

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

Keisuke Yoshimoto

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 or a dative particle, while semantically the subject of the *tokoro*-clause is construed as the thematic object of the matrix verb. It has been argued that this mismatch can be reconciled by assuming backward object control in which the unpronounced matrix object is coreferential with the downstairs *tokoro*-clause subject: NP *ec*_i [NP_i V *tokoro*]-ACC/DAT V. While acknowledging four different types of *tokoro*-clauses according to the particle and the matrix verb, it is argued that none of them involve obligatory control, let alone backward control. Specifically, two of them are complements on their own, and the other two are *v*P-adjuncts. Although there is a null matrix object in the latter case, it does not have a c-command relation with the *tokoro*-clause subject, and its referential relation is pronominal coreference rather than obligatory control.

Keywords: *tokoro*-clauses; backward object control; *v*P-adjuncts; pronominal coreference

1. Introduction

As a starting point for discussion, let us consider the nature of control. Control is a coreferential relation between two phrases in thematic positions: one overt and the other covert. The covert anaphor, called the controllee, is obligatorily coreferential with the overt antecedent, called the controller. Until recently, the main focus of interest has been placed on instances of **forward control** in which a controller in a matrix clause c-commands a controllee in a subordinate clause. For instance, in (1a), the matrix subject *John* is the controller (i.e. forward subject control), and

in (1b), the matrix indirect object *Mary* is the controller (i.e. forward object control).¹

- (1) a. John_i tried [*ec*_i to find a new housemate].
b. John persuaded Mary_i [*ec*_i to find a new housemate].

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

- (2) a. *ec*_i V [controller_i V (NP)]
b. NP V *ec*_i [controller_i V (NP)]

Although 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), Spanish (Alexandou et al., 2010) and Assamese (Haddad, 2011); 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).² It is important to note that the presence of backward control casts doubt on the existing

¹ The abbreviations used in this article are as follows: ACC = accusative, C = complementiser, CAUS = causative, CNP = conjunctive participle, COP = copula, DAT = dative, DUR = durative, *ec* = empty category, GEN = genitive, M = masculine, NOM = nominative, PASS = passive, PROG = progressive, PRS = present (non-past) tense, PRT = particle, PST = past tense, Q = question, RECIP = reciprocal, S = singular, *t* = trace, TOP = topic marker

² See also Polinsky and Potsdam (2006) and Fukuda (2008) for a survey of existing backward control analyses.

PRO-based analysis of obligatory control (Chomsky, 1981; Martin, 1996; Landau, 2000, 2004, among others). First of all, the PRO-based analysis has the 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 of nonfinite clauses.³ Thus it is unexpected for these analyses that the controllee is in the finite matrix clause, and what is more, in the object position that is inevitably governed.

On the other hand, 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 sole difference lying in the number of θ -roles a controller checks in the course of movement.⁴ Coupled with the copy theory of movement (Chomsky, 1995), therefore, backward control can be reduced to the matter of which copy of a given A-chain will be pronounced at PF. That is, although a controller moves out of the subordinate clause into the 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;

³ The PRO theorem states that PRO must be ungoverned. Null case analyses 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.

⁴ 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.

Potsdam, 2006, 2009; Boeckx, Hornstein and Nunes, 2010).

The purpose of this paper is to argue against control analyses of Japanese *tokoro*-clause (henceforth TC) constructions, which are pioneering instances of backward object control tracing their origin to a series of works in the 60s and 70s (e.g. Kuroda, 1965, 1978; Harada, 1973; Ohso, 1976; Hale and Kitagawa, 1976-77). TC constructions are exemplified by the sentences in (3).

- (3) a. John-ga ec_i [Bob_i-ga nige-ru *tokoro*]-o tukamae-ta.
 John-NOM Bob-NOM run.away-PRS tokoro-ACC catch-PST
 ‘John caught Bob_i as he_i tried to run away.’
- b. John-ga ec_i [Bob_i-ga baa-kara deteku-ru *tokoro*]-ni dekuwasi-ta.
 John-NOM Bob-NOM bar-from come.out-PRS tokoro-DAT come.across-PST
 ‘John came across Bob_i when he_i came out of the bar.’
- (4) a. John-ga Bob-o tukamae-ta.
 John-NOM Bob-ACC catch-PST
 ‘John caught Bob.’
- b. John-ga Bob-ni dekuwasi-ta.
 John-NOM Bob-DAT come.across-PST
 ‘John came across Bob.’

In (3), the clause headed by the noun *tokoro* – which literally means ‘place or scene’ – functions as giving background information about 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 the object of the matrix verb, i.e. Bob, is missing in the matrix

clause, but instead it appears as the subject of the TC. I shall henceforth refer to this argument within the TC, which is understood as the thematic object of the matrix verb as the **T-pivot**, following the terminology of Narita (2007). Furthermore, the particles attached to the TCs in (3) coincide with the case particles attached to the complements of the same verbs in (4); namely, the accusative particle *o* in (3a) and the dative particle *ni* in (3b). Therefore, it seems as if the TC itself is the complement of the matrix verb, in spite of its meaning as a circumstantial adverb. Accordingly, this anomalous behaviour of TC constructions leads us to wonder (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 lies 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 an unpronounced matrix object obligatorily coreferential with it. In other words, the T-pivot (the controller) controls the unpronounced matrix object (the controllee) in a backward manner.

In this paper, I aim to reconsider the nature of different types of TCs outlined in Kuroda (1999), and show that none of them involve obligatory control, let alone backward control. Specifically, I acknowledge four types of subordinate TCs, among which two are complements on their own, and the other two are *vP*-adjuncts. The first two types are exempt from control because there is no unpronounced matrix object coreferential with the T-pivot. Although 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 no-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 no-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) and Kim (2004) among many others.

latter two types of TC constructions contain a null matrix object, they do not involve obligatory control either. I will show that sideward movement (Nunes, 2001, 2004) cannot fully account for them because there is no c-command relation between the null matrix object and the T-pivot, and that the movement chain cannot be linearised. It is also argued that the null matrix object is *pro*, hence the referential relation between the unpronounced matrix object and the T-pivot is not obligatory control.

The organisation 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 four types, and that two of them are complements on their own and the other two are vP-adjuncts. In section 4, it is argued that sideward movement cannot fully account for the latter two types of TC construction, and that the unpronounced matrix object is *pro*. Section 5 discusses the nature of the particles attached to TCs. Section 6 is a conclusion.

2. Counter Equi NP deletion

This section outlines the previous analyses which analyse TC constructions in terms of Counter Equi NP deletion, and in terms of the MTC. In 2.1, I provide evidence for an unpronounced matrix object in the TC construction, and then explain the Double *o* Constraint in 2.2. The subsection 2.3 outlines accounts based on movement.

2.1. The unpronounced matrix object

The first piece of evidence for an unpronounced matrix object in TC constructions comes from selection restrictions on the TC subject (Harada, 1973). In a simple sentence, it is not feasible

for the subject *keikan* ‘policeman’ to select *ame* ‘rain’ as its object (except in a figurative meaning).

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

Policeman-NOM rain-ACC catch-PST

‘The policeman caught rain.’

(Harada, 1973: (31))

The same selection restriction can be observed if *ame* ‘rain’ is the subject of the TC as in (6).

(6) * *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.’

(Harada, 1973: (30))

According to Harada (1973), this suggests that there is a null matrix object coreferential with the TC subject in (6) on which the matrix verb imposes the selection restriction, because otherwise it is not possible for the matrix verb to impose selection restrictions on the embedded subject across a clause boundary.

The second piece of evidence comes from Condition B of Binding Theory (Fujii, 2004). Condition B prohibits a pronoun from being bound by an antecedent in the designated binding domain (Chomsky, 1981).⁶ For instance, in (7), the pronoun *kare* ‘he’ cannot refer to the clause-mate antecedent *John* due to Condition B.

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

⁶ Condition B (Chomsky, 1981: 188)

A pronominal is free in its governing category.

Governing category (Chomsky, *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.

John-NOM he-ACC console-PST

‘*John_i consoled him_i.’

(Fujii, 2004: (24))

Fujii (2004) observes that the same restriction holds if the pronoun *kare* ‘he’ is the TC subject as in (8a).

(8) 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.’

(Fujii, 2004: (25))

b. John_i-ga [kare_i-ga syoosinsu-ru koto]-o negat-ta.

John-NOM he-NOM promote-PRS C-ACC with-PST

‘John_i wished that he_i would be promoted.’

This state of affairs leads him to assume that it is the null matrix object coreferential with the TC subject *kare* ‘he’ that violates Condition B in (8a), because if the antecedent and the pronoun belong to different clauses as in (8b), this would not normally yield a Condition B violation.⁷

2.2. The Double *o* Constraint

We have seen so far that there is an unpronounced matrix object in TC constructions, but we are not sure yet what ensures its unrealisation. In the light of this, let us begin by looking at the difference between (9a) (= (3a)) and (9b).

(9) a. John-ga *ec*_i [Bob_i-ga nige-ru tokoro]-o tukamae-ta.

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 antecedents salient in the discourse.

John-NOM Bob-NOM run.away-PRS tokoro-ACC catch-PST

‘John caught Bob_i as he_i tried to run away.’

b. * John-ga Bob_i-o [*ec*_i nige-ru tokoro]-o tukamae-ta.

John-NOM Bob-ACC run.away-PRS tokoro-ACC catch-PST

(9a) is an example that involves backward control between *ec* and the T-pivot. In contrast, (9b) is a forward instantiation of control in which, contrary to (9a), 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 reasons. Harada (1973) ascribes the ill-formedness of (9b) to the fact that both the matrix object and the TC are assigned the accusative particle *o*. In Japanese, it is independently known that 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:

(10) *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: (55))

For instance, the DoC prohibits movement of the genitive NP in possessor raising (11) and light verb (12) constructions, because it would end up in a structure with two NPs marked with *o*.

(11) 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** [_i atama]-**o** tatai-ta.

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

‘Ken hit Naomi on the head.’

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

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

‘Ken studied Navajo.’

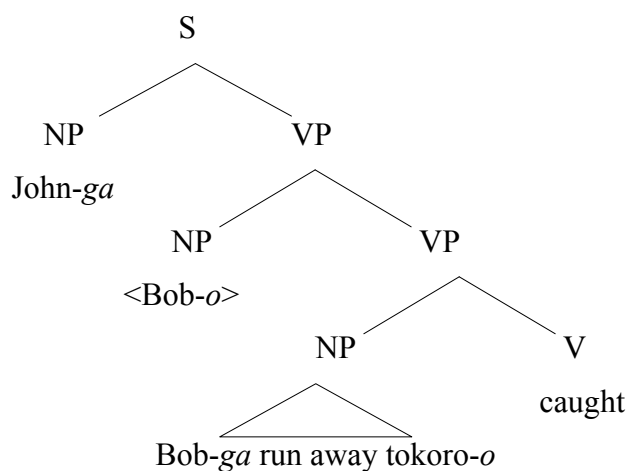
b.?? Ken-ga navajo-go-**o** [_i kenkyuu]-**o** si-ta.

