da.

Manager-also COP

Sloppy reading: ‘The manager_i wrote in the letter that s/he_i had continued working at his_i/her_i own pace.’

Strict reading: ‘The manager wrote in the letter that Mary_i had continued working at her_i own pace.’

As shown below, the unpronounced object in TC sentences is in the matrix clause, and so it is inevitably tensed. Thus it is expected that the null matrix object is *pro*.

- (74) a. John-ga *pro*_i [Mary_i-ga otikonde i-ru tokoro]-o nagusame-ru/-ta.
 John-NOM Mary-NOM down be-PRS tokoro-ACC console-PRS/-PST
 ‘John will console/consolated Mary_i when she_i is/was down.’ (Type A)
- b. John-ga *pro*_i [Mary_i-ga ie-ni i-ru tokoro]-ni hana-o
 John-NOM Mary-NOM home-at be-PRS tokoro-DAT flower-ACC
 todoke-ru/-ta.
 deliver-PRS/-PST
 ‘John will deliver/delivered flowers to Mary_i when she_i is/was at home.’ (Type B)

In the remainder of this section, I shall adduce evidence for the *pro*-status of the null constituent in TC sentences.

4.2 Three properties of *pro*

Now that we have established the distinction between PRO and *pro*, we are able to determine whether the null matrix object in TC sentences is PRO or *pro*. Since previous studies have argued that the null matrix object in Type A TC sentences is *pro* (Ohso 1976), I aim to show here that the same is true for the null matrix object in Type B TC sentences.²³ In what follows,

²³ To be more precise, Sudo (2008) suggests that the null matrix object in Type A TC sentences is an E-type pronoun, building on the E-type pronoun analysis of Japanese HIRCs (e.g., Shimoyama, 1999; Kim, 2004). However, it seems that what Kubota and Smith (2007) propose in opposition to the E-type pronoun analysis of Japanese HIRCs can also be applied to TC sentences. For instance, one piece of evidence Sudo (2008) adduces in support of an E-type pronoun comes from cases in which there is no explicit antecedent.

(i) John-wa [koori-ga tokedasi-ta tokoro]-o tibitibi non-da.
 John-TOP [ice-NOM begin.to.melt-PST tokoro]-ACC little.by.little drink-PST
 ‘John sipped as the ice began to melt’

However, this may not be enough to justify the E-type pronoun analysis because the same effect can hold if we replace *tokoro* with *node* ‘because’.

(ii) John-wa [koori-ga tokedasi-ta node] tibitibi non-da.

I will apply the diagnostics just introduced to both Type A and Type B TC sentences.

- *Long-distance antecedent*

- (75) Yakuza-wa [terorisuto-ga [hitoziti_i-ga kega-o sitei-na-i koto]-o
 Yakuza-TOP terrorist-NOM hostage-NOM injury-ACC do-NEG-PRS C-ACC
 kakuninsi-ta tokoro]-o *pro*_i kyuusyutusi-ta.
 make.sure-PST tokoro-ACC *pro* rescue-PST

‘Yakuza rescued the hostage_i when the terrorist made sure that he_i was not injured.’

(Type A)

(Fujii, 2006: 212)

- (76) a. John-wa [Mary-ga [Bob_i-ga ne-tei-ru koto]-o
 John-TOP Mary-NOM Bob-NOM sleep-PROG-PRS C-ACC
 kakuninsi-ta tokoro]-ni *pro*_i osoikakat-ta.
 make.sure-PST tokoro-DAT *pro* attack-PST

‘John attacked Bob_i when Mary made sure that he_i was asleep.’

- b. John-wa [Mary-ga [Bob_i-ga masui-de ne-tei-ru koto]-o
 John-TOP Mary-NOM Bob-NOM anesthesia-by sleep-PROG-PRS C-ACC
 kakuninsi-ta tokoro]-ni *pro*_i mesu-o ire-ta.
 make.sure-PST tokoro-DAT *pro* surgical.knife-ACC put-PST
 ‘John put a surgical knife to Bob_i when Mary made sure that he_i was asleep by
 anesthesia.’

(Type B)

John-TOP [ice-NOM begin.to.melt-PST because] little.by.little drink-PST

‘Because the ice began to melt, John sipped it.’

Thus, those effects Sudo argues are not specific to TC constructions, but can also obtain where the object is a null pronoun *pro* (though I will not dwell on this issue any further because of space limitation). Here, following Kubota and Smith (2007), it suffices to assume that the matrix object is simply *pro*.

- *Non-c-commanding antecedent*

(77) Mary-ga [[John_i-no oya]-ga rusunisi-tei-ru tokoro]-o *pro*_i tazune-ta.
 Mary-NOM John-GEN parents-NOM absent-PROG-PRS tokoro-ACC *pro* visit-PST
 ‘Mary visited John_i when his_i parents were absent.’

(Type A)

(78) a. ? Mary-ga [[John_i-no zitsensya]-ga kosyoosi-ta tokoro]-ni
 Mary-NOM John-GEN bicycle-NOM get.broken-Pst tokoro-DAT
 yatto *pro*_i oitui-ta.
 finally *pro* catch.up.with-Pst
 ‘Mary finally caught up with John_i when his_i bicycle got broken.’

b. John-wa [[Mary_i-no oya]-ga rusunisi-tei-ru tokoro]-ni
 John-TOP Mary-GEN parents-NOM absent-PROG-PRS tokoro-DAT
*pro*_i puresento-o todoke-ta.
pro present-ACC deliver-PST
 ‘John delivered Mary_i a present when her_i parents were absent.’

(Type B)

- *Strict reading under ellipsis*

(79) a. Keikan-wa [John_i-ga nige-ru tokoro]-o *pro*_i tukamae-ta.
 Policeman-TOP John-NOM run.away-PRS tokoro-ACC *pro* catch-PST
 ‘The policeman caught John_i as he_i tried to run away.’

b. [Mary-ga nige-ru tokoro]-mo-da.
 Mary-NOM run.away-PRS tokoro-even-COP
 ‘As Mary tried to run away, too.’

