CONDITION (A) AND COMPLEX PREDICATES*

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1. Introduction

It is proposed that there are two types of anaphors in natural language. One type is called plain anaphors. They follow Condition (A) and must be clause-mates with their antecedents (see, for example, Chomsky 1986). The other type is called exempt anaphors (logophors). They are not subject to Condition (A) and take the NP that represents the 'point of view' of the sentence as the antecedent. The 'point of view' holder is the person from whose perspective the sentence is expressed (see Kuno 1978).

However, it was not clear how to distinguish the two types of anaphors independently of Condition (A). Given this, Charnavel and Sportiche (2013) propose a way to make the distinction. They examine the distribution of plain anaphors in French by using anaphors with inanimate antecedents. They point out that inanimate NPs cannot represent the 'point of view' of the sentence and hence anaphors bound by them must be plain anaphors.

If we apply Charnavel and Sportiche's (2013) test to the Japanese *otagai* 'each other' and *zibun-zisin* 'self', we should be able to find out whether they are ambiguous between plain and exempt anaphors. A relevant example is shown in (1).

(1) Sono kasetto rekoodaa$_i$-wa zibun-zisin$_i$-ga suter-are-ru oto-o
the cassette recorder-TOP itself-NOM throw-Passive-Pres. sound-ACC

hirot-ta.
pick up-Past

'The cassette recorder picked up the sound that itself was thrown away.'

In (1), an inanimate NP *sono kasetto rekoodaa* 'the cassette recorder' binds *zibun-zisin* 'self'. Therefore, *zibun-zisin* in this example must be a plain anaphor. Discussing examples of this kind in detail, I first show in this paper that *otagai* 'each other' and *zibun-zisin* 'self' are

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indeed ambiguous between plain and exempt anaphors.

Binding Conditions were proposed as principles on representations in government and binding theory. Pursuing the minimalist program, Chomsky (1993) suggests that Binding Conditions are interpretive principles that apply to LF. Quicoli (2008) develops this idea and proposes that Condition (A) applies to each phase. Charnavel and Sportiche (2013; 40) reformulate Condition (A) as follows, further extending Quicoli's (2008) proposal:

(2) **Proposal #1**
There is a domain because Condition A:
• applies at the interface.
• applies cyclically (upon Transfer).

Proposal #2: the binding domain for condition A is the spell out domain of a phase (i.e. what becomes incrementally visible to meaning computation).

Condition A
A plain anaphor must be interpreted within the spell out domain containing it.

In the second part of the paper, I examine Charnavel and Sportiche's (2013) Condition (A) against the distribution of plain anaphors in Japanese. I present some apparent counter-examples, and argue that their theory successfully accommodates them. In the first set of examples, a matrix element binds a plain anaphor in the subject position of a tensed embedded clause. In the second, a plain anaphor appears as an object in a small clause *v*P complement and is bound by an antecedent outside the small clause.

I review Charnavel and Sportiche's (2013) analysis of plain anaphors in French in section 2. Then, in section 3, I consider *otagai* and *zibun-zisin* with inanimate antecedents and confirm that Japanese plain anaphors should be bound locally. Based on the distributions of plain anaphors in French, Charnavel and Sportiche (2013) revise Condition (A) and make it phase-based. Their proposal gives an account for most instances of plain anaphors in Japanese; however, there are some apparent counter-examples. In sections 4 and 5, I discuss two kinds of examples: plain anaphors in the subject position of tensed embedded clauses and those in sentences with complex predicates. For the former, I adopt Saito's (2011) proposal on feature inheritance in Japanese and argue that they indeed follow Condition (A). For the latter, I first point out that they provide evidence for Takahashi's (2011) generalization that small clause *v*P complements are not phases. Then, I try to explain this with Merchant's (2013) proposal that VoiceP is independent from *v*P. If these analyses are on the right track, they provide support for Charnavel and Sportiche's (2013) Condition (A).

2. Plain Anaphors Following Condition (A)

First, I review Charnavel and Sportiche's (2013) discussion of plain anaphors in French.

Anaphors with inanimate antecedents satisfy the locality and c-command requirements. (3a) and (3b) show that *son propre* 'its own' and its antecedent *ce pont* 'this bridge' should be clause-mates.