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

(Hiraiwa, 2010: 730)

While dismissing the accusative particle **o** as a postposition, Harada (1973) supposes that the TC is an *adverbial complement* located below the unpronounced matrix object so that the T-pivot can be c-commanded by it. This should be so if a c-command relation between a controller and controllee is a prerequisite for obligatory control (Rosenbaum, 1967; Williams, 1980; Bouchard, 1984; Koster, 1984, among others). The relevant structure of (9a) is shown in (13) (the deleted constituent is surrounded by angled brackets).

(13)



In (13), the object NP and the TC are marked with **o**, both of which are dominated by the same

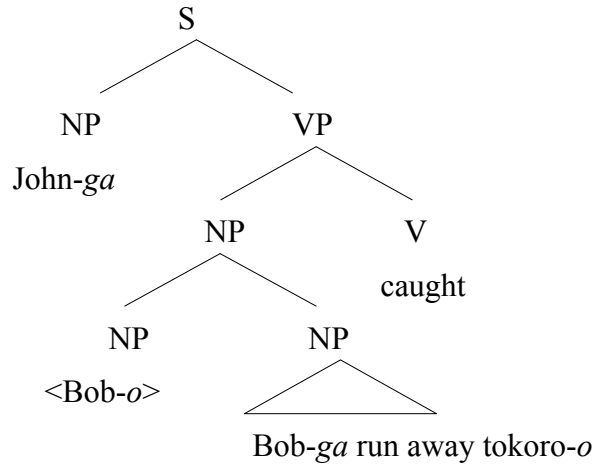
VP, which I take to contain two segments.⁸ Since this configuration would be ruled out by the DoC, it is required to delete either the matrix object or the T-pivot under identity with each other by the operation known as Equi NP deletion (Rosenbaum, 1967). If the T-pivot is deleted by Forward Equi NP deletion, 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 ill-formed sentence like (9b). On the other hand, Counter Equi NP deletion (i.e. backward 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 (9a). 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.⁹ By assuming so, he argues that it is possible to capture the fact that the alleged case particle is assigned to the TC by the matrix verb. In this connection, let us observe the relevant structure of (9a) in (14), in which the TC is adjoined to the right of the unpronounced matrix object in order to be case-marked by the verb.

⁸ 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 so that it can conform to binary branching, and to Harada's analysis that the TC is c-commanded by the matrix object.

⁹ 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 *tokoro*-clauses are like head-internal relative clauses (Fujii, 2004; Sudo, 2008; Hiraiwa, 2010). But both analyses have in common that TCs are located in a low position that is c-commanded by the unpronounced matrix object.

(14)



Notwithstanding technical differences, Kuroda's (1978) 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. Thus the resulting structure would not contravene the DoC. As predicted, in a passive sentence like (15b), which is derived from its active counterpart in (15a), it is possible to delete the T-pivot instead of the matrix object.¹⁰

- (15) a. John-ga ec_i [Bob_i-ga nige-ru tokoro]-o tukamae-ta.
John-NOM Bob-NOM run.away-PRS tokoro-ACC catch-PST
'John caught Bob_i as he_i tried to run away.'
- b. Bob_i-ga John-niyotte [ec_i nige-ru tokoro]-o tukamae-rare-ta.
Bob-NOM John-by run.away-PRS tokoro-ACC catch-PASS-PST
'Bob_i was caught by John as he_i tried to run away.'

Likewise, clefting takes a constituent within VP and places it in the pre-copula position. Since

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

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 (15a); in (16a) the matrix object is clefted, and in (16b) the TC is clefted.

(16) a. John-ga [_{VP} *t_i* [_{EC} *nige-ru* tokoro]-o tukamae]-ta-no-wa

John-NOM run.away-PRS tokoro-ACC catch-PST-C-TOP

Bob_i-o-da.

Bob-ACC-COP

‘It was Bob_i that John caught when he_i tried to run away.’

b. John-ga [_{VP} Bob_i-o *t_j* tukamae]-ta-no-wa

John-NOM Bob-ACC catch-PST-C-TOP

[_{EC} *nige-ru* tokoro]-o_j-da.

run.away-PRS tokoro-ACC-COP

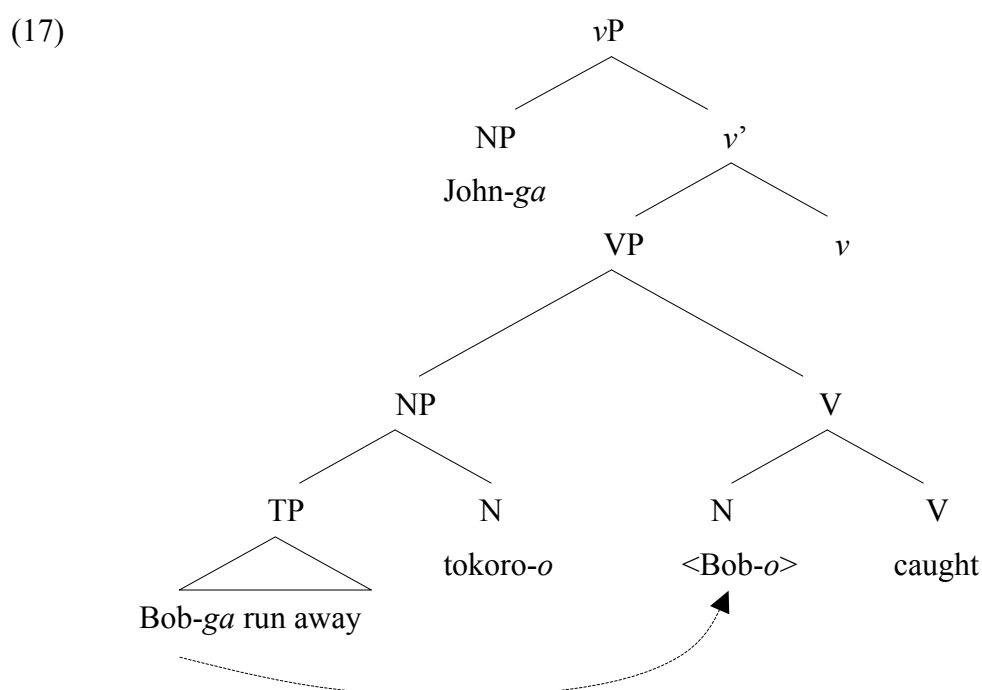
‘It was when Bob_i tried to run away that John caught him_i.’

2.3. Backward control by movement

In the preceding subsection, we saw that backward control in TC constructions 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 an advantage of accounting for backward control since the issue of counter-cyclicity boils down to an independent factor concerning phonetic realisation of nontrivial chains.

As an example of the analyses in terms of the MTC, let us first review Fujii (2004). Recall that the data from Condition B in 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 (9a) is roughly schematised in (17).¹¹



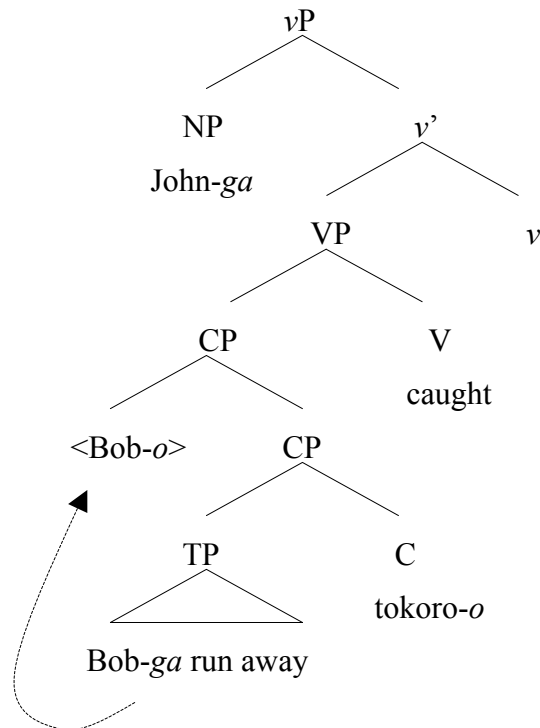
While sharing the core assumptions of the movement approach to TC constructions, Narita (2007) differs from Fujii (2004) in denying movement into θ -positions. One of the reasons for his assuming so is concerned with the position of the T-pivot within a TC. Although the T-pivot is the subject of a TC in most cases, Narita (2007) suggests that it can also be a direct object within the TC like *John* in (18a) or an indirect object like *Mai* in (18b) (based on Narita, 2007: (6) and (8)).

¹¹ The structure above vP is omitted for ease of exposition.

- (18) a. Sono omawari-ga *ec*_i [bookan-ga John_i-o naguritaositesimat-ta
 That cop-NOM thug-NOM John-ACC knock.down-PST
 tokoro]-ni ookyuusyoti-o si-ta.
 tokoro-DAT first.aid-ACC do-PST
 ‘That cop gave first aid to John_i when a thug knocked him_i down.’
- b. Isao-ga *ec*_i [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 (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_i.’

If feature movement of the T-pivot is involved, this would pose a problem, because both the direct object and indirect object must skip the TC subject before reaching the checking domain of 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 checking a θ -feature. Instead, he proposes that movement of the T-pivot is induced by checking an EPP feature on the head noun *tokoro* 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 relevant structure of (9a) in line with Narita (2007) is shown in (19).

(19)



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 more importance is his assumption 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 this approach is the idea that a chain head copy is rendered silent due to the following PF condition.

(20) *The Economy Principle of A-chain Pronunciation* (Narita, 2007: 194)

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

Given (20), 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).¹²

Summarising the discussion in this section, the previous literature implicitly assumes that the silent matrix object c-commands the T-pivot on the assumption that TC constructions involve backward object control. The matrix object is not overtly realised because if it were, the resulting structure would violate a language specific constraint, i.e. the DoC. Instead of the matrix object, the T-pivot is deleted by Counter Equi NP deletion (Harada, 1973; Kuroda, 1978). Alternatively the T-pivot (or its features) is moved to a position high enough to count as an argument of the matrix verb but phonologically unrealised (Fujii, 2004; Narita, 2007).

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

This section introduces various types of TCs and reconsiders their syntactic status. Although TCs marked by the accusative particle *o* (e.g. (3a)) have been most researched, it is true that there are also TCs marked by the dative particle *ni* (e.g. (3b)). According to Kuroda (1999), accusative TCs such as (3a) 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 accounted for if accusative TCs (other than the type that is the complement itself) are adverbs in line with Harada (1973), with the particle *o* marking default case. On the other hand, the distribution of dative TCs is rather limited because they can only occur with verbs that assign

¹² This in turn leads us to expect that an (in)direct object can be a controllee in other obligatory control configurations. However, contrary to this prediction, the controllee in canonical obligatory control constructions is always the 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 suggests that TC constructions may not involve obligatory control. See section 5 for further arguments that the silent matrix object in TC constructions is *pro*, not PRO.

dative case to its complement. According to Kuroda (1999), the distribution of dative TCs is so limited because they are adjoined to the matrix object in Deep Structure, in line with the NP-adjunction structure of (14) (Kuroda, 1978), whereby they can be assigned dative case by the matrix verb. Notwithstanding these differences, Kuroda (1999) assumes that all of them involve backward object control. That is, the T-pivot is rendered unpronounced by Counter Equi NP deletion because otherwise the resulting structure would lead to the violation of the DoC.¹³ Unlike Kuroda (1999), while acknowledging four types of subordinate TCs according to the matrix verb and the particle attached to them, I suggest that TCs are categorised into two kinds. One is the complement on its own, so there is no unpronounced matrix object coreferential with the T-pivot. The other is a *v*P-adjunct which is situated structurally higher than the null matrix object.¹⁴

¹³ One may wonder how the DoC can apply to the dative particle *ni*. Although Harada's (1973) original definition of the DoC is only concerned with the accusative particle *o*, Sells (1990) states that the DoC is actually a lexical constraint which prohibits a predicate from having two direct objects. In Japanese, some stative transitive verbs require a nominative-marked object as shown in (i) (Sells, 1990: 447).