Sloppy reading: ‘The policeman caught Mary_i as she_i tried to run away.’

Strict reading: ‘*The policeman caught John as Mary tried to run away.’

(Type A)

- (80) a. Keikan-wa [John_i-ga nige-ru tokoro]-ni *pro*_i oitui-ta.

Policeman-TOP John-NOM run.away-PRS tokoro-DAT *pro* catch.up.with-PST

‘The policeman caught up with John_i as he_i tried to run away.’

- b. [Mary-ga nige-ru tokoro]-ni-mo-da.

Mary-NOM run.away-PRS tokoro-DAT-even-COP

‘As Mary tried to run away, too.’

Sloppy reading: ‘The policeman caught up with Mary_i as she_i tried to run away.’

Strict reading: ‘*The policeman caught up with John as Mary tried to run away.’

- (81) a. John-wa [Mary_i-ga komatte i-ru tokoro]-ni *pro*_i kane-o

John-TOP Mary-NOM troubled be-PRS tokoro-DAT *pro* money-ACC

kasi-ta.

lend-PST

‘John lent Mary_i money when she_i was in trouble.’

- b. [Bill-ga komatte i-ru tokoro]-ni-mo-da.

Bill-NOM troubled be-PRS tokoro-DAT-even-COP

‘When Bill was in trouble, too.’

Sloppy reading: ‘John lent Bill_i money when he_i was in trouble.’

Strict reading: ‘*John lent Mary money when Bill was in trouble.’ (Type B)

Although appropriate contexts may be required to make these sentences sound pragmatically felicitous, the diagnostics of long distance antecedent and c-commanding antecedent illustrate that not only the null matrix object in Type A TC sentences but also that in Type B TC

sentences are not obligatorily controlled. However, what is puzzling is that the null object in both Type A and Type B TC sentences only have a sloppy reading under ellipsis as shown in (80)-(81). This in fact leads Fujii (2006) to assume that the null object in TC sentences has both properties of PRO and *pro*.²⁴ Unlike Fujii (2006), I suggest that the ban on a strict reading under ellipsis does not necessarily exhibit the property of obligatory control in Japanese when, unlike (73), the null argument is the matrix object. Let us replace the TC in (80)-(81) with a temporal adjunct which is, according to Koizumi's (1993) classification, a *vP*-adjunct. In such a sentence, the null object can generally be considered *pro*; but it is difficult to have a strict reading under ellipsis as shown in (82).

- (82) a. John-wa [Mary_i-ga komatte i-ru toki]-ni *pro*_i kane-o kasita.
 John-TOP Mary-NOM troubled be-PRS when-DAT *pro* money-ACC lend-PST
 'John lent Mary_i money when she_i was in trouble.'
- b. [Bill-ga komatte i-ru toki]-ni-mo-da.
 Bill-NOM troubled be-PRS when-DAT-even-COP
 'When Bill was in trouble, too.'
- Sloppy reading: 'John lent Bill_i money when he_i was in trouble.'
- Strict reading: '??John lent Mary money when Bill was in trouble.'

Accordingly, setting aside the diagnostic of sloppy/strict readings under ellipsis, it is reasonable to conclude that the null matrix object in these TC sentences is a *pro* whose referent is determined in terms of pronominal coreference.²⁵

²⁴ But Fujii (2006: 215) uses the verb *dekuwas-u* 'come across' in order to test for a reading under ellipsis. However, as noted, *dekuwas-u* is a verb that takes Type D TCs and therefore there is no null argument in the matrix clause.

²⁵ The observation that the null matrix object is *pro* in turn supports the present proposal that the TC is an adjunct. This is because if the TC is in a complement position, the T-pivot is c-commanded by the referential null pronominal *pro*, and so this would lead to a Condition C violation. See Cormack and Smith (2004) for a related issue regarding Korean object control.

4.3 Disambiguation

Another property of *pro* is that unlike controlled PRO it can be lexicalised. However, this is the point at which previous literature becomes dubious about its status as *pro*. According to Ohso (1976: 104), the matrix object is obligatorily made covert in TC sentences, although this is not the case with other adjuncts. In this light, observe the sentences below.

- (83) a. John-wa [Hanako_i-ga nakidasi-ta monodakara] awatete kanozyo_{i/j}-o/*pro*_{i/j}
John-TOP Hanako-NOM begin.to.cry-PST because in.a.hurry she-ACC/*pro*
soto-ni turedasi-ta.
outside-to take.out-PST
‘Since Hanako_i started to cry, John took her_{i/j} out in a hurry.’
- b. Hanako-wa [Bill_i-ga kuruma-o kaes-anai node] kare_{i/j}-o/*pro*_{i/j}
Hanako-TOP Bill-NOM car-ACC return-NEG because he-ACC/*pro*
sagi-de uttae-ta.
fraud-for sue-PST
‘Hanako sued him_{i/j} for fraud because Bill_i didn’t return her car.’
- c. Keisatu-wa [sono doroboo_i-ga nigete ik-u tokoro]-o
Policeman-TOP that thief-NOM run.away go-PRS tokoro-ACC
*kare_{i/j}-o/*pro*_{i/*j} tukamae-ta.
he-ACC/*pro* catch-PST
‘The policeman caught that thief_i as he_{i/*j} was running away.’