(3) a. [Ce pont]$_i$ dispose de son$_i$ (propre) architecte.

'[This bridge]$_i$ has its$_i$ (own) architect.'

b. [Ce pont]$_i$ a l'air très fragile. Son$_i$ (*propre) architecte a re□u moins de moyens que les autres architects de la région.

'[This bridge]$_i$ looks very fragile. Its$_i$ (*own) architect got less means than the other architects of the area.'

c. [Cet enfant]$_i$ a l'air très perturbé. Sa$_i$ (propre) mère passé moins de temps à la maison que les autres mères de la classe.

'[This child]$_i$ looks very disturbed. His$_i$ (own) mother spends less time at home than the other mothers of the children in the class.'

(Charnevel and Sportiche 2013)

In (3a), *ce pont* 'this bridge' is inanimate and binds the anaphor *son propre* 'its own'. In (3c), *sa propre* 'his own' is allowed despite the fact that the antecedent *cet enfant* 'this child' is in the preceding sentence. In this case, *sa propre* can be an exempt anaphor because its antecedent is animate. In (3b), on the other hand, *son propre* is not allowed. In this case, *ce pont* 'this bridge' cannot represent the 'point of view' of the sentence. Therefore, *son propre* must be a plain anaphor.

The locality of anaphors with inanimate antecedents is rigid. Relevant examples are given in (4).

(4) a. [Cette auberge]$_i$ fait de l'ombre à son$_i$ (propre) jardin et au jardin de la maison voisine.

'[This inn]$_i$ gives shade to its$_i$ (own) garden and to the garden of the neighboring house.'

b. [Cette auberge]$_i$ bénéficie du fait que [$_{TP}$ son$_i$ (*propre) jardin est plus spacieux que celui das auberges voisines].

'[This inn]$_i$ benefits from the fact that [$_{TP}$ its$_i$ (*own) garden is more spacious than that of the neighboring inns].'

(Charnavel and Sportiche 2013)

In (4a), *son propre* 'its own' and its antecedent *cette auberge* 'this inn' are clause-mates. In (4b), *son propre* and its antecedent *cette auberge* are in the same sentence but are not clause-mates. Their contrast demonstrates that anaphors with inanimate antecedents should be bound locally.

Also, anaphors with inanimate antecedents must be c-commanded by their antecedents. In (5), for example, *sa propre* requires a c-commanding antecedent.

(5) a. [Ce problème]$_i$ inclut sa$_i$ (propre) solution et celle du problèm précédent.

'[This problem]$_i$ includes its$_i$ (own) solution and that of the precious problem.'

b. Les annexes de [ce problème]$_i$ incluent sa$_i$ (*propre) solution et celle du problème précédent.

'The appendices of [this problem]$_i$ include its$_i$ (*own) solution and that of the previous problem.'

(Charnavel and Sportiche 2013)

In (5a), *ce problème* 'this problem' is the subject and binds *sa propre* 'its own'. In (5b), on the other hand, *sa propre* is not allowed. This is because *ce problème* is part of the subject and does not c-command *sa propre*.

As shown above, Charnavel and Sportiche (2013) demonstrate convincingly that anaphors with inanimate antecedents are plain anaphors and should be bound locally. Given this, Japanese anaphors with inanimate antecedents must also be plain anaphors. We predict that Japanese anaphors are ambiguous between plain and exempt anaphors in the same way as French anaphors. In the following section, I confirm the ambiguity by using inanimate antecedents.

3. Otagai 'each other' and Zibun-zisin 'self' as Plain Anaphors

For Japanese anaphors, there are different views with respect to their status. For example, Nakamura (1996) and Yang (1983) assume that *otagai* 'each other' and *zibun-zisin* 'self' are plain anaphors and follow Condition (A). According to Aiwaka (1994), on the other hand, some of their instances are plain anaphors and others are exempt anaphors. They provide different analyses for anaphors within the embedded clause as in (6).

(6) a. Karera-wa [otagai-ga rikouda]-to omot-teiru.
they-TOP each other-NOM smart-COMP think-Pres.

'They think that they are smart.'

(Yang 1983)

b. John-wa [zibun-zisin-ga Mary-o seme-ta]-to it-ta.
John-TOP self-NOM Mary-ACC blame-Past-COMP say-Past.