(i) Taroo-ga teion-dake-{ga/*o} tuyoku kikoeru.
 Taroo-NOM low.sound-only-{NOM/*ACC} strongly can.hear-PRS
 'Taro can only hear low sounds strongly.'

When the sentence in (i) is embedded as the complement of a causative verb, the object *Taroo* has to be assigned dative rather than accusative case irrespective of the fact that there is no other NP marked with *o* in the sentence:

(ii) Naoko-ga Taroo-{ni/*o} teion-dake-ga tuyoku kikoe-sase-ta.
 Naoko-NOM Taroo-{DAT/*ACC} low.sound-only-NOM strongly can.hear-CAUS-PAST
 'Naoko made Taro only able to hear low sounds strongly.'

This suggests that the object *teion-dake* 'only low sounds', although assigned nominative case, serves as the direct object, and so another direct object is banned from occurring due to the DoC. Thus, the DoC applies to prevent the occurrences of two direct objects irrespective of the surface morphological case realization. Furthermore, as pointed out by an anonymous reviewer, Jeong (2007: 66-67) states that sequences of two *ni*-phrases are generally rejected by native speakers (cf. Gunji, 1999). Even if there is a constraint that prohibits two *ni*-marked objects, it does not pose a problem to the present analysis because the *ni*-marked TCs are either a complement on its own or an adjunct.

¹⁴ 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_i-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.'*

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

(iii) a. [[Kono koma]_i]-ga *t_j* kirei-na-no]-wa [*ec_i* mawat-tei-ru tokoro]_j-ga-da.
 This top-NOM beautiful-COP-C-TOP spin-PROG-PRS tokoro-NOM-COP

3.1. Four types of subordinate *tokoro*-clauses

The first type which I dub Type A is the one we have mainly looked at thus far. They cooccur with most transitive 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*. Illustrative examples are given in (21).

- (21) a. John-ga ec_i [Bob_i-ga nige-ru tokoro]-o tukamae-ta.
 John-NOM Bob-NOM run.away-PRS tokoro-ACC catch-PST
 ‘John caught Bob_i as he_i tried to run away.’
- b. John-ga ec_i [Bob_i-ga otikonde i-ru tokoro]-o nagusame-ta.
 John-NOM Bob-NOM down be-PRS tokoro-ACC console-PST
 ‘John consoled Bob_i when he_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* ‘be in time’ and *osoikakar-u* ‘attack’, and with three-place predicates such as *osie-ru* ‘teach, tell’, *watas-u* ‘hand’, *todoke-ru* ‘deliver’ etc.

-
- ‘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]_i-ga-da.
 Spin-PROG-PTS 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.’

Here, 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*] ‘the scene in which 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-TOP spin-PROG-PRS tokoro-NOM continue-PST
 ‘The scene in which the top was spinning continued.’

The verb *tuzuk-u* ‘continue’ cannot select *kono koma* ‘this top’ as its subject as in (va), therefore it is obvious that *kono koma* ‘this top’ is not the subject (T-pivot) even in (vb). Rather, the subject in (vb) is the situation depicted by the TC itself.

These verbs have in common that the *ni*-phrase they take is understood as a goal/recipient. The examples are shown in (22).

- (22) a. John-ga *ec_i* [densya_i-ga syuppatusu-ru tokoro]-ni maniat-ta.
 John-NOM train-NOM depart-PRS tokoro-DAT be.in.time-PST
 ‘John managed to catch the train_i when it_i was about to depart.’
- b. 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.’ (Type B)

Type C TCs are assigned the accusative particle *o*. They cooccur with subset of perception and observation verbs such as *kansatusu-ru* ‘watch, observe’, *kirokusu-ru* ‘record’, *hakkensu-ru* ‘discover’, *soozoosu-ru* ‘imagine’ and *yumemi-ru* ‘dream’ etc. These verbs can be characterised as selecting a situation as their complement.¹⁵ Illustrative examples are (23).

- (23) 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 yuusyoosu-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 encounter such as *dekuwas-u* ‘come across’, *dea-u* ‘meet’, *butukar-u* ‘bump into’, and a few idiomatic verbs that

¹⁵ Perception verbs such as *kikoe-ru* ‘hear’ and *kanzi-ru* ‘feel’ cannot cooccur with Type C TCs because they cannot select a situation as their complement.

take a *ni*-marked argument such as *hara-o tate-ru* ‘get angry’, *heikoosu-ru* ‘be annoyed’, and *hekiekisu-ru* ‘be fed up with’. Like Type C TCs, these verbs can select a situation as their complement. Examples are shown in (24).

- (24) a. John-ga [Bob_i-ga baa-kara deteku-ru tokoro]-ni dekuwasi-ta.
 John-NOM Bob-NOM bar-from come.out-PRS tokoro-DAT come.across-PST
 ‘John came across Bob_i when he_i came out of the bar.’
- 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.annoyed-PST
 ‘John was annoyed that Mary made a noise while eating.’ (Type D)

In the following, I will demonstrate that Type A and Type B TCs are adjuncts whereas Type C and Type D TCs are complements. 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 matrix object in the matrix clause coreferential with the T-pivot.

3.2. Selection restrictions

Recall that in subsection 2.1, we saw that selection restrictions reveal the presence of an unpronounced object in the matrix clause. The relevant example from Type A TCs are reproduced here below.

- (25) 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)

If the matrix verb cannot impose selection restrictions on the embedded subject, (25b) suggests that there is a null matrix object coreferential with the T-pivot, on which the matrix verb imposes the same selection restriction as in (25a).

Likewise, the following examples show that the same argument can be applied to Type B TCs. The verb *oituk-u* ‘catch up with’ and *osie-ru* ‘teach, tell’ cannot select an inanimate noun such as *tosyokan* ‘library’ as in (26), and the same selection restriction holds in Type B TC sentences in (27).

- (26) 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.’
- (27) 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)

It follows therefore that there is a null matrix object in Type B TC constructions coreferential with the T-pivot on which the matrix verb imposes selection restrictions.

In contrast, Type C TCs do not exhibit similar patterns of selection restrictions. Verbs such as *kansatusu-ru* ‘watch, observe’ and *soozoosu-ru* ‘imagine’ do not select an abstract concept such as *GB riron* ‘GB theory’ as in (28), but an abstract concept can appear as the subject of Type C TCs as in (29).

(28) 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 gakkai-de saikoosu-ru tokoro]-o

John-NOM GB-theory-NOM conference-at revive-PRS tokoro-ACC

kansatusi-ta/soozoosi-ta.

observe-PST/imagine-PST

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

Type D TCs do not exhibit selection restrictions either as shown below.

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

John-NOM library-DAT come.across-PST

‘John came across the library.’

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

John-NOM library-NOM burn-PROG-PRS tokoro-DAT come.across-PST

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

Thus it is plausible to think that there is no null matrix object in Type C and Type D TC sentences, and that the matrix verb cannot impose selection restrictions on the subject of these TCs.

3.3. Condition B

As we saw in 2.1, Condition B can also detect the presence of an unpronounced matrix object coreferential with the T-pivot. The example of Type A TCs proposed by Fujii (2004) is repeated below.

- (30) * 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 consoled him_i when he_i was down.’ (Type A)

(30) shows that there is a null object in the matrix clause coreferential with the pronoun *kare* ‘he’, and that it violates Condition B in the matrix clause.

Likewise, the following examples show that Type B TC sentences contravene Condition B, which points to the presence of an unpronounced matrix object in this type of TC sentences.

- (31) 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 kane-o kasi-ta.
 John-NOM he-NOM troubled be-PRS tokoro-DAT money-ACC lend-PST

‘John_i lent him_i money when he_i was in trouble.’ (Type B)

In contrast, Fujii (2004) shows that Type C TC sentences do not induce a Condition B violation. In this connection, let us observe (32).

- (32) 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 video.’ (Fujii, 2004)
- b. John_i-ga [kare_i-ga yuusyoo-su-ru tokoro]-o yumemi-ta.
 John-NOM he-NOM win-PRS tokoro-ACC dream-PST
 ‘John_i dreamt that he_i would win.’ (Type C)

Likewise, I propose that no Condition B violation is attested in Type D TC sentences either. This is shown in (33).

- (33) a. John_i-ga [kare_i-ga terebi-ni utut-tei-ru tokoro]-ni dekuwasi-ta.
 John-NOM he-NOM TV-on appear-PROG-PRS tokoro-DAT come.across-PST
 ‘John_i came across the scene on TV in which he_i appeared.’
- 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.annoyed-PST
 ‘John_i was annoyed by the scene on TV in which he_i appeared.’ (Type D)

Accordingly, it follows that in Type C and Type D TC sentences, there is no null matrix object coreferential with the pronoun T-pivot, and that is why they do not violate Condition B.

3.4. Passivisation

The diagnostics of selection restrictions and Condition B have shown that there is an unpronounced matrix object in Type A and Type B TC sentences whereas there is no such null matrix object in Type C and Type D TC sentences. However, we are not sure yet about the grammatical function of TCs, especially because Type A and Type B TCs can be adjuncts in Harada's (1973) sense or relative clauses adjoined to the matrix object in Kuroda's (1978, 1999) sense. In order to clarify this, we need to use the passivisation test. Let us begin by investigating what can be passivised. As shown below, an (in)direct object can be passivised, regardless of whether it is accusative or dative.

- (34) 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.'

- (35) 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 below.

- (36) 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.’

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

John-NOM win-PST 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 the verb.

This is illustrated in (38).

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

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

‘John consoled Mary_i when she_i was down.’

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

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

nagusame-rare-ta.

console-PASS-PST

Accordingly, the passivisation test can clarify whether or not a given TC is an adjunct.

As discussed in 2.2, a Type A TC sentence like that in (39a) has the passive counterpart in (39b) in which the null matrix object is passivised; yet the TC itself cannot be passivised as in (39c) (based on Harada, 1973).

(39) a. John-ga *ec_i* [Bob_i-ga nige-ru tokoro]-o tukamae-ta.

John-NOM Bob-NOM run.away-PRS tokoro-ACC catch-PST

‘John caught Bob_i as he_i tried to run away.’

b. Bob_i-ga John-niyotte [*ec_i* nige-ru tokoro]-o tukamae-rare-ta.

Bob-NOM John-by run.away-PST tokoro-ACC catch-PASS-PST

‘Bob_i was caught by John as he_i tried to run away.’

c. * [Bob_i-ga nige-ru tokoro]-ga John-niyotte *ec_i* tukamae-rare-ta.