(Ohso, 1976: 104)

Note that the matrix object in (83a, b) can be either *pro* or an overt pronoun that refers either

to the antecedent in the adverb or to an extra-sentential individual, but in (83c) the matrix object should be a *pro* that refers to the T-pivot. Ohso (1976) argues that this state of affairs cannot be accounted for solely in terms of pragmatics, and Ohso (1976) and Hale and Kitagawa (1976-77) argue that the DoC is necessary in order to guarantee that the matrix object is not overtly realised in TC sentences by zero pronominalisation (*pro*-drop). In other words, they assume that backward control (Counter Equi NP deletion) is not involved in Type A TC sentences as the null matrix object is *pro*, but the DoC obligatorily makes the matrix object pronoun covert as the resulting structure would end up having two phrases marked by *o*. However, as noted, we cannot resort to the DoC because Type B TCs are marked by *ni*.

Although more research is needed, I propose that the null matrix object in TC sentences can be lexicalised when there is a necessity to disambiguate its referent. In this light, let us consider the following sentences.

- (84) ? Keikan-wa [doroboo_i-ga sono dansei_j-ni osoikakat-ta tokoro]-o
Policeman-TOP thief-NOM that man-DAT attack-PST tokoro-ACC
kare_j-o/sono dansei_j-o utte simat-ta.
he-ACC/that man-ACC shoot have-PST
'The policeman (accidentally) shot the man_j when the burglar_i attacked him_j.'
(Type A)
- (85)a. ? John-wa [Mary_i-to Bill_j-ga betubetu-ni nigete ik-u tokoro]-ni
John-TOP Mary-and Bill-NOM separately run.away go-PRS tokoro-DAT
kanozyo_i-ni/Mary_i-ni saki-ni oitui-ta.
she-DAT/Mary-DAT first catch.up.with-PST
'When Mary_i and Bill were running away separately, John caught up with her_i first.'

b.? Sono omawari-wa [byoonin_i-ga John_j-o naguritaositesimat-ta tokoro]-ni
 That cop-TOM patient-NOM John-ACC had.knocked.down-PST tokoro-DAT
 Kare_j-ni/John_j-ni ookyuusyoti-o si-ta.
 He-DAT/John-DAT first.aid-ACC do-PST
 ‘That cop gave first aid to John_i when a patient knocked down him_i.’

(Type B)

In the above sentences, there are two potential referents for the null matrix object. In this case, it is possible to lexicalise the unpronounced matrix object either as a pronoun or an R-expression in order to disambiguate its referent. Since controlled PRO can never be lexicalised, this point strengthens my claim that the null matrix object in Type A and Type B TC sentences is not controlled.

4.4 Extra-sentential antecedent

An anonymous reviewer points out that if the null matrix object in TC sentences is *pro*, it should be able to have an antecedent which does not appear in the TC sentence, but is obvious from the discourse. Although it is difficult for *pro* in TC sentences to have an extra-sentential antecedent in the normal settings, if an appropriate context is given, it may well be possible. By way of illustration, let us imagine the situation in (86).

(86) A policeman (*keikan*) was keeping watch for a bank robbery (*gootoo*) who held a hostage (*hitoziti*) inside the bank. The policeman broke into the bank and caught/attacked the bank robbery when the hostage sneaked out of the bank.

In this context, it is possible for the unpronounced matrix object to refer to the bank robbery (*gootoo*) although it is not present in the sentence.

- (87) a. Keikan-ga [hitoziti-ga nigedasi-ta tokoro]-o
Policeman-NOM hostage-NOM run.away-PST tokoro-ACC
ginkoo-ni osiitte *pro* tukamae-ta.
bank-to breaking.into catch-PST
‘The policeman broke into the bank and caught the bank robbery when the hostage
ran away (from the bank).’ (Type A)
- b. ? Keikan-ga [hitoziti-ga nigedasi-ta tokoro]-ni
Policeman-NOM hostage-NOM run.away-PST tokoro-DAT
ginkoo-ni osiitte *pro* osoikakat-ta.
bank-to breaking.into attack-PST
‘The policeman broke into the bank and attacked the bank robbery when the
hostage ran away (from the bank).’ (Type B)

As obligatory control PRO cannot have an extra-sentential referent, it follows that the null matrix object in Type A and Type B sentences is not a PRO, but rather *pro* whose referent is determined on the basis of pronominal coreference.

Recall that the MTC analyses obligatory control into adjuncts by means of sideward movement, yet sideward movement requires two noun phrases connected in terms of copying and merging to be identical copies. In this section, I have shown pieces of evidence that the unpronounced matrix object in Type A and Type B TC sentences is not controlled, and it should be analysed as a *pro* object whose referent is determined by pronominal coreference. Since it is not controlled, sideward movement has nothing to do with this construction.

Moreover, this section has made it clear that in addition to Type C and Type D TCs, Type A and Type B TCs do not fall under the scope of obligatory control, let alone backward control.

5. Particles

Lastly, this section aims to untangle some of the issues that revolve around the particles attached to TCs. Note that Type A and Type C TCs are marked by the accusative particle *o* and Type B and Type D TCs are marked by the dative particle *ni*. The problem surrounding these accusative and dative particles is that they coincide with the case the matrix verb assigns to its internal argument. This would especially be a problem for Type A and Type B TCs because I claim here that they are *vP*-adjuncts, so the matrix verb is not able to assign case to them.

One point to note about the accusative particle *o* and the dative particle *ni* is that they can be ambiguous between a structural case marker and a postposition (inherent case marker) in Japanese.²⁶ In the current framework of syntax, structural case assignment is implemented under an asymmetric c-command relation between a probe and goal (Chomsky 2000). The probe is a functional head bearing uninterpretable agreement features and it asymmetrically c-commands the goal noun phrase which has an uninterpretable case feature. The probe assigns a value to the uninterpretable case feature on the goal, and the goal in turn values the uninterpretable agreement features on the probe. Yet this c-command relation does not apply to the assignment of a postposition (inherent case).