'John said that he had blamed Mary.'

(Aikawa 1994)

Yang (1983), assuming the binding theory of Chomsky (1981), proposes that *otagai* 'each other' in (6a) is allowed as a plain anaphor because there should be no NIC effects in Japanese. In this example, *otagai* is the embedded subject. Its binding domain is extended to the whole sentence since Japanese lacks AGR. Aikawa (1994) proposes that anaphors without co-argument antecedents are exempt anaphors. In (6b), *zibun-zisin* is an exempt anaphor because it does not have a clause-mate antecedent. In this section, I employ Charnavel and Sportiche's (2013) test for plain anaphors with inanimate antecedents and provide evidence for Yang's (1983) conclusion that anaphors as in (6) are plain anaphors.

I mainly discuss *otagai* here. *Otagai* in (7a, b) has an animate antecedent.

(7) a. Hutari-no hito$_i$-ga heddoraito-de otagai$_i$-no nanbaapureeto-o terasi-ta.
two people-NOM headlight-with each other-GEN number plates-ACC light-Past

'Two people lighted each other's number plates with their headlights.'

b. Hutari-no hito$_i$-ga saachi raito-de [Taroo-ga otagai$_i$-no kuruma-o
two people-NOM searchlight-with Taroo-NOM each other$_i$-GEN car-ACC

nusumu tokoro]-o terasi-ta.
steal scene-ACC light-Past

'Two people lighted the scene that Taroo stole each other's cars with a searchlight.'

In (7b), *hutari-no hito* 'two people' is the subject of the main clause and *otagai-no kuruma* 'each other's car' is the object of the subordinate clause. If *otagai* is a plain anaphor, (7b) should be ungrammatical. However, *otagai* in (7b) is allowed because the antecedent *hutari-no hito* can represent the 'point of view' of the sentence. Therefore, *otagai* can be an exempt anaphor.

However, *otagai* with an inanimate antecedent as in (8a, b) should be bound locally.

(8) a. Hutatsu-no kuruma$_i$-ga heddoraito-de otagai$_i$-no nanbaapureeto-o
two cars-NOM headlight-with each other-GEN number plates-ACC

terasi-ta.
light-Past

'Two cars lighted each other's number plates with their headlights.'

b.*Hutatsu-no kuruma$_i$-ga heddoraito-de [Taroo-ga otagai$_i$-no bonnetto-o
two cars-NOM headlight-with Taroo-NOM each other-GEN hoods-ACC

akeru tokoro]-o terasi-ta.
open scene-ACC light-Past

'Two cars lighted the scene that Taroo opened each other's hoods with headlights.'

In (8a), *otagai* 'each other' is allowed because it is bound by its antecedent *hutatu-no kuruma* 'two cars' in the same clause. In the ungrammatical (8b), *otagai-no bonnetto* 'each other's hoods' is bound by its antecedent *hutatu-no kuruma* 'two cars' but not locally. *Otagai* in this example cannot be an exempt anaphor because *hutatu-no kuruma* does not represent the 'point of view' of the sentence. Then, *otagai* with an inanimate antecedent, it seems, is indeed a plain anaphor.

As discussed above, anaphors with inanimate antecedents follow Condition (A). Given this, let us examine more closely the locality imposed on *otagai* with an inanimate antecedent. (9) indicates that an anaphor in the embedded subject position, as in (6), is a plain anaphor.

(9) Hutatsu-no kuruma$_i$-ga heddoraito-de [otagai$_i$-ga tomaru tokoro]-o
two cars-NOM headlight-with each other-NOM stop scene-ACC

terasi-ta.
light-Past

'Two cars lighted the scene that each other stopped with their headlights.'

In this example, *hutatsu-no kuruma* 'two cars' is inanimate and *otagai* 'each other' is allowed. The grammaticality of the example shows that *otagai* as a plain anaphor can appear as the subject of an embedded tensed clause, as argued by Yang (1983).

(10) shows that *zibun-zisin* 'self' behaves in the same way as *otagai*.

(10) Sono kasetto rekoodaa$_i$-wa zibun-zisin$_i$ -ga suter-are-ru oto-o
the cassette recorder-TOP itself-NOM throw away-Passive-Pres. sound-ACC

hirot-ta.
pick up-Past

'The cassette recorder picked up the sound that itself was thrown away.'