Bob-NOM run.away-PRS tokoro-NOM John-by catch-PASS-PST (Type A)

Likewise, I suggest that the same can be applied to Type B TCs. As noted earlier, Type B TC sentences can be divided into cases in which the matrix verb is a two-place predicate and in which it is a three-place predicate. In either case, an active sentence has a passive counterpart which, coupled with the argument in the previous subsections, is naturally accounted for if the null matrix object is passivised. But the Type B TC itself cannot be passivised. In this light, let us observe (40) (with a two-place predicate) and (41) (with a three-place predicate).¹⁶

¹⁶ An anonymous reviewer points out that (40b) and (41b) are unacceptable. But my informants agree that they are far better, if not perfect, than (40c) and (41c), and moreover, their acceptability improves if we omit the by-phrase.

- (40) a. John-ga *ec_i* [Bob_i-ga nige-ru tokoro]-ni oitui-ta.
 John-NOM Bob-NOM run.away-PRS tokoro-DAT catch.up.with-PST
 ‘John caught up with Bob_i as he_i was running away.’
- b. ? Bob_i-ga (John-niyotte) [*ec_i* nige-ru tokoro]-ni oituk-are-ta.
 Bob-NOM John-by run.away-PRS tokoro-DAT catch.up.with-PST
 ‘Bob_i was caught up with by John as he_i was running away.’
- c. * [Bob_i-ga nige-ru tokoro]-ga John-niyotte *ec_i* oituk-are-ta.
 Bob-NOM run.away-PRS tokoro-NOM John-by catch.up.with-PASS-PST
- (41) 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
 Mary-NOM troubled be-PRS tokoro-NOM John-by money-ACC
 kas-are-ta.
 lend-PASS-PST (Type B)

This suggests that Type A and Type B TCs are neither objects nor relative clauses adjoined to the matrix object, but they are adjuncts.

In contrast, Kuroda (1999) shows that Type C TCs can be passivised as shown in (42).

- (42) 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. [Mary-ga tabe-ru tokoro]-ga John-niyotte kansatus-are-ta.
 Mary-NOM eat-PST tokoro-NOM John-by observe-PASS-PST
 ‘Mary was watched by John while eating.’ (Type C)

If there is no null matrix object and the TC itself serves as a complement, it is no surprise that Type C TCs can be passivised.

This state of affairs naturally lead us to expect that Type D TCs can be passivised as well since we have just seen through evidence from selection restrictions and Condition B that there is no unpronounced matrix object in this type of TC sentences. Contrary to this prediction, Type D TCs cannot be passivised:

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

The key to understanding this may lie in the fact that the matrix predicates in Type D TC sentences cannot be passivised in a simple sentence either:

(44) a. John-ga Bob-ni dekuwasi-ta/heikoosi-ta.

John-NOM Bob-DAT come.across-PST/be.annoyed-PST

‘John came across with Bob/John was annoyed with Bob.’

b.?*Bob-ga John-niyotte dekuwas-are-ta/heikoos-are-ta.

Bob-NOM John-by come.across-PASS-PST/be.annoyed-PASS-PST

It is therefore plausible to consider that (43b) is ruled out since sentences containing these verbs do not have passive counterparts in the first place.¹⁷

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 silent argument serves as the complement of the matrix verb. On the other hand, Type C and Type D TCs function as the complements themselves, and there is no unpronounced matrix object. Consequently, it is plausible to think that Type C and Type D TCs are not an instance of obligatory control because there is no unpronounced argument in the matrix clause coreferential with the T-pivot.

3.5. The attachment site of adjunct *tokoro*-clauses

Although we are aware that Type A and Type B TCs are adjuncts, a problem still remains as to their attachment site. Recall that the backward control analysis by Harada (1973) assumes that TCs are adjuncts, and that they are situated in the lower position as an *adverbial complement* so

¹⁷ Hale and Kitagawa (1976-77: 53) independently argue that Type D TCs are a complement to the matrix verb by citing the following example.

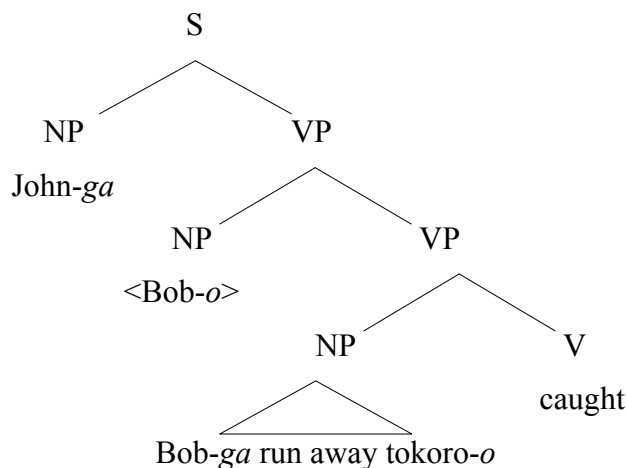
(i) John-wa [ookii otoko-ga roozin-o naguri, roozin-ga himei-o age, toorikakat-ta onna-ga
John-TOP big man-NOM old.man-ACC hit old.man-NOM scream-ACC raise passing.by-PST woman-NOM
tasuke-o yon-dei-ru tokoro]-ni dekuwasi-ta.
help-ACC call-PROG-PRS tokoro-DAT come.across-PST

‘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. Therefore, they assume that this TC is a dative argument of the verb *dekuwas-u* ‘come across’.

that the unpronounced matrix object can c-command the T-pivot. The relevant structure is repeated below.

(45)



Following the classification of adverbs by Nakajima (1982) and Koizumi (1993), adverbs can be categorized into three groups.¹⁸ The first one is VP-adjuncts located in the lowest position adjoined to the inner projection of the VP-shell, and the second one is ν P-adjuncts adjoined to the outer projection of the VP-shell.¹⁹ The third one is located higher in the structure outside the VP-shell, and adjoined to TP. If Harada's (1973) backward control analysis was right, it would be predicted that TCs are the lowest adjuncts, i.e. VP-adjuncts. This is because if the object is overtly shifted to Spec ν P in Japanese for independent reasons (Ochi, 2009), VP-adjuncts are the only type of adjuncts into which the matrix object can c-command. Against this prediction, I demonstrate that Type A and Type B TCs are ν P-adjuncts in line with Ohso (1976), Mihara (1994) and Fujii (2006).

3.5.1. Scope of negation

¹⁸ 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 his VP-adjuncts can be divided into ν P-adjuncts and VP-adjuncts.

¹⁹ 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.

The first piece of evidence comes from scope of negation. The sentences below illustrate that VP-adjuncts are clearly inside the scope of negation, and *v*P-adjuncts are ambiguous, and TP-adjuncts only have a reading in which they are outside the scope of negation ((46b) is based on Koizumi, 1993).

- (46) a. John-wa [Mary-o [kodomo-no yooni] ayasi-wa si]-nakat-ta.
 John-TOP Mary-ACC child-GEN like pacify-TOP do-NEG-PST
 ‘John didn’t pacify Mary as if she was a child.’ (VP-adjuncts)
- 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.’ (*v*P-adjuncts)
- c. John-wa [gakoo-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.’ (TP-adjuncts)

Like its English translation, (46a) only has an interpretation such that it was not like a child John pacified Mary. In contrast, (46b) can have two readings. The salient reading of (46b) is that John did not study while watching TV, in which case the adjunct is negated. The less salient reading of (46b) 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. (46c) only has an interpretation in which the adjunct is not negated, which means that it was because the school was over that John did not study. Here, what is relevant is the difference between *v*P-adjuncts and VP-adjuncts.

Applying this diagnostic to TCs, therefore, we are able to detect the attachment site of each TC. The test will show that Type A and Type B TCs are ambiguous as to whether they are

inside or outside the scope of negation whereas Type C and Type D TCs are clearly negated.²⁰

- (47) 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 on some other occasions, but he did not do so when she was crying.’ (in) (Type A)

- (48) a. John-wa [inu_i-ga hasi-ru tokoro]-ni *ec*_i oituki-wa si-nakat-ta.
John-TOP dog-NOM run-PRS tokoro-DAT catch.up.with-TOP do-NEG-PST

A: ‘When the dog was running, John didn’t catch up with it.’ (out)

B: ‘?John may have caught up with the dog on some other occasions (e.g. when it’s walking), but he did not do so when it was running.’ (in)

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

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

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

²⁰ 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*.

- (49) 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 on some other occasions, but he did not
 watch/imagine her sleeping.’ (in) (Type C)

- (50) John-wa [gekusei-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.annoyed-TOP do-NEG-PST
- A: ‘??When his students were drinking, John did not come across/was not annoyed with
 them.’ (out)
- B: ‘John may have come across/been annoyed with his students on some other occasions,
 but he did not/was not when they were drinking.’ (in) (Type D)

What is important here is the contrast between Type A and Type B TCs on the one hand and Type C and Type D TCs on the other. If it is ν P-adjuncts that are ambiguous as to the scope of negation, the above data suggest that Type A and Type B TCs are ν P-adjuncts. One may wonder, however, why Type C and Type D TCs behave like VP-adjuncts if they are complements. Nakajima (1982) maintains that the lower a clause is located, the clearer it takes scope under negation. If this is true, it is not unreasonable to think that although Type C and Type D TCs are complements, they can only take scope under negation because they are situated in a low position within the inner projection of the VP-shell.

3.5.2. The focus particle *sae* ‘even’

Another diagnostic Koizumi (1993) uses in testing the attachment site of adverbs is the scope of the focus particle *sae* ‘even’. Koizumi argues that when *sae* is attached to a verb, it can focus any constituent contained within *vP*. Yet, there are differences of focus interpretation depending on the attachment site of adjuncts. As illustrated below, VP-adjuncts are only interpreted under the scopal domain of *sae*, *vP*-adjuncts have both readings in which they are outside or inside the focus domain, and TP-adjuncts are clearly outside the focus domain.

- (51) a. John-wa [Mary-o kodomo-no yooni] ayasi]-sae si-ta.
 John-TOP Mary-ACC child-GEN like pacify-even do-PST
 ‘John even pacified Mary as if she was a child.’ (VP-adjuncts)
- 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.’ (vP-adjuncts)
- c. John_i-wa [sensei-ga kare_i-o okot-ta-node]
 John-TOP teacher-NOM he-ACC get.angry-because
 naki-sae si-ta.
 cry-even do-PST
 ‘John_i even cried because the teacher got angry with him_i.’ (TP-adjuncts)

The adjunct in (51a) only has an interpretation under the scope of *sae* such that John may have pacified Mary in some other ways, but it was least expected that he would pacify her like a child. On the other hand, (51b) is ambiguous. When the adjunct is focused, it means that among things

John did while studying, watching TV was the least expected; whereas if it is not focused, it means that among things that John did while watching TV, studying was the least expected. (51c) is not focused, and it only means that because the teacher got angry with him John even cried.

Like negation scope, this diagnostic also shows that Type A and Type B TCs are ambiguous whereas Type C and Type D TCs are only understood as focused. In this light, let us observe the following examples.

(52) John-wa [kodomo_i-ga hasirimawa-ru tokoro]-o *ec_i* home-sae si-ta.

John-TOP child-NOM run.about-PRS tokoro-ACC praise-even do-PST

A: ‘?Among all the things John could do to their children running about, to praise them was the least expected.’ (out)

B: ‘Among all the situations in which John could praise his children, to do so when they were running about was the least expected.’ (in) (Type A)

(53) a. Inu-wa [John_i-ga ne-tei-ru tokoro]-ni *ec_i* kaburituki-sae si-ta.