Given these considerations, it is important to examine the nature of the accusative particle *o* attached to Type A TCs and the dative particle *ni* attached to Type B TCs. If they are *vP*-adjuncts, they are not in the c-commanding domain of the probe *v*. Hence, it is predicted

²⁶ But see Fukui and Takano (1998) who suggest that the accusative particle *o* in Japanese is generally an inherent case marker on theoretical grounds.

that these particles are at least not structural case markers. The rest of this section is devoted to clarifying this point.

5.1 The accusative particle *o*

Insofar as the accusative particle *o* is concerned, there are several diagnostics for differentiating a postposition from a case marker. As argued by Mihara (1998), case markers in Japanese can be omitted in colloquial conversation, while postpositions cannot. That this is true for the particle *o* is shown in (88).

- (88) a. Ken-wa nani-o/∅ tabe-ta-no?
 Ken-TOP what-ACC/∅ eat-PST-Q
 ‘What did Ken eat?’
- b. Ken-wa doko-o/∅ arui-ta-no?
 Ken-TOP where-ACC/∅ walk-PST-Q
 ‘Where did Ken walk?’ (accusative case of path)
- c. Ken-wa dono-saka-o/*∅ zitsensya-o issyookkenmei osi-ta no?
 Ken-TOP which-slope-ACC/*∅ bicycle-ACC hard push-PST Q
 ‘On which slope did Ken push the bicycle hard?’ (accusative of situation)
- (Hiraiwa, 2010: 733)

In the sentences in (88), only in the (c) example is it the case that the particle *o* cannot be dropped. This is because this *o* is a postposition called an ‘accusative of situation’ that serves to give some additional information as to the situation in which the event takes place. Bearing this in mind, let us consider Type A and Type C TCs that are marked by the particle *o*.

- (89) a. John-ga *ec_i* [Mary_i-ga otikonde i-ru tokoro]-{*o*/??∅}
 John-NOM Mary-NOM down is-PRS tokoro-{ACC/??∅}
 nagusamete-ta-yo.
 console-PST-PRT
 ‘John consoled Mary_i when she_i was down.’ (Type A)
- b. John-ga [Mary-ga tabe-ru tokoro]-{*o*/∅} kansatusite-ta-yo.
 John-NOM Mary-NOM eat-PRS tokoro]-{ACC/∅} watch-PST-PRT
 ‘John watched Mary eating.’ (Type C)

Although the difference is rather subtle, the omission of the particle *o* attached to Type A TCs is less acceptable than that attached to Type C TCs. As for Type C TCs, this is expected if this particle is a structural case marker assigned to the object. On the other hand, the observation that *o* attached to Type A TCs is hard to omit suggests that this is not a case marker but rather a postposition. Considering that the function of Type A TCs is to specify the situation in which the matrix event takes place, it is not arbitrary to assume that this *o* is a postposition of ‘accusative of situation’ in line with (88c).

The second diagnostic comes from clefting with a particle. In Japanese cleft sentences, a clefted constituent is placed in a focus position before the copula *da*. Talking about this copula *da*, Nakayama (1989) argues that it can assign case. The assumption that the copula can assign case accounts for the distribution of a pre-copula constituent in cleft sentences. In this connection, let us observe (90).

- (90) a. Kore-wa [_{NP}piza]-da.
 This-TOP pizza-COP

‘This is pizza.’

- b. *Kore-wa [NP utukusii]-da. (cf. ✓ Kore-wa utukusii.)

This-TOP beautiful-COP

This-TOP beautiful

‘This is beautiful.’

- c. Kore-wa [PP Nihon kara]-da.

This-TOP Japan from-COP

‘This is from Japan.’

(Sadakane and Koizumi, 1995: 9)

An NP can occur in the pre-copula position in (90a) because it needs case; on the other hand, an adjective cannot occur in the pre-copula position in (90b) because adjectives cannot bear case. (90c) shows that postpositions can also occur in a case position in Japanese. With this in mind, let us observe (91).

- (91) a. * [Kinoo piza-o tabe-ta]-no-wa [NP Mary-ga]-da.

Yesterday pizza-ACC eat-PST-C-TOP Mary-NOM-COP

‘It’s Mary that ate pizza yesterday.’

- b. [Kinoo piza-o tabe-ta]-no-wa [NP Mary]-da.

Yesterday pizza-ACC eat-PST-C-TOP Mary-COP

‘It’s Mary that ate pizza yesterday.’

- c. [John-ga tegami-o morat-ta]-no-wa [PP Mary kara]-da.

John-NOM letter-ACC receive-PST-C-TOP Mary-from-COP

‘It’s from Mary that John received a letter.’ (ibid.)

According to Sadakane and Koizumi (1995), (91a) is ill-formed because the NP carries the

case marker *ga* and is also case-marked by the copula, which leads to duplication of case. The duplication of case is circumvented if the NP does not carry the case marker *ga* as shown in (91b). Likewise, a PP can occur in the focus position of the cleft sentence as shown in (91c) because duplication of case does not take place with *kara* ‘from’ being a postposition.

Turning to particles on Type A and Type C TCs, it is expected by this diagnostic that if a particle is a case marker it cannot appear in the focus position of a cleft sentence due to the duplication of case, whereas if it is a postposition it can do so. In this light, let us observe (92).

- (92) a. [Keikan-ga doroboo_i-o tukamae-ta]-no-wa [*ec*_i nige-ru
Policeman-NOM thief-ACC catch-PST-C-TOP run.away-PRS
tokoro]-o-da.
tokoro-ACC-COP
‘It was when the thief_i tried to run away that the policeman caught him_i.’

(Type A)

- b.??[John-ga Mary_i-o kansatusi-ta/soozoosi-ta]-no-wa [*ec*_i tabe-ru
John-NOM Mary-ACC observe-PST/imagine-PST-C-TOP eat-PRS
tokoro]-o-da.
tokoro-ACC-COP
‘It was the scene in which Mary was eating that John observed/imagined.’