Zibun-zisin 'self' in this example is bound in the embedded subject position by its inanimate antecedent *sono kasetto rekoodaa* 'the cassette recorder'. This raises doubts on Aikawa's (1994) claim that *zibun-zisin* in (6b) must be an exempt anaphor.

Japanese has plain and exempt anaphors as French does. As noted above, Charnavel and Sportiche (2013) revise Condition (A) and propose a phase-based cyclic application of Condition (A). Interestingly, the examples of Japanese plain anaphors as in (9, 10) seem to be problematic for their analysis. In section 4, I introduce Charnavel and Sportiche's (2013) Condition (A) and discuss examples of this kind in detail.

4. The Cyclic Application of Condition (A)

Charnavel and Sportiche (2013) propose a phase-based cyclic application of Condition (A). If we apply this to Japanese, plain anaphors in the embedded subject position as in (6) seem to be problematic. In this section, I first review Charnavel and Sportiche's (2013) Condition (A) and then deal with a crucial example in detail.

4.1 The Reformulation of Condition (A)

Charnavel and Sportiche (2013) reformulate Condition (A) as follows:

(11) Condition (A) applies at C-I interface in each phase and a plain anaphor is interpreted in the transfer domain containing it.

This extends Quicoli's (2008) phase-based application of Condition (A). While Quicoli (2008) hypothesizes that phases constitute binding domains, Charnavel and Sportiche (2013) propose that a plain anaphor should receive its interpretation from a NP in the same transfer domain. If a plain anaphor and its antecedent are not in the same transfer domain, the anaphor cannot be interpreted.

Confining binding domains to transfer units instead of phases, Charnavel and Sportiche (2013) assume that there is a functional phrase XP over *v*P and suggest that not *v*Ps but XPs are phases as in (12).

(12) a. $John_i$ likes $himself_i$.

b. $[_{XP}\ John_i \quad [_{vP}\ t_i\ [_{VP}$ likes $himself_i]\ ]\ ]$.
←phase edge→ ← transfer domain →

In (12a), if the *v*P is a phase and its complement VP is transferred, *himself* within the VP cannot take the NP *John* as its antecedent. However, if the XP is a phase and its complement *v*P is transferred as in (12b), *himself* and the copy of *John* in the *v*P are in the same transfer domain. This is how *himself* is interpreted in their phase-based Condition (A).

Let us go back to Japanese plain anaphors in the embedded subject position. French plain anaphors are disallowed in this position, as (13) shows.

(13) [Cette auberge]$_i$ bénéficie du fait que [$_{TP}$ son$_i$ (*propre) jardin est plus spacieux que celui das auberges voisines].

'[This inn]$_i$ benefits from the fact that [$_{TP}$ its$_i$ (*own) garden more spacious than that of the neighboring inns].'

(Charnavel and Sportiche 2013)

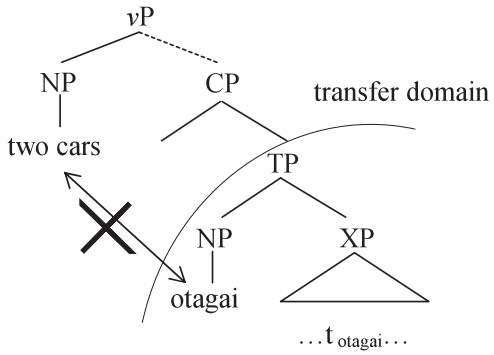
This contrasts with (9), repeated below in (14a).

(14) a. Hutatsu-no kuruma$_i$-ga heddoraito-de [otagai$_i$-ga tomaru tokoro]-o
two cars-NOM headlight-with each other-NOM stop scene-ACC

terasi-ta.
light-Past

'Two cars lighted the scene that each other stopped with their headlights.'

b.



If (14a) has the structure in (14b), it is predicted to be ungrammatical. When the embedded CP phase is completed and the TP is transferred to the C-I interface, *otagai* cannot be interpreted because the antecedent *hutatu-no kuruma* 'two cars' is not contained within the TP. Then, either the structure of (14a) is different or Condition (A) must be revised. In the following section, I assume Saito's (2011) proposal that the EPP feature remains at phase heads in Japanese and argue that examples like (14a) are consistent with Charnavel and Sportiche's (2013) Condition (A).