Dog-TOP John-NOM sleep-PROG-PRS tokoro-DAT bite-even do-PST

A: ‘?Among all the things the dog could do to John while he was asleep, to bite him was the least expected.’ (out)

B: ‘Among all the situations in which the dog could bite John, to do so while he was asleep was the least expected.’ (in)

b. John-wa [Mary_i-ga kikensi-ta tokoro]-ni *ec_i* hana-o watasi-sae

John-TOP Mary-NOM withdraw-PST tokoro-DAT flower-ACC hand-even
si-ta.

do-PST

A: ‘?Among all the things John could do to Mary when she withdrew midway through the race, to give her flowers was the least expected.’ (out)

B: ‘Among all the situations in which John could give Mary flowers, to do so when she withdrew midway through the race was the least expected.’ (in) (Type B)

(54) John-wa [Mary-ga ne-tei-ru tokoro]-o kansatusi-/soozoosi-sae si-ta.

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

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

B: ‘Among the situations in which John could watch/imagine Mary, to watch/imagine her sleeping was the least expected.’ (in) (Type C)

(55) 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.annoyed-even do-PST

A: ‘??Among all the things John could do to his students while they are drinking, to come across/be annoyed with them was the least expected.’ (out)

B: ‘Among all the situations in which John could come across/be annoyed with his students, it was the least expected for John to do so when they were drinking.’

(Type D)

Although judgments are subtle, there are contrasts between Type A and Type B TCs on the one hand and Type C and Type D TCs on the other. That Type A and Type B TCs are ambiguous as to the scope of *sae* suggests that they are vP-adjuncts. On the other hand, the fact that Type C

and Type D TCs are unambiguously focused points to their low position within VP. Accordingly, it has become clear that adjunct TCs are not located in as low a position as suggested by Harada (1973), and that they are actually *v*P-adjuncts that are not c-commanded by the unpronounced matrix object.

3.6. Summary

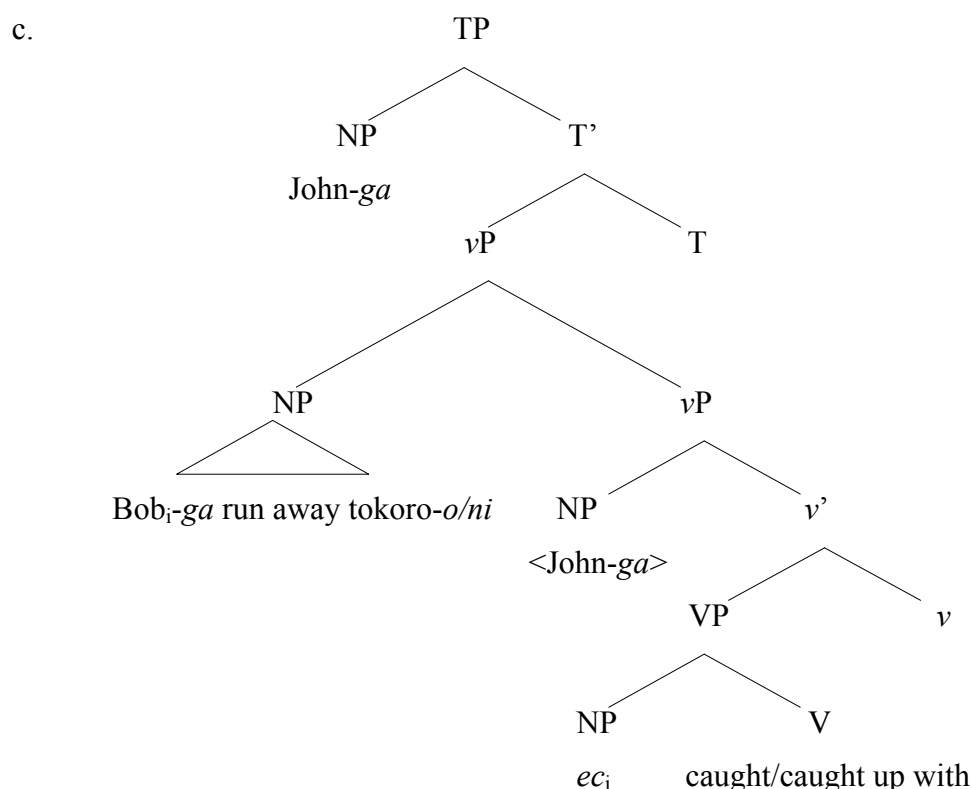
This section has shown that subordinate TCs are categorised into four types according to the matrix verb and the particle attached to them. The classification of these TCs is summarised in the table below.

(56)

	particle	matrix predicate	status
Type A	accusative <i>o</i>	<i>tumamae-ru</i> ‘catch’, <i>nagusame-ru</i> ‘console’, <i>tasuke-ru</i> ‘help’, <i>home-ru</i> ‘praise’, <i>sikar-u</i> ‘scold’ etc.	<i>v</i> P-adjunct
Type B	dative <i>ni</i>	<i>oituk-u</i> ‘catch up with’, <i>tadorituk-u</i> ‘reach’, <i>mania-u</i> ‘be in time’, <i>osoikakar-u</i> ‘atack’, <i>kas-u</i> ‘lend’, <i>osie-ru</i> ‘teach, tell’, <i>todoke-ru</i> ‘deliver’, <i>syookaisu-ru</i> ‘introduce’ etc.	<i>v</i> P-adjunct
Type C	accusative <i>o</i>	<i>kansatusu-ru</i> ‘watch, observe’, <i>kirokusu-ru</i> ‘record’, <i>soozoosu-ru</i> ‘imagine’, <i>yumemi-ru</i> ‘dream’ etc.	complement
Type D	dative <i>ni</i>	<i>dekuwas-u</i> ‘come across’, <i>dea-u</i> ‘encounter’, <i>butukar-u</i> ‘bump into’, <i>hara-o tate-ru</i> ‘get angry’, <i>heikoosu-ru</i> ‘be annoyed’, <i>hekiekisu-ru</i> ‘be fed up with’ etc.	complement

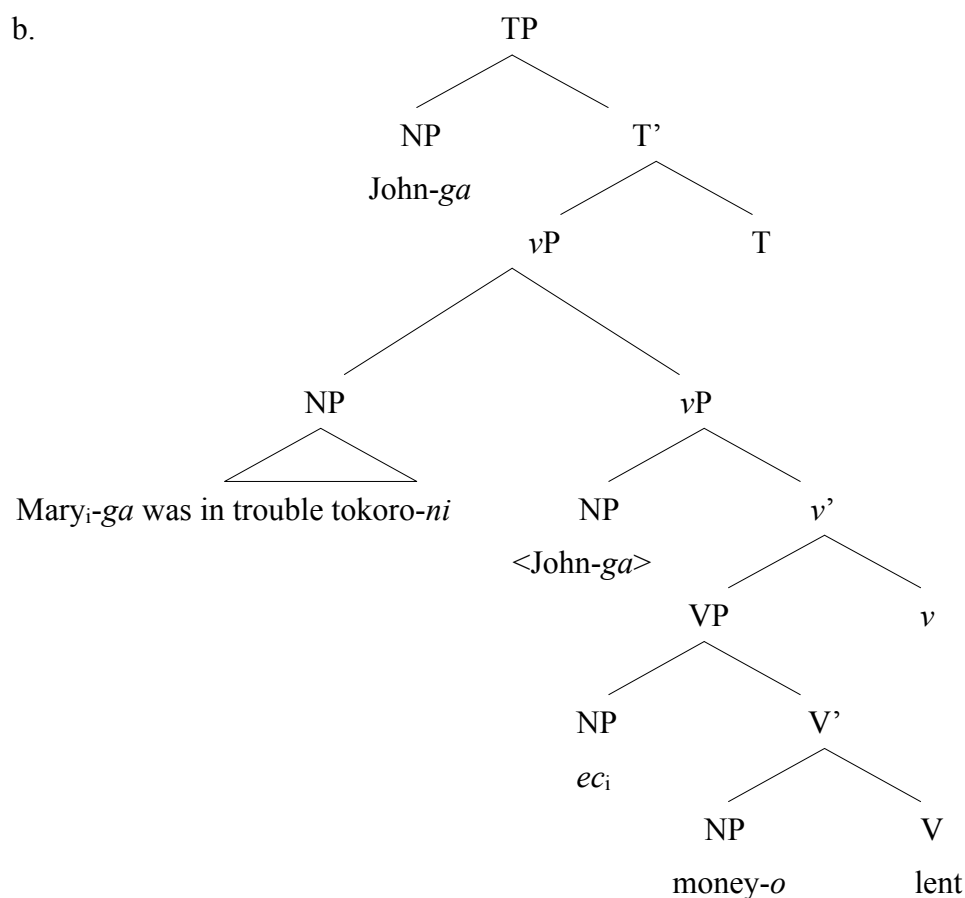
Among these four types of TCs, Type C and Type D are not considered to involve control because there is no silent matrix object coreferential with the T-pivot and the TC itself serves as the complement. Of crucial importance therefore is the structure of Type A and Type B TCs. Given that they are *vP*-adjuncts, the structure of the Type A TC sentence in (57a) and the Type B TC sentence in (57b) is schematised in (57c).

- (57) a. John-ga [Bob_i-ga nige-ru tokoro]-o *ec_i* tukamae-ta.
 John-NOM Bob-NOM run.away-PRS tokoro-ACC catch-PST
 ‘John caught Bob_i as he_i tried to run away.’ (Type A)
- b. John-ga [Bob_i-ga nige-ru tokoro]-ni *ec_i* oitui-ta.
 John-NOM Bob-NOM run.away-PRS tokoro-DAT catch.up.with-PST
 ‘John caught up with Bob_i as he_i was running away.’ (Type B)



Similarly, the Type B TC sentence with a three-place predicate in (58a) has the structure in (58b) in which the TC is adjoined to *vP*.

- (58) a. John-ga [Mary_i-ga komatte i-ru tokoro]-ni *ec*_i kane-o
 John-NOM Mary-NOM troubled be-PRS tokoro-DAT money-ACC
 kasi-ta.
 lend-PST
 ‘John lent Mary_i money when she_i was in trouble.’ (Type B)



What is apparent from looking at the structures in (57c) and (58b) is that the unpronounced matrix object *ec* does not c-command the T-pivot, given that TCs are *vP*-adjuncts located structurally higher than the *ec* object. Furthermore, contained within the TC, the T-pivot does not c-command the unpronounced matrix object *ec* either. Thus, the lack of the c-command relation between the unpronounced matrix object and the T-pivot constitutes a strong counterargument against the previous backward control analyses reviewed in section 2 that

assume a c-command relation between a controller and a controllee as a prerequisite for obligatory control. Nonetheless, the lack of the c-command relation may not be sufficient counterevidence because, as Fujii (2006) hints at, there remains a possibility of sideward movement (Nunes, 2001, 2004) that does not require the c-command relation for obligatory control. The next section will be devoted to arguing against sideward movement.

4. Against sideward movement

4.1. Linearisation

Based on the copy theory of movement (Chomsky, 1995), Nunes (2001, 2004) puts forth a theory according to which movement to a non c-commanding position is possible. More specifically, Nunes (2004) suggests that movement consists of the following four sub-operations ((59c) is adopted from Haddad, 2009: 88).