(Type C)

(92a) is acceptable with the particle *o* while (92b) is slightly awkward, if not ungrammatical, compared to (92a). It follows therefore that the accusative particle on Type A TCs is a postposition whereas that on Type C TCs is a structural case marker.

The third diagnostic is clefting without a particle, which is a reverse of the second diagnostic we just saw. Hoji (1987) notes that the focus position in cleft sentences is not syntactically related to any particular position in the cleft clause, and that the relation between them is an ‘aboutness relation’ established on the grounds of semantico-pragmatic factors. For this reason, Sadakane and Koizumi (1995) argue that postpositions are difficult to omit in the focus position in cleft sentences, because the semantic content of postpositions plays a crucial role in establishing an aboutness relation. On the other hand, case markers can easily be omitted in that position because case markers are not so relevant to an observed aboutness relation. In this connection, let us observe (93).

(93) a. [Kinoo piza-o tabe-ta]-no-wa [_{NP} Mary]-da.

Yesterday pizza-ACC eat-PST-C-TOP Mary-COP

‘It’s Mary that ate pizza yesterday.’

b.??[John-ga tegami-o morat-ta]-no-wa [_{PP} Mary]-da.

John-NOM letter-ACC receive-PST-C-TOP Mary-COP

‘It’s (from) Mary that John received a letter.’

(Sadakane and Koizumi, 1995: 10)

(93a) can be understood without problem even though the accusative particle *o* is omitted.

This indicates that the particle is a case marker. On the other hand, it is difficult to relate the cleft clause and the focus constituent in (93b) without the particle, which suggests that the particle omitted is a postposition.

Applying this diagnostic to particles on Type A and Type C TCs, we are able to detect whether a particle is a case marker or a postposition. In fact, Harada (1973) notes that it is awkward to omit the particle attached to Type A TCs in the focus position of cleft sentences as

shown in (94a). Observe that the omission of the particle on Type C TCs is better in (94b).

(94) a.??[Keikan-ga doroboo_i-o tukamae-ta]-no-wa [*ec*_i nige-ru

Policeman-NOM thief-ACC catch-PST-C-TOP run.away-PRS

tokoro]-da.

tokoro-COP

‘It was when the thief_i tried to run away that the policeman caught him_i.’ (Type A)

b.? [John-ga Mary_i-o kansatusi-ta/soozoosi-ta]-no-wa [*ec*_i tabe-ru

John-NOM Mary-ACC observe-PST/imagine-PST-C-TOP eat-PRS

tokoro]-da.

tokoro-COP

‘It was the scene in which Mary was eating that John observed/imagined.’ (Type C)

Accordingly, the above three diagnostics suggest that the accusative particle on Type A TCs is a postposition while that on Type C TCs is a case particle. This is in accordance with the argument so far that the former is a *vP*-adjunct and the latter is a direct object. Since a *vP*-adjunct is not in the *c*-commanding domain of the probe *v*, it is no wonder that it is not assigned structural case.

5.2 The dative particle *ni*

Turning now to the particle *ni* attached to Type B and Type D TCs, it appears that the omission diagnostic does not work very well. As shown in (95), the dative particle *ni* cannot be omitted, whether it is a case maker as in (95a) or a postposition as in (95b).

(95) a. John-ga Mary-{ni/*Ø} tegami-o watasite-ta-yo.

John-NOM Mary-{DAT/*Ø} letter-ACC hand-PST-PRT

‘John gave Mary a letter.’

b. John-no hanasi-wa kono hon-{ni/*Ø} motozui-tei-ru-yo.

John-GEN story-TOP this book-{on/*Ø} based-PROG-PRS-PRT

‘John’s story is based on this book.’

Therefore, we are only concerned with the diagnostics of clefting with or without a particle.

As for clefting with a particle, it is expected that a case marker cannot occur in the focus position of cleft sentences. In this respect, let us observe (96).

(96) a. [Keikan-ga doroboo_i-ni oitui-ta]-no-wa

Policeman-NOM thief-DAT catch.up.with-C-TOP

[*ec_i* nige-ru tokoro]-ni-da.

run.away-PRS tokoro-DAT-COP

‘It was when the thief_i tried to run away the policeman caught up with him_i.’

b. [John-ga Mary_i-ni kane-o kasi-ta]-no-wa

John-NOM Mary-DAT money-ACC lend-PST-C-TOP

[*ec_i* komatte i-ru tokoro]-ni-da.

troubled be-PRS tokoro-DAT-COP

‘It was when Mary_i was in trouble that John lent her_i money.’ (Type B)

c. [John-ga Mary_i-ni dekuwasi-ta/heikoosi-ta]-no-wa

John-NOM Mary-DAT come.across-PST/be.weary-PST-C-TOP

[*ec_i* nige-ru tokoro]-ni-da.

run.away-PRS tokoro-DAT-COP

‘It was when Mary_i tried to run away that John came across her_i/was weary
of her_i.’ (Type D)

(96) shows that the particles attached to both Type B and Type D TCs are acceptable in the focus position of cleft sentences, which suggest that they are postpositions. The same result can be obtained by clefting without a particle as shown in (97).