4.2 Saito's (2011) Proposal

Chomsky (2008) hypothesizes that the EPP feature and phi-features originate in phase heads and are transmitted to their complements. Saito (2011), on the other hand, provides evidence that C retains the EPP feature in Japanese, based on Miyagawa's (2001, 2003) analysis of the scope interaction between the subject and negation. In this section, I first review Saito's (2011) proposal on the absence of feature inheritance in Japanese. Then, with the proposal, I reexamine plain anaphors as in (14a) in the light of Charnavel and Sportiche's (2013) Condition (A).

In Miyagawa's (2001, 2003) analysis, the scope relation between the subject and negation depends on their structural relation. Two of his examples are given in (15).

(15) a. Zen'in-ga sono tesuto-o uke-na-katta.
all-NOM that test-ACC take-Neg.-Past

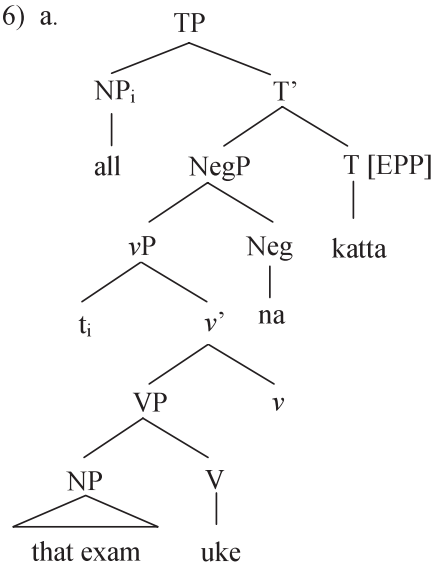
'All didn't take that exam.' (all > not, *not > all)

b. Sono tesuto-o$_i$ zen'in-ga t_i uke-na-katta.
that test-ACC all-NOM take-Neg.-Past

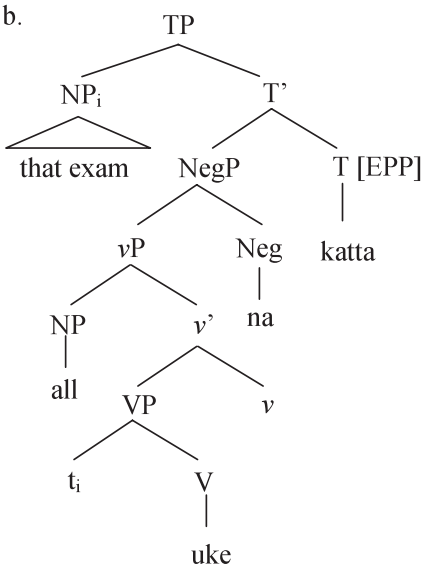
'That exam, all didn't take.' (all > not, not > all)

In (15a), *zen'in* 'all' takes scope over negation. Once the object *sono tesuto* 'that test' is scrambled over the subject as in (15b), *zen'in* can take narrow scope with respect to negation. Miyagawa (2001, 2003) proposes that the structures of (15a, b) are as follows:

(16) a.



b.



Zen'in 'all' in (16a) takes wide scope over negation because the former c-commands the latter. In (16b), *zen'in* remains in *v*P spec and *sono tesuto* 'that test' is scrambled to TP spec. In this case, the object checks the EPP feature in T instead of the subject. Negation c-commands the subject *zen'in* in the *v*P spec. Therefore, it takes scope over *zen'in*. If *sono tesuto* in (16a) is adjoined to TP, (16a) becomes the structure for the wide reading of *zen'in* in (15b). In this case, *zen'in* c-commands negation and hence, takes scope over it.