- (59) a. Copy
- b. Merge
- c. Form Chain: Two constituents X and Y form a chain iff
- (i) X and Y are non-distinct copies of the same token; that is, they are identical copies related through movement
 - (ii) X c-commands Y

d. Chain Reduction

Delete the minimal number of constituents of a nontrivial chain CH that suffices for CH to be mapped into a linear order in accordance with the LCA (Linear Correspondence Axiom).

The LCA is cited below.

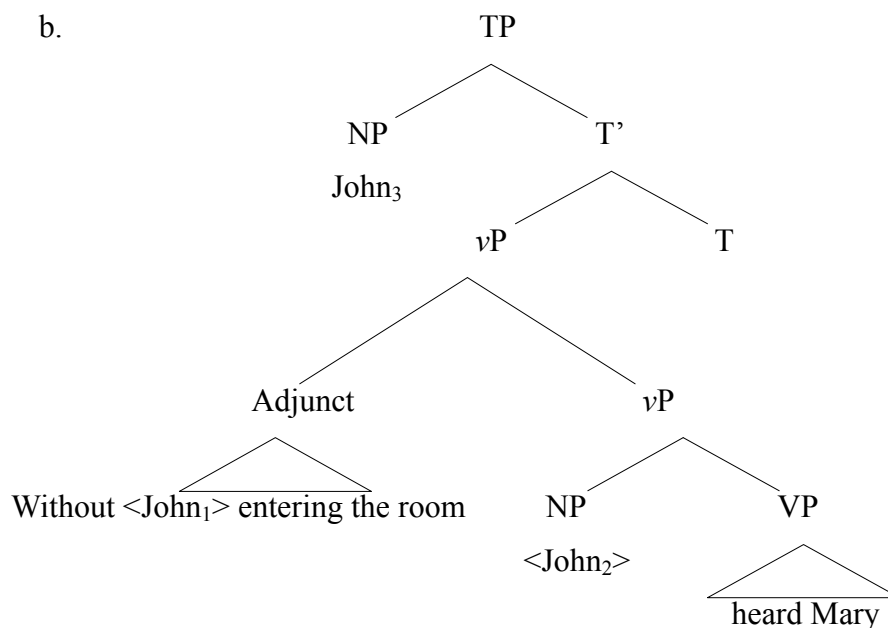
(60) *Linear Correspondence Axiom (LCA)*

Let X, Y be nonterminals and x, y be terminals such that X dominates x and Y dominates y .

Then if X asymmetrically c-commands Y , x precedes y . (Kayne, 1994: 33)

Now, let us see how sideward movement is integrated into the analysis of control. Hornstein (1999, 2001) suggests that a sentence such as that in (61a) involves obligatory control into adjunct, and that it has a structure like (61b).

(61) a. John_i heard Mary_j [_{Adjunct} without PRO_{i/*j} entering the room].



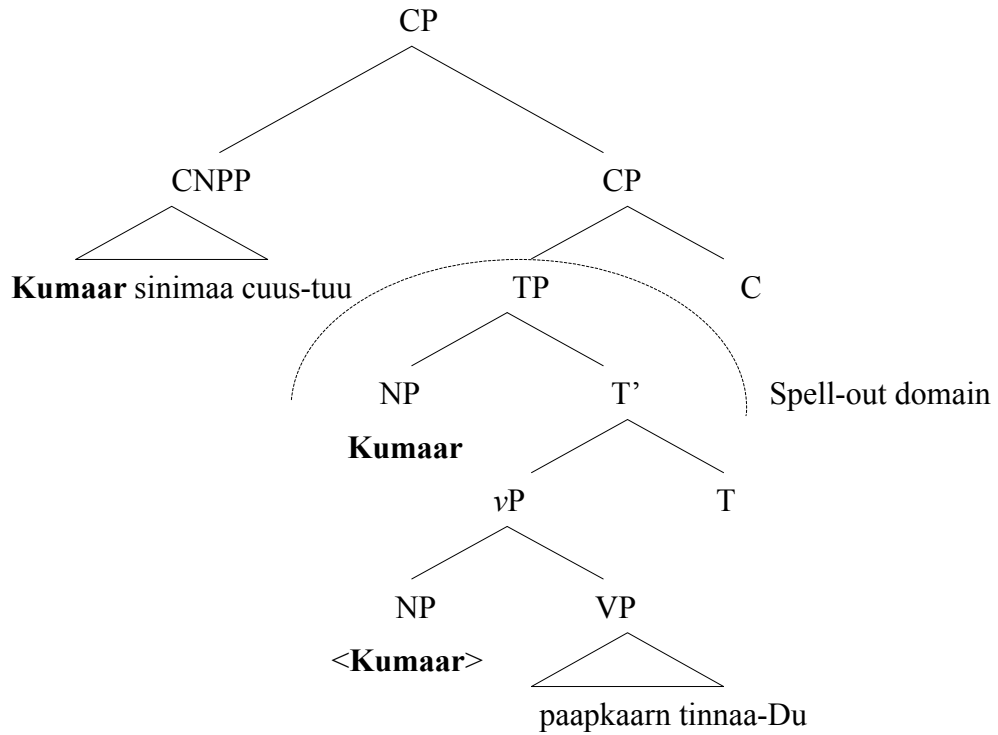
First, the operation Copy applies to the subject of the adjunct $\langle \text{John}_1 \rangle$ and merges it with VP as $\langle \text{John}_2 \rangle$. Although this movement targets a non c-commanding position, it does not pose any theoretical problem if movement simply consists of Copy and Merge. Subsequently, $\langle \text{John}_2 \rangle$ is moved to Spec TP to check an EPP feature on T. According to Form Chain, this configuration

contains two eventual nontrivial chains; that is, {John₃, John₂} and {John₃, John₁} because John₃ c-commands both <John₂> and <John₁>. At this point, Chain Reduction is required to delete one of the non-distinct copies of each nontrivial chain because the linear order among non-distinct copies is unclear, with *John* ending up preceding and following itself. For this reason, <John₁> and <John₂> are deleted at PF. Put this simply, although c-command is not necessary for obligatory control established by movement of non-distinct copies (i.e. Copy and Merge), it is required to linearise a given nontrivial chain in accordance with the LCA (i.e. Form Chain and Chain Reduction). Unlike obligatory control into adjuncts, Type A and Type B TCs do not involve a c-command relation between the unpronounced matrix object and the T-pivot at any point of its derivation, because it is not the subject but the object that is coreferential with the T-pivot. Thus, Form Chain cannot operate on two copies connected by movement, if any, and the derivation would crash at PF because it cannot decide the linear order of these copies by Chain Reduction.

Notwithstanding this problem, an anonymous reviewer points out that there are cases of copy control into conjunctive participle (CNP) clause in Telugu (Haddad, 2009) and Assamese (Haddad, 2011) which do not require a c-command relation between two non-distinct copies at any point of the derivation. The relevant example from Telugu is cited in (62a) whose structure looks like (62b).

- (62) a. [[**Kumaar** sinimaa cuus-tuu] **Kumaar**
 Kumar-NOM movie watch-DUR.CNP Kumar-NOM
 paapkaarn tinnaa-Du]
 popcorn ate-3.M.S
 ‘While watching a movie, Kumar ate popcorn.’

b.



(Haddad, 2009)

In this structure, the subject of the adjunct **Kumaar** is copied and merged with VP in Spec vP, and subsequently the copy in Spec vP is moved to Spec TP to check an EPP feature on T.

However, neither **Kumaar** in the adjunct nor **Kumaar** in Spec TP c-command one another because there is a restriction that a CNP clause is always a CP-adjunct in Telugu copy control.

Therefore, Form Chain cannot apply to these identical copies and Chain Reduction cannot delete one of the copies of a nontrivial chain in order to decide the linear order among the copies. To our surprise, however, the derivation in (62) does not crash at PF. Haddad (2009) ascribes this peculiarity to the fact that the two pronounced copies of **Kumaar** belong to different spell-out domains of phases (Chomsky, 2000, 2001). According to Chomsky, once the ongoing derivation reaches a phase (that is, a CP or a transitive vP), the domain/complement of a phase head is transferred to the phonological and semantic components. Haddad (2009) argues that linearisation takes place at the point where the domain of a phase head is transferred to PF, and that Form Chain and Chain Reduction do not operate across the boundary of spell-out domains.

In the structure of (62b), one of the identical copies of **Kumaar** is in the spell-out domain of CP, i.e. Spec TP, and the other is outside the spell-out domain. Thus, although they are non-distinct copies that are not connected by c-command in any way, and neither of them can be deleted by Form Chain and Chain Reduction in order to be linearised, copy control would not pose any problem at PF.

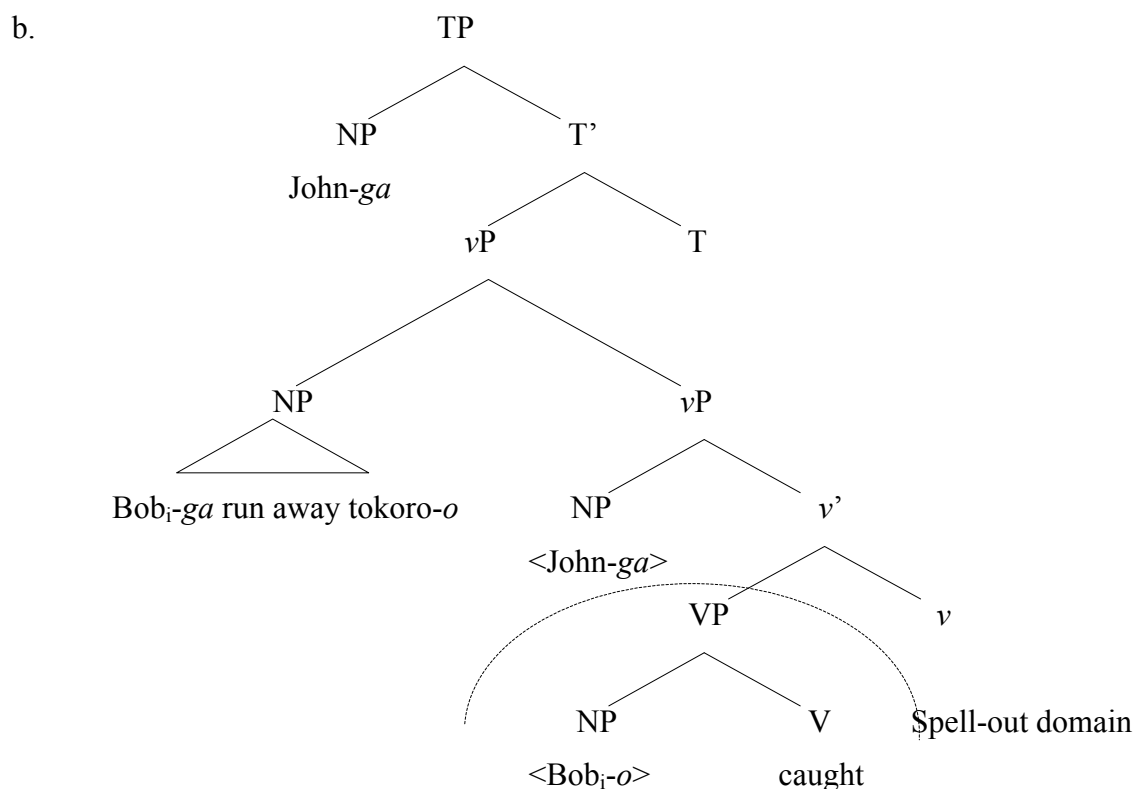
As an anonymous reviewer suggests, Type A and Type B TC constructions have in common with copy control in Telugu in that neither the T-pivot nor the unpronounced matrix object c-command one another, and they belong to different spell-out domains. In this light, let us consider the Type A TC sentence in (63).