(97) a. ?*[Keikan-ga doroboo_i-ni oitui-ta]-no-wa

Policeman-NOM thief-DAT catch.up.with-C-TOP

[*ec*_i nige-ru tokoro]-da.

run.away-PRS tokoro-COP

‘It was when the thief_i tried to run away the policeman caught up with him_i.’

b. * [John-ga Mary_i-ni kane-o kasi-ta]-no-wa

John-NOM Mary-DAT money-ACC lend-PST-C-TOP

[*ec*_i komatte i-ru tokoro]-da.

troubled be-PRS tokoro-COP

‘It was when Mary_i was in trouble that John lent her_i money.’ (Type B)

c. ?*[John-ga Mary_i-ni dekuwasi-ta/heikoosi-ta]-no-wa

John-NOM Mary-DAT come.across-PST/be.weary-PST-C-TOP

[*ec*_i nige-ru tokoro]-da.

run.away-PRS tokoro-COP

‘It was when Mary_i tried to run away that John came across her_i/was weary of
her_i.’ (Type D)

Since it is a case marker that can be omitted in the focus position of cleft sentences, the fact that the particles on both Type B and Type D TCs cannot be omitted indicates that they are postpositions. As far as Type B TCs are concerned, this result is expected if they are *vP*-adjuncts. Since *vP*-adjuncts are not *c*-commanded by the probe *v*, they cannot be assigned structural case by it. What is intriguing is the result that the dative particle *ni* attached to Type D TCs is a postposition. We saw in section 3 that they are the object of the matrix verb. If this is on the right track, a likely possibility would be that Type D TCs are a postpositional object; that is, they are a sole internal argument of the matrix verb but the particle *ni* attached to it is a postposition.

6. Concluding remarks

By reconsidering the syntax of not only accusative but also dative TCs, this paper has argued that no obligatory control, let alone backward control, is involved in any type of subordinate TC. Type C and Type D TCs are exempt from control because they are objects on their own. Type A and Type B TCs are *vP*-adjuncts and there is a null constituent in the matrix clause, but I have shown that it is not controlled. It is often the case that the literature on Japanese TC constructions focuses on accusative TCs (Type A and Type C). In this regard, the present paper contributes to a better understanding of dative TCs by proposing that they do not involve obligatory control either.²⁷

²⁷ It is important to mention in passing that Fujii (2006) introduces *assist*-constructions such as follows as an example of backward control in Japanese.

(i) John-ga [Mary-ga siken-ni too-ru no]-o tasuke-ta/zyamasi-ta
 John-NOM Mary-NOM exam-DAT pass-PRS C-ACC assist-PST/disrupt-PST
 ‘John assisted Mary to pass the exam/John disrupted Mary from passing the exam.’

According to Fujii (2006), there is a null thematic object in the matrix clause that is controlled in a backward manner by the embedded subject *Mary* as in John [_{VP} *ec*_i [_{CP} Mary_i pass the exam] assisted]. Although it appears that Fujii assumes that both the null object and the *no*-clause are objects, I object to this analysis because the verb *tasuke-ru* ‘assist’ is a two-place predicate and hence cannot select both the null object and the *no*-clause.

(ii) a. John-ga Mary-o tasuke-ta/zyamasi-ta.
 John-NOM Mary-ACC assist-PST/disrupt-PST
 ‘John helped/disrupted Mary.’

b. * John-ga Mary-ni siken-o tasuke-ta/zyamasi-ta.

Since backward control is a peripheral phenomenon, one reasonable avenue to dealing with this would be to investigate an empirical backdrop for it to be exceptional, rather than trying to accommodate it to core phenomena under powerful theoretical machineries. What I have demonstrated in this paper is that under close scrutiny, a flagship instance of backward control is revealed to be irrelevant to the MTC because Japanese TC constructions actually have different nature than advocates of the MTC have assumed. More research is needed to investigate whether the same argument is applicable to purported backward control configurations in other languages.²⁸

Acknowledgements

To be added after reviewing.

References

Alboiu, G. 2007. Moving forward with Romanian backward control and raising. In: Davies,

John-NOM Mary-DAT exam-ACC assist-PST/disrupt-PST
Diagnostics such as selection restriction, Condition B and passivisation suggest that the *no*-clause is an object on its own. As shown in (iiia), it is difficult for the verbs to select an abstract concept such as *GB riron* ‘GB theory’, but it is acceptable if *GB riron* is an embedded subject as in (iiib).

- (iii) a.?? John-ga GB-riron-o tasuke-ta/zyamasi-ta.
John-NOM GB-theory-ACC assist-PST/disrupt-PST
‘John assisted/disrupted GB theory.’
b. John-ga [GB-riron-ga saikoosu-ru no]-o tasuke-ta/zyamasi-ta.
John-NOM GB-theory-NOM revive-PRS C-ACC assist-PST/disrupt-PST
‘John assisted GB theory to revive/John disrupted GB theory from reviving.’

A Condition B violation is obviated in *assist*-constructions.

- (iv) a. John-ga [kare-ga syoosinsu-ru no]-o ura-de tasuke-ta.
John-NOM he-NOM promote-PRS C-ACC behind assist-PST
‘John assisted himself to be promoted from behind-the-scenes.’
b. John-ga [kare-ga rakudaisu-ru no]-o ura-de zyamasi-ta.
John-NOM he-NOM fail.the.exam-PRS C-ACC behind disrupt-PST
‘John disrupted himself from failing the exam from behind-the-scenes.’

Lastly, the *no*-clause in *assist*-constructions can be passivised (from its active counterpart in (i)).

- (v) ? [Mary-ga siken-ni too-ru no]-ga John-niyotte tasuke-rare-ta/zyamas-are-ta.
Mary-NOM exam-DAT pass-PRS C-NOM John-by assist-PASS-PST/disrupt-PASS-PST
‘Lit. That Mary passed the exam was assisted by John./Mary was disrupted by John from passing the exam.’

All these considerations suggest that the *no*-clause in *assist*-constructions is a direct object on its own.

²⁸ In relation to this, it is worth mentioning Korean object control. Monahan (2003) argues that Korean object control involves backward object control in which the null matrix object is coreferential with the downstairs nominative complement subject. However, Cormack and Smith (2004) state that the null matrix object is *pro* and what seems to be a complement is actually a scrambled adjunct. Recently, Polinsky, Monahan and Kwon (2007) also suggest an analysis in harmony with Cormack and Smith (2004) (see also Kwon, Monahan and Polinsky, 2010).