Saito (2011) presents the following counter-example for this analysis:

(17) a. Zen'in-ga zibun-zisin-ni toohyoosi-na-katta.
all-NOM self-DAT vote-Neg.-Past

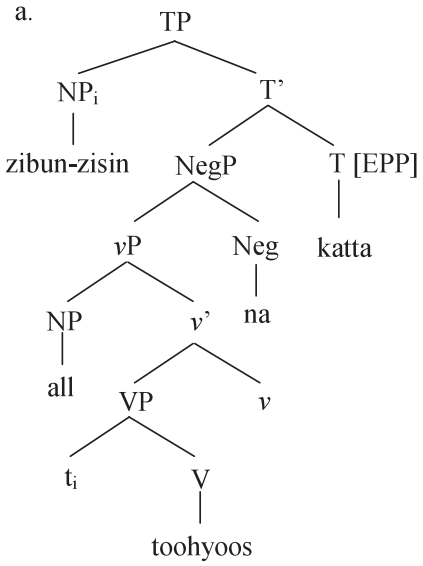
'Everyone did not vote for herself/ himself.' (all > not, *not > all)

b. Zibun-zisin$_i$-ni zen'in-ga t_i toohyoosi-na-katta.
self-DAT all-NOM vote-Neg.-Past

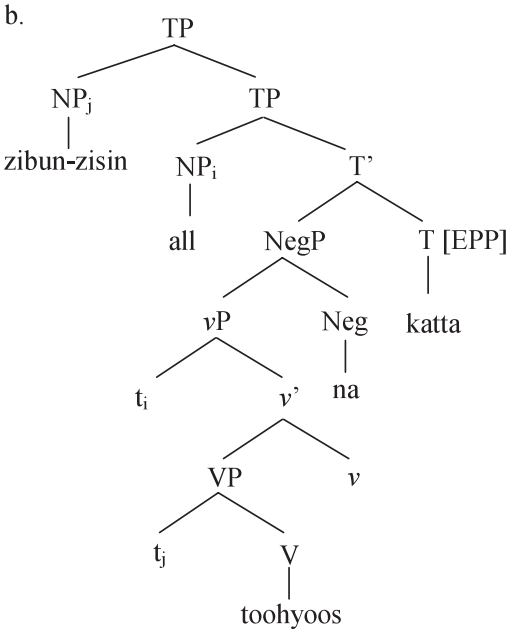
'For herself/ himself, everyone did not vote.' (all > not, not > all)

In (17a, b), the object *zibun-zisin* 'self' is an anaphor. If we apply Miyagawa's (2001, 2003) analysis to these examples, the structure for the narrow scope reading of *zen'in* in (17b) will be as in (18a).

(18) a.



b.



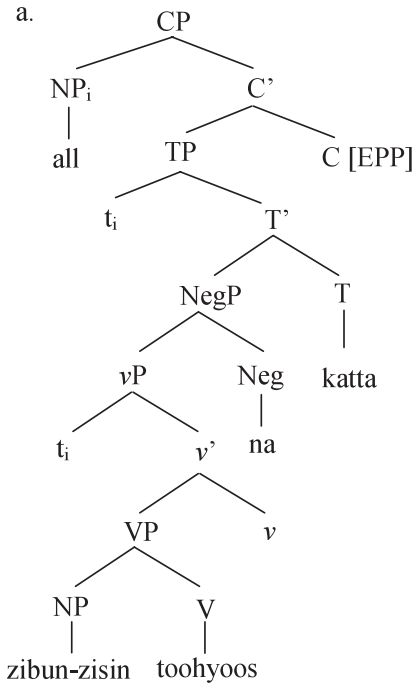
In (18a), the object *zibun-zisin* 'self' is scrambled to TP spec and satisfies the EPP requirement of T. However, this structure violates Condition (C) because *zibun-zisin* A-binds the subject *zen'in*. The other way to prepose *zibun-zisin* is A'-scrambling as in (18b). In this case, the violation of Condition (C) is avoided; however, negation does not c-command *zen'in* and cannot take wide scope over it.

As pointed out in Saito (2011), scope ambiguity is observed in English when a quantifier is located in TP spec as in (19).