(63) a. John-ga [Bob_i-ga nige-ru tokoro]-o *ec_i* tukamae-ta.

John-NOM Bob-NOM run.away-PRS tokoro-ACC catch-PST

‘John caught Bob_i as he_i tried to run away.’

(Type A)



Here, the spell-out domain of the vP-phase is VP. So, the silent matrix object and the T-pivot

belong to different spell-out domains. If this construction contains two non-distinct copies created through Copy and Merge, neither of them needs to be deleted by Form Chain and Chain Reduction, because linearisation is blind to identical copies in different spell-out domains. The difference from Telugu copy control is that while the lexicalisation of two copies merely leads to redundancy in Telugu, it leads to ill-formedness in Japanese TC constructions (except in the case of disambiguation as discussed in subsection 4.2.3). We cannot ascribe the unrealisation of the matrix object to Chain Reduction because the T-pivot and the matrix object are not connected through c-command in any way and so they cannot form a chain. Accordingly, we are led to doubt that sideward movement is tenable in Japanese TC constructions in the same way as in Telugu copy control.

4.2. Pronominal coreference

Stronger counterevidence against sideward movement comes from the observation that the unpronounced matrix object in Type A and Type B TC sentences is not actually controlled. Notwithstanding the proposal of the previous literature that the unpronounced matrix object in TC constructions does not have all the properties of *pro* (e.g. Ohso, 1976; Hale and Kitagawa, 1976-77; Fujii, 2006), I intend to show that it does not share properties of PRO, and it is therefore better analysed as a *pro* whose referent is determined by pronominal coreference.²¹ In

²¹ 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 HIRC's (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 HIRC's 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 [koo-ri-ga tokedasi-ta tokoro]-o tibi-tibi 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 [koo-ri-ga tokedasi-ta node] tibi-tibi non-da.
 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*

the following, evidence is provided for the *pro* properties of the silent matrix object in Type A and Type B TC sentences from (i) long distance control, (ii) a non c-commanding antecedent, (iii) disambiguation, and (iv) an extra-sentential antecedent.²²

4.2.1. Long distance control

Even though Japanese does not exhibit finiteness in terms of agreement morphology, Fujii (2006) maintains that obligatory control is observed in the Japanese equivalent of nonfinite complement clauses; that is, clauses which do not permit the past tense indicated by the suffix *ta* (or more precisely, they are untensed by virtue of not showing any alternation between non-past tense and past tense). And it is well known that the unavailability of long distance control can be a diagnostic to tell obligatory control PRO from *pro* (Koster, 1984; Bouchard, 1985; Higginbotham, 1992; Hornstein, 1999; Landau, 2000, among others). For instance, the complement clause to the verb *kessinsu-ru* ‘decide’ is untensed and its unpronounced subject cannot have a long distance antecedent as shown in (64a), whereas the complement clause to the verb *okor-u* ‘get angry’ is tensed and its null subject can have a long distance antecedent as shown in (64b).

(though I will not dwell on this issue any further because of space limitations). Here, following Kubota and Smith (2007), it suffices to assume that the matrix object is simply *pro*.

²² One may wonder whether split antecedents and a strict reading under ellipsis can be used as relevant diagnostics. An anonymous reviewer points out that split antecedents cannot be a useful test in Japanese because the exhortative mood marker *-yoo* can force split antecedents even in obligatory control configurations (see Fujii, 2006: Chapter 2). Although it is well known that the impossibility of a strict reading under ellipsis shows the property as obligatory control, this does not apply to Japanese when the null constituent at issue is the object of a sentence (cf. Fujii, 2006: Chapter 6). This is because, as shown in the sentence below which contains the temporal adverb and the null matrix object *pro*, the strict reading is unnatural under ellipsis even though the null matrix object is not PRO.

- (i) 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.’

- (64) 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 hihansia-u/-tta koto]-o
 They-TOP director-DAT *pro* each.other-ACC criticise-PRS/-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 would criticise/had criticised each other_i.’

Turning to Type A and Type B TCs, they are tensed as indicated by the past tense suffix *ta*, and the unpronounced object in these TC sentences can have a long distance antecedent as shown in (65) and (66) respectively. This suggests that the silent matrix object is not PRO but *pro*.

- (65) Yakuza-wa [terorisuto-ga [hitoziti_i-ga kega-o si-tei-nai koto]-o
 Yakuza-TOP terrorist-NOM hostage-NOM injury-ACC do-PROG-NEG 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)

- (66) a. John-wa [Mary-ga [Bob_i-ga ne-tei-ru koto]-o kakuninsi-ta

John-TOP Mary-NOM Bob-NOM sleep-PROG-PRS C-ACC make.sure-PST
tokoro]-ni *pro*_i osoikakat-ta.

tokoro-DAT *pro* attack-PST

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

- b. Isya-wa [kangofu-ga [Bob_i-ga masui-de ne-tei-ru koto]-o

Doctor-TOP nurse-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

‘The doctor put a surgical knife to Bob_i when the nurse made sure that he_i was asleep by anesthesia.’

4.2.2. Non c-commanding antecedent

Another diagnostic to distinguish between PRO and *pro* is necessity of c-command. A controlled PRO requires a c-commanding antecedent whereas *pro* does not need a c-commanding antecedent. That this is true in Japanese is illustrated below; in (67a), the complement to the verb *motome-ru* ‘require, ask’ is untensed and the unpronounced embedded subject cannot have *Mary* as its antecedent because it cannot c-command, whereas in (67b), the sentential subject is tensed and the null embedded subject can take *Mary* as its antecedent.

- (67) 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] motome-ta.

C require-PST

‘[Mary_i’s mother]_j asked 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 hyookasu-ru/hyookasi-ta
 Mary-GEN teacher-NOM *pro* that paper-ACC evaluate-PRS/-PST
 koto]-ga daizi-da to] it-ta.
 C-NOM important-COP C say-PST
 ‘[Mary_i’s teacher]_j said that it was important that they_{i/j/k} would evaluate/had
 evaluated that paper.’ (Aoshima, 2001)

As with a long distance antecedent, this diagnostic also suggests that the null matrix object in both Type A and Type B TC sentences is *pro* as it can take a non c-commanding antecedent.

- (68) John-wa [[Mary_i-no oya]_j-ga rusunisi-tei-ru tokoro]-o *pro*_{i/j}
 John-TOP Mary-GEN parent-NOM be.away-PROG-PRS tokoro-ACC *pro*
 tazune-ta.
 visit-PST
 ‘When [Mary_i’s parents]_j were away, John visited her_i/them_j.’ (Type A)

- (69) a. John-wa [[Mary_i-no inu]_j-ga yasun-dei-ru tokoro]-ni *pro*_{i/j}
 John-TOP Mary-GEN dog-NOM rest-PROG-PRS tokoro-DAT *pro*
 oitui-ta.
 catch.up.with-PST
 ‘When [Mary_i’s dog]_j was taking a break, John caught up with her_i/it_j.’
 b. John-wa [[Mary_i-no oya]_j-ga rusunisi-tei-ru tokoro]-ni *pro*_{i/j}
 John-TOP Mary-GEN parent-NOM be.away-PROG-PRS tokoro-DAT *pro*
 puresento-o todoke-ta.
 present-ACC deliver-PST
 ‘When [Mary_i’s parents]_j were away, John delivered a present to her_i/them_j.’

4.2.3. Disambiguation

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

- (70) 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_j 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. Keikan-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.’

- (72) 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
 **pro*/Mary_i-ni/Bill_j-ni/kanozyo_i-ni/kare_j-ni saki-ni oitui-ta.
pro/Mary-DAT/Bill-DAT/she-DAT/he-DAT first catch.up.with-PST
 ‘When Mary_i and Bill_j were running away separately, John caught up with
 Mary_i/Bill_j/her_i/him_j first.’
- b. Isya-wa [byoonin_i-ga John_j-o naguritaositesimat-ta tokoro]-ni
 Doctor-TOP patient-NOM John-ACC knock.down-PST tokoro-DAT
*pro*_{i/j}/kare_{i/j}-ni/byoonin_i-ni/John_j-ni ookyuusyoti-o si-ta.
pro/he-DAT/patient-DAT/John-DAT first.aid-ACC do-PST
 ‘When the patient_i knocked down John_j, the doctor gave first aid to him_{i/j}/the
 patient_i/John_j.’ (Type B)

In the sentences above, there are two potential referents for the unpronounced matrix object.

That is, *doroboo* ‘thief’ and *sono zyosei* ‘that woman’ in (71), *Mary* and *Bill* in (72a), and *byoonin* ‘patient’ and *John* in (72b). Thus we are not completely sure which antecedents the null matrix object refers to. In these cases, it is possible to lexicalise the unpronounced matrix object either as a pronoun or as an R-expression in order to disambiguate its referent, although the resulting structure may contravene the DoC. Since PRO cannot be lexicalised, these data strengthen my claim that the null matrix object in Type A and Type B TC sentences is not PRO but *pro*.

4.2.4. Extra-sentential antecedent

An anonymous reviewer points out that if the silent matrix object in TC sentences is *pro*, it

should be able to have an antecedent which is salient in the discourse but does not appear in the TC sentence. Although it is difficult for *pro* in TC sentences to have an extra-sentential antecedent in normal settings, if an appropriate context is given, it may well be possible. By way of illustration, let us imagine the situation in (73).

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

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

- (74) 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 *pro* catch-PST
‘The policeman broke into the bank and caught the bank robber when the hostage ran away (from the bank).’ (Type A)

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

As PRO cannot have an extra-sentential referent, this also suggests that the null matrix object in Type A and Type B TC sentences is not PRO but *pro* whose referent is determined on the basis of pronominal coreference.²⁴

It should be noted that the premise of the analysis based on the MTC and sideward movement is that an unpronounced constituent is exactly the same as its antecedent for it assumes that non-distinct copies are connected through Copy and Merge. To put it another way, the MTC and sideward movement are only valid if a null constituent in a given sentence has the same properties as obligatory control PRO. Thus, the aforementioned properties of the null matrix object in Type A and Type B TC sentences as *pro* constitutes strong counterevidence against the analysis of Japanese TCs in terms of sideward movement.