- W. D., Dubinsky, S. (Eds.) *New Horizons in the Analysis of Control and Raising*.
Springer, Dordrecht.
- Alexiadou, A., Anagnostopoulou, E., Iordachioaia, G., Marchis, M., 2010. No objections to backward control. In: Hornstein, N., Polinsky, M., (Eds.) *Movement Theory of Control*. John Benjamins, Amsterdam, pp. 89-118.
- Aoshima, S., 2001. *Mono-clausality in Japanese obligatory control constructions*. Ms, University of Maryland, College Park.
- Aoyagi, H., 1994. On association with focus and scope of focus particles in Japanese. MIT Working Papers in Linguistics 24: *Formal Approaches to Japanese Linguistics*, 23-44.
- Aoyagi, H., 1998. *On the Nature of Particles in Japanese and Its Theoretical Implications*. Doctoral dissertation, University of Southern California, Los Angeles, CA.
- Bobaljik, J., 2002. A-chains at the PF-interface: Copies and ‘covert’ movement. *Natural Language and Linguistic Theory* 20, 197-267.
- Boeckx, C., Hornstein, N., 2003. Reply to “control is not movement”. *Linguistic Inquiry* 34, 269-280.
- Boeckx, C., Hornstein, N., 2004. Movement under control. *Linguistic Inquiry* 35, 431-452.
- Boeckx, C., Hornstein, N., 2006. The virtues of control as movement. *Syntax* 9, 118-130.
- Boeckx, C., Hornstein, N., Nunes, J., 2010. *Control as Movement*. Cambridge University Press, Cambridge.
- Bošković, Ž., 1997. *The Syntax of Nonfinite Complementation: An Economy Approach*. MIT Press, Cambridge, MA.
- Bošković, Ž., Takahashi, D., 1998. Scrambling and last resort. *Linguistic Inquiry* 29, 347-366.
- Bouchard, D. 1985. PRO, pronominal or anaphor. *Linguistic Inquiry* 16, 471-477.
- Bowers, J., 1981. *The Theory of Grammatical Relations*. Cornell University Press, Ithaca, NY. Ithaca, N.Y.

- Bowers, J., 2008. On reducing control to movement. *Syntax* 11, 125-143.
- Chomsky, N., 1981. *Lectures on Government and Binding*. Mouton de Gruyter, Berlin.
- Chomsky, N., 1993. A minimalist program for linguistic theory. In ; Hale, K., Keyser, S. J., (Eds.) *The View from Building 20*. MIT Press, Cambridge, MA, pp. 1-52.
- Chomsky, N., Lasnik, H., 1993. The theory of principles and parameters. In: Jacobs, J., von Stechow, A., Vennemann, T. (Eds.) *Syntax: An International Handbook of Contemporary Research*. Walter de Gruyter, Berlin, pp. 506-569. [Reprinted with minor revisions in Chomsky, N., 1995. *The Minimalist Program*. MIT Press, Cambridge, MA, pp. 13-127.
- Cormack, A., Smith, N., 2004. Backward control in Korean and Japanese. *University College London Working Papers in Linguistics* 16, 57-83.
- Farrell, P., 1995. Backward control in Brazilian Portuguese. In: Fuller, J.M., Han, H., Parkison, D. (Eds.) *ESCOL 11*, Cornell University Department of Modern Languages and Linguistics, Ithaca, NY, pp. 116-127.
- Fujii, T., 2004. Binding and scope in Japanese backward control. Paper presented at the workshop on control in cross-linguistic perspective, ZAS, Berlin.
- Fujii, T., 2006. *Some Theoretical Issues in Japanese Control*. Doctoral Dissertation, University of Maryland, College Park.
- Fukuda, S., 2008. Backward control. *Language and Linguistics Compass* 2, 168-195.
- Fukui, N., Takano, Y., 1998. Symmetry in syntax: Merge and demerge. *Journal of East Asian Linguistics* 7: 27-86.
- Haddad, Y., 2009. Copy control in Telugu. *Journal of Linguistics* 45, 69-109.
- Haddad, Y., 2011. *Control into Conjunct Participle Clauses: The Case of Assamese*. Mouton de Gruyter, Berlin.
- Hale, K. L., Kitagawa, C., 1976-77. A counter to Counter Equi. *Papers in Japanese*

- Linguistics 5, 41-61.
- Harada, S., 1973. Counter equi NP deletion. University of Tokyo Research Institute of Logopedics and Phoniatics Annual Bulletin 7, 113-147. [Reprinted in 2000. In: Fukui, N. (Ed.) Syntax and Meaning: S.I. Harada Collected Works in Linguistics, Taishukan, Tokyo, pp. 181-216.
- Higginbotham, J., 1992. Reference and control. In: Higginbotham, J., Larson, R. K., Iatridou, S., Lahiri, U. (Eds.) Control and Grammar. Kluwer Academic Publishers, Dordrecht, pp. 79-108.
- Hiraiwa, K., 2010. Spelling out the Double-*o* Constraint. Natural Language and Linguistic Theory 28, 723-770.
- Hoji, H., 1987. Two types of cleft in Japanese. Paper presented at USC, March 26.
- Hornstein, N., 1999. Movement and control. Linguistic Inquiry 30, 69-96.
- Hornstein, N., 2001. Move! A Minimalist Theory of Construal. Blackwell, Oxford.
- Hornstein, N., 2003. On control. In: Hendric, R. (Ed.) Minimalist Syntax. Blackwell, Oxford, pp. 6-81.
- Ishii, Y., 1989. Head-internal relative clauses in Japanese. ESCOL 89, 234-245.
- Ito, J., 1986. Head-movement at LF and PF: The syntax of head-internal relatives in Japanese. University of Massachusetts Occasional Papers in Linguistics 11, 109-138.
- Kato, T., 2004. Not so overt movement. Proceedings of the 23rd West Coast Conference on Formal Linguistics, 436-449.
- Kim, M., 2004. Event-Structure and the Internally-Headed Relative Clause Construction in Korean and Japanese. Doctoral Dissertation, University of Massachusetts, Amherst.
- Kishimoto, H., 2008. On the variability of negative scope in Japanese. Journal of Linguistics 44, 379-435.
- Koizumi, M., 1993. Modal phrase and adjuncts. In: Clancy, P. M. (Ed.) Japanese/Korean