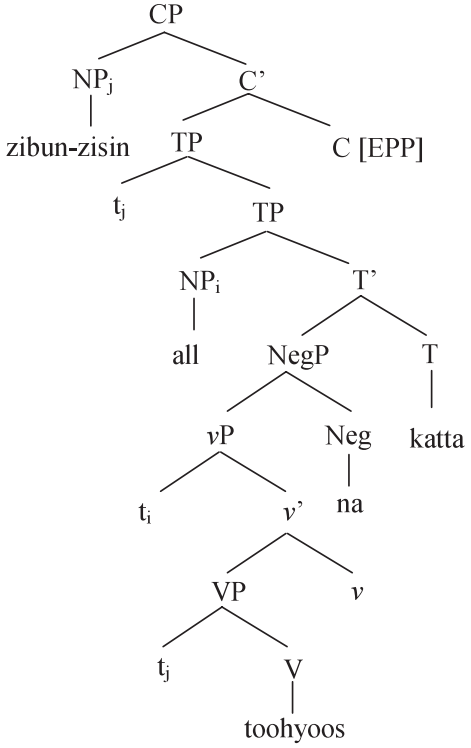
(19) [$_{TP}$ Everyone didn't [$_{vP}$ take the exam]] (every > not, not > every)

With this fact, he proposes that feature inheritance does not take place in Japanese and assigns the structures in (20a, b) to (17a, b).

(20) a.



b.



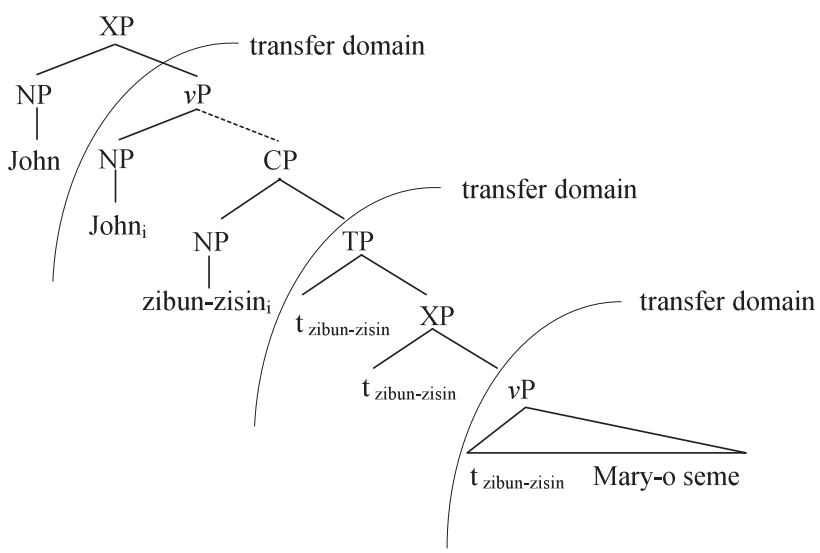
In (20a), the quantifier *zen'in* 'all' moves to the edge of CP via TP spec to check the EPP feature in C. In this case, *zen'in* is located in CP spec and hence, takes scope over negation. On the other hand, in (20b), *zen'in* is at the edge of TP and scope ambiguity emerges. Saito (2011) assumes that C attracts the nearest NP to satisfy the EPP requirement. This indicates that *zibun-zisin* 'self' first adjoins to TP and then moves to the edge of CP. Thus, his proposal that the EPP feature remains in phase heads in Japanese accounts for the subject-negation scope interaction.

Given this, let us consider the crucial example in (14a). (21a) is a simpler example with the relevant structure.

(21) a. John$_i$-wa [zibun-zisin$_i$-ga Mary-o seme-ta]-to it-ta.
John-TOP self-NOM Mary-ACC blame-Past-COMP say-Past

'John said that he had blamed Mary.'

b.



In (21b), *zibun-zisin* first moves to the XP spec. With the completion of the XP phase, the *v*P is transferred to the C-I interface. *Zibun-zisin* need not be assigned a reference within the *v*P because a copy of *zibun-zisin* is located in XP spec. *Zibun-zisin* in XP spec moves to TP spec. Then, it moves to CP spec to check the EPP feature in C. *Zibun-zisin* and its antecedent *John* are in the same *v*P when the matrix XP phase is completed. Hence, *zibun-zisin* within the *v*P receives its interpretation from *John* and satisfies Condition (A).

Saito's (2011) proposal on the absence of feature inheritance in Japanese accounts for plain anaphors in the embedded subject position of tensed embedded clauses. This gives an explanation for the difference in the distributions of plain anaphors between Japanese and French. In French, the EPP feature is transmitted to T and anaphors in the embedded subject position do not move to CP spec. In the following section, I consider another potentially problematic case for Charnavel and Sportiche's (2013) Condition (A); plain anaphors in sentences with complex predicates.