5. Particles

Lastly, this section aims to untangle some of the issues that revolve around the particles attached to TCs. As noted in section 1, the particle attached to each TC coincides with the case particle the matrix verb normally assigns to its complement, and therefore the particle makes it look as if the TC is a complement. And recall that this leads Kuroda (1978) to assume an NP-adjunction structure in order for the TC to be case-marked by the matrix verb. A potential problem for my analysis would be that it cannot account for why Type A and Type B TCs have the particle they have if they are *v*P-adjuncts. In the current syntactic framework, structural case assignment is implemented under an asymmetric c-command relation between a probe and a goal (Chomsky, 2000). The probe is a functional head bearing uninterpretable agreement features and it asymmetrically c-commands the goal noun phrase which has interpretable agreement features

²⁴ 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 pronoun *pro*, which would lead to a violation of Condition C of Binding Theory (Chomsky, 1981). See Cormack and Smith (2004) for a related issue regarding Korean object control.

and an uninterpretable case feature. The probe assigns a value to the uninterpretable case feature on the goal, and the goal in return values the uninterpretable agreement features on the probe. However, if Type A and Type B TCs are ν P-adjuncts, they cannot be c-commanded by the functional head ν (see the structures in (57c) and (58b)), and so cannot be case-marked by the matrix verb.²⁵

A possible solution may come from ambiguity of the particles. In Japanese, the accusative particle *o* and the dative particle *ni* are ambiguous between a structural case marker and a postposition (inherent case marker) (Sadakane and Koizumi, 1995; Inoue, 1998).²⁶ If a c-command relation between a probe and a goal is relevant to the assignment of structural case markers but irrelevant to the assignment of postpositions, it is predicted that the particles attached to adjunct TCs (i.e. Type A and Type B) may be postpositions, while the particles attached to complement TCs (i.e. Type C and Type D) may be structural case markers. Although this line of reasoning cannot fully account for why the particle attached to each TC coincides with the case particle the matrix verb assigns, it at least circumvents an obstacle when analysing Type A and Type B TCs as ν P-adjuncts. As will be discussed in the remainder of this section, this prediction is borne out as far as the accusative particle *o* is concerned, but it will become clear that the dative particle *ni* is generally a postposition.

5.1. The accusative particle *o*

As far 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

²⁵ More recently, Chomsky (2007, 2008) suggests that agreement features originate on the phase heads C and ν , and are handed over to the subsequent heads T and V. So, accusative case assignment is implemented under a symmetric c-command relation between V and the object. Even so, Type A and Type B TCs cannot be case-marked as they are not sisters to V.

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.

omitted in colloquial conversation, whereas postpositions cannot. That this is true for the accusative particle *o* is shown in (75).

- (75) 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/*∅ zitensya-o issyookenmei 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 (75), 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 ‘accusative of situation’ that serves to give 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*.

- (76) a. John-ga ec_i [Mary_i-ga otikonde i-ru tokoro]-{o/??∅}
 John-NOM Mary-NOM down be-PRS tokoro-{ACC/??∅}
 nagusame-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/∅} kansatusi-ta-yo.

John-NOM Mary-NOM eat-PRS tokoro- $\{\text{ACC}/\emptyset\}$ 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 natural than that attached to Type C TCs. Considering that the function of Type A TCs is to specify the situation in which the matrix event takes place as a circumstantial adverb, it is not implausible to assume that this *o* in (76a) is a postposition of ‘accusative of situation’ in line with (75c).

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, and that its subject should be one that can be assigned case. As illustrated below, an NP in (77a) can appear in the pre-copula position, and so does a PP in (77c); but an adjective in (77b) is not permitted in that position because it cannot be assigned case.

(77) a. Kore-wa [_{NP} pizza]-da.

This-TOP pizza-COP

‘This is pizza.’

b. * Kore-wa [_{AP} utukusii]-da. (cf. Kore-wa utukusii.)

This-TOP beautiful-COP

‘This is beautiful.’

c. Kore-wa [_{PP} nihon-kara]-da.

This-TOP Japan-from-COP

‘This is from Japan.’

(Sadakane and Koizumi, 1995: 9)

Bearing this in mind, let us observe the cleft sentences in (78).

- (78) 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.’ (Sadakane and Koizumi, 1995: 9)

According to Sadakane and Koizumi (1995), (78a) 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 avoided if the NP does not carry the case marker *ga* as in (78b). A PP can occur in the focus position as shown in (78c) 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 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. With this in mind, let us observe (79).

- (79) 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 watched/imagined.’ (Type B)

(79a) is acceptable with the particle *o* while (79b) is slightly awkward, if not ungrammatical. It follows therefore that the accusative particle *o* 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 the opposite case of the second diagnostic we just saw. Hoji (1978) notes that the focus position in cleft sentences is not syntactically related to any particular position in the cleft clause in Japanese, 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, because the semantic content of postpositions plays a crucial role in establishing an aboutness relation between a focused phrase and the cleft clause. On the other hand, case markers can easily be omitted in that position because they are not so relevant to the aboutness relation at issue. This is shown in the contrast in (80) below; in (80a) the nominative case marker *ga* is omitted (cf. (78a)) and in (80b) the postposition *kara* ‘from’ is omitted (cf. (78c)).

(80) 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)

Applying this diagnostic to TC constructions, it is predicted that if the accusative particle *o* is a postposition, it cannot be omitted, while if it is a case marker, it can be omitted. In this light, let us observe (81).²⁷

(81) a.?? [Keikan-ga doroboo-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

(Type C)

There is a slight contrast between (81a) and (81b) in that the omission of *o* attached to Type A TCs is worse than the omission of *o* attached to Type C TCs. Like the two earlier diagnostics, this diagnostic also suggests that the particle *o* on Type A TCs is a postposition while that attached to Type C TCs is a case-maker. This is in accordance with my claim that Type A TCs are *v*P adjuncts and Type C TCs are complements. Since Type A TCs are not within the *c*-command domain of the functional head *v*, the particle on them cannot be a case-maker, but

²⁷ In fact, Harada (1973) notes that it is awkward to omit the particle *o* attached to Type A TCs in cleft sentences.

rather it is a postposition. On the other hand, because Type C TCs are complements, it is natural to think that they can be case-marked by *v*.

5.2. The dative particle *ni*

Turning now to the dative particle *ni* on Type B and Type D TCs, it appears that the omission diagnostic does not work very well. As shown in (82), the dative particle *ni* cannot be omitted, regardless of whether it is a case marker as in (82a) or a postposition as in (82b).

- (82) a. John-ga Mary-{*ni*/* \emptyset } tegami-o watasite-ta-yo.
 John-NOM Mary-{DAT/* \emptyset } letter-ACC hand-PST-PRT
 ‘John gave Mary a letter.’
- b. John-no hanasi-wa kono hon-{*ni*/* \emptyset } motozui-tei-ru-yo.
 John-GEN talk-TOP this book-{DAT/* \emptyset } be.based-PROG-PRS-PRT
 ‘John’s talk is based on this book.’

Therefore, we are only concerned with the diagnostics of clefting with and 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 due to duplication of case. In this light, observe (83) and (84).

- (83) a. [Keikan-ga doroboo_i-ni oitui-ta]-no-wa [*ec*_i nige-ru
 Policeman-NOM thief-DAT catch.up.with-C-TOP run.away-PRS
 tokoro]-ni-da.
 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 [*ec*_i komatte i-ru
 John-NOM Mary-DAT money-ACC lend-PST-C-TOP troubled be-PRS
 tokoro]-ni-da.
 tokoro-DAT-COP

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

- (84) [Mary-ga John_i-ni dekuwasi-ta/heikoosi-ta]-no-wa [*ec*_i nige-ru
 Mary-NOM John-DAT come.across-PST/be.annoyed-PST-C-TOP run.away-PRS
 tokoro]-ni-da.
 tokoro-DAT-COP

‘It was when John_i tried to run away that Mary came across him_i/got annoyed with
 him_i.’ (Type D)

(83) and (84) show that the particle *ni* attached both to Type B and Type D TCs is acceptable, which suggests that they are postpositions. The same result can be obtained by clefting without a particle as shown in (85) and (86).

- (85) a. ?*[Keikan-ga doroboo_i-ni oitui-ta]-no-wa [*ec*_i nige-ru
 Policeman-NOM thief-DAT catch.up.with-PST-C-TOP run.away-PRS
 tokoro]-da.
 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 [*ec*_i komatte i-ru
 John-NOM Mary-DAT money-ACC lend-PST-C-TOP troubled be-PRS
 tokoro]-da.
 tokoro-COP

- ‘It was when Mary_i was in trouble that John lent her_i money.’ (Type B)
- (86)?* [Mary-ga John_i-ni dekuwasi-ta/heikoosi-ta]-no-wa [*ec*_i nige-ru
 Mary-NOM John-DAT come.across-PST/be.annoyed-PST-C-TOP run.away-PRS
 tokoro]-da.
 tokoro-COP
- ‘It was when John_i tried to run away that Mary came across him_i/got annoyed with him_i.’
 (Type D)

Since it is a case marker that can be omitted in the focus position of cleft sentences, the fact that the particle *ni* on both Type B and Type D TCs cannot be omitted suggests that they are not case makers but postpositions. As far as Type B TCs are concerned, this result is expected if they are *v*P-adjuncts. As *v*P-adjuncts cannot be c-commanded and case-marked by *v*, it would be plausible to assume that the dative particle *ni* on them is not a case maker but a postposition. In contrast, the result regarding Type D TCs is intriguing because if they are complements, they are supposed to be case-marked by *v*. A likely possibility is that Type D TCs are postpositional objects such as those roughly schematised in (87).

- (87) [_{VP} [_{VP} [_{PP} [_{NP} NP V tokoro] *ni*] V] *v*] (Type D)

As noted in section 3 and repeated here as (88), Type D TCs cannot be passivised despite their complement status. The impossibility of passivisation can be accounted for by assuming the structure in (87) for Type D TCs because postpositional objects cannot normally be passivised as shown in (89b).

- (88) * [Bob-ga nige-ru tokoro]-ga John-niyotte

Bob-NOM run.away-PRS tokoro-NOM John-by

dekuwas-are-ta/heikoos-are-ta.

come.across-PASS-PST/be.annoyed-PASS-PST

(Type D)

(89) a. John-no hanasi-wa kono hon-ni motozui-tei-ru.

John-GEN talk-TOP this book-DAT be.based-PROG-PRS

‘John’s talk is based on this book.’

b. * Kono hon-ga John-no hanasi-niyotte motozuk-are-tei-ru.

This book-NOM John-GEN talk-by be.based-PASS-PROG-PRS

6. Concluding remarks

By reconsidering the syntax of various types of TCs outlined in Kuroda (1999), 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 TC constructions do not involve control because they are complements on their own and there is no null constituent in the matrix clause coreferential with the T-pivot. I have shown that Type A and Type B TCs are *v*P-adjuncts, but the null matrix object is better characterised as a *pro* whose referent is determined in terms of pronominal coreference. Although a c-command relation is not a prerequisite for obligatory control under the MTC, sideward movement cannot apply to TC constructions since it requires that the null matrix object should be PRO.²⁸

²⁸ 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 Fujii seems to assume 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

Since backward control is a peripheral phenomenon, one reasonable avenue to dealing with it 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 in fact are different in structure and nature from what advocates of the MTC have assumed. More research is awaited to establish whether the same argument is applicable to purported backward control configurations in other languages.²⁹

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- ‘John helped/disrupted Mary.’
- b. *John-ga Mary-ni siken-o tasuke-ta/zyamasi-ta.
 John-NOM Mary-DAT exam-ACC assist-PST/disrupt-PST
- Diagnostics such as selection restrictions, Condition B and passivisation suggest that the *no*-clause is an object on its own. As shown in (iii), 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_i-ga [kare_i-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_i-ga [kare_i-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 toor-u 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 complement on its own.

²⁹ 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 embedded subject. However, Cormack and Smith (2004) state that the null matrix object is *pro* and that 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).

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