- Linguistics 2. CSLI Publications, Stanford, pp. 409-428.
- Koster, J. 1984. On binding and control. *Linguistic Inquiry* 15, 417-459.
- Kubota, Y., Smith, E.A., 2007. The Japanese internally headed relative clause is *not* an E-type pronoun. *MIT Working Papers in Linguistics* 55, 149-160.
- Kuroda, S.-Y., 1965. *Generative Grammatical Studies in the Japanese Language*. PhD Dissertation, MIT.
- Kuroda, S.-Y., 1978. Case marking, canonical sentence patterns, and counter Equi in Japanese (a preliminary survey). In Hinds, J., Howard, I. (Eds.) *Problems in Japanese Syntax and Semantics*. Kaitakusha, Tokyo, pp. 30-51.
- Kuroda, S.-Y., 1999. Tokoro-setsu (tokoro-clauses). In: Kuroda, S.-Y., Nakamura, M. (Eds.) *Kotoba no Kaku to Shuen: Nihongo to Eigo no Aida [The Core and Periphery of Language: Comparisons between English and Japanese]*. Kuroshio, Tokyo, pp. 105-162.
- Kwon, N., Monahan, P. J., Polinsky, M., 2010. Object control in Korean: A backward control imposer. In: Hornstein, N., Polinsky, M. (Eds.) *Movement Theory of Control*. John Benjamins, Amsterdam, pp. 299-328.
- Landau, I., 2000. *Elements of Control: Structure and Meaning in Infinitival Constructions*. Kluwer Academic Publishers, Dordrecht.
- Martin, R., 1996. *A Minimalist Theory of PRO and Control*. Doctoral Dissertation, University of Connecticut, Storrs.
- Martin, R., 2001. Null case and the distribution of PRO. *Linguistic Inquiry* 32, 141-166.
- Mihara, K., 1994. *Nihongo no Toogo Kouzou [The Syntactic Structure of Japanese]*. Shohakusha, Tokyo.
- Mihara, K., 1998. *Seisei Bunpoo to Hikaku Toogoron [Generative Grammar and Comparative Syntax]*. Kuroshio, Tokyo.
- Monahan, P. J., 2003. Backward object control in Korean. *Proceedings of the 22nd*

- West Coast Conference on Formal Linguistics, 356-369.
- Nakajima, H., 1982. The V4 system and bounding category. *Linguistic Analysis* 9, 341-378.
- Nakayama, M. 1989. Empty copulas. In: Otsu, Y., (Ed.) *MITA Working Papers in Psycholinguistics* 1. Mita Linguistics Circle, Tokyo.
- Narita, H., 2007. Counter equi 'NP'-trace pronunciation. *MIT Working Papers in Linguistics* 55, 185-196.
- Nemoto, N. 1993. *Chains and Case Positions: A Study from Scrambling in Japanese*. Doctoral Dissertation, University of Connecticut, Storrs.
- Nunes, J. 2001. Sideward movement. *Linguistic Inquiry* 32: 303-344.
- Nunes, J. 2004. *Linearization of Chains and Sideward Movement*. MIT Press, Cambridge, Mass.
- Ochi, M., 2009. Overt object shift in Japanese. *Syntax* 12, 324-362.
- Ohso, M., 1976. *A Study of Zero Pronominalization in Japanese*. Doctoral Dissertation, Ohio State University.
- O'Neil, J., 1995. Out of control. *Proceedings of the North East Linguistics Society* 25, 361-371.
- Polinsky, M., Potsdam, E., 2002a. Backward control. *Linguistic Inquiry* 33, 245-282.
- Polinsky, M., Potsdam, E., 2002b. Backward control: Evidence from Malagasy. *MIT Working Papers in Linguistics* 44, 257-272.
- Polinsky, M., Potsdam, E., 2006. Expanding the scope of control and raising. *Syntax* 9, 171-192.
- Polinsky, M., Monahan, P.J, Kwon, N., 2007. Object control in Korean: How many constructions? *Language Research* 42, 1-33.
- Pollock, J.-Y., 1989. Verb movement, universal grammar, and the structure of IP. *Linguistic Inquiry* 20, 365-424.

- Potsdam, E., 2006. Backward object control in Malagasy: Against an empty category analysis. *Proceedings of the 25th West Coast Conference on Formal Linguistics*, 328-336.
- Potsdam, E., 2009. Malagasy backward object control. *Language* 85, 754-784.
- Rosenbaum, P., 1967. *The Grammar of English Predicate Complement Constructions*. MIT Press, Cambridge, MA.
- Sadakane, K., Koizumi, M., 1995. On the nature of the dative particle “*ni*” in Japanese. *Linguistics* 33, 5-33.
- Shimoyama, J., 1999. Internally headed relative clauses in Japanese and E-type anaphor. *Journal of East Asian Linguistics* 8, 147-182.
- Sudo, Y., 2008. An E-type analysis of *tokoro*-relatives. *MIT Working Papers in Linguistics* 56, 279-290.
- Takezawa, K., 1987. *A Configurational Approach to Case-marking in Japanese*. Doctoral Dissertation, University of Washington.
- Uchibori, A., 2000. *The Syntax of Subjunctive Complements: Evidence from Japanese*. Doctoral Dissertation, University of Connecticut, Storrs.
- Ura, H., 2000. *Checking Theory and Grammatical Functions in Universal Grammar*. Oxford University Press, Oxford.