5. Condition (A) and Plain Anaphors in Sentences with Complex Predicates

First, I briefly go over the structure of sentences with complex predicates in Japanese. Then, I examine plain anaphors in the objects position of small clause *v*P complements and show that Charnavel and Sportiche's (2013) cyclic application of Condition (A) accommodates them.

5.1 Sentences with Complex Predicates in Japanese

It has been demonstrated that sentences with complex predicates are biclausal (see, Kuroda 1965, Kuno 1973). One piece of evidence for this is the behavior of *zibun* 'self' in sentences with complex predicates. Let us first consider (22).

(22) Taroo$_i$-wa Hanako$_j$-o zibun$_{i/*j}$-no heya-de sika-tta.
Taroo-TOP Hanako-ACC self-GEN room-at scold-Past

'Taroo scolded Hanako at self's room.'

Zibun 'self' is subject-oriented. In this example, the subject *Taroo* is a possible antecedent for *zibun* but the object *Hanako* is not. In (23), however, the subject *Taroo* and the NP *Hanako* are both possible antecedents for *zibun*.

(23) Taroo$_i$-wa Hanako$_j$-ni zibun$_{i/j}$-o sinyoo-sase-ta.
Taroo-TOP Hanako-DAT self-ACC trust-Cause-Past

'Taroo made Hanako trust self.'

This indicates *Hanako* is the subject of the clausal complement of *-sase* 'cause' in this example.

The behavior of pronouns also supports the biclausality of sentences with complex predicates. (24) is an example given by Oshima (1979).

(24) John$_i$-wa Bill$_j$-ni kare$_{i/*j}$-o sinyoo-sase-ta.
John-TOP Bill-DAT him-ACC trust-Cause-Past

'John made Bill trust himself.'

(Oshima 1979)

The pronoun *kare* 'him' cannot take the NP *Bill* as its antecedent because of Condition (B); however, it can take *John* as its antecedent. This indicates that *kare* and its antecedent *John* are not clause-mates.

5.2 Merchant's (2013) Proposal

Given this background, consider the apparent counter-example in (25).

(25) [$_{vP}$ A kabusiki gaisya$_i$-ga [$_{vP}$ B kabusiki gaisya-ni [$_{VP}$ zibun-zisin$_i$-no kogaisya-o
A corporation-NOM B corporation-DAT self-GEN subsidiary-ACC

tubus]]-ase]-ta.
put out of business-Cause-Past

'A corporation made B corporation put itself's subsidiary out of business.'

According to Murasugi, Hashimoto and Kato (2004), the causative verb *-sase* 'cause' takes a *v*P complement. In (25), *zibun-zisin* 'self' in the object position of the small clause *v*P complement takes the matrix subject *A kabusiki gaisya* 'A corporation' as its antecedent. This example provides independent evidence for Takahashi's (2011) generalization as follows:

(26) Small clause *v*P complements are not phases.[1]

In this subsection, I give an explanation for this with Merchant's (2013) proposal on VoiceP.

Merchant (2013) proposes that VoiceP is a separate phrase over *v*P in the discussion of voice mismatch in VP ellipsis.[2] Let us first consider the examples in (27a, b).

(27) a. *Joe was murdered, but we don't know who.

b. *Someone murdered Joe, we don't know who by.

These examples of sluicing show that voice mismatch between the antecedent part and the elided part is not allowed. This raises the question why the following examples of VP ellipsis are grammatical:

(28) a. I have implemented it with a manager but it doesn't have to be. <implemented with a manager>

b. This problem was to have been looked into, but obviously nobody did. <look into this problem>

If voice mismatch is disallowed, (28) indicates that Voice is not included in the target of VP ellipsis. Merchant (2013) proposes that VoiceP is independent from *v*P and that VP ellipsis applies to the latter. (29a, b) are the structures of the TPs with VP ellipsis in (28a, b).

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[1] Takahashi (2011) argues that *v*P complements of causatives in Japanese are not phases. (i) and (ii) are the relevant examples he presents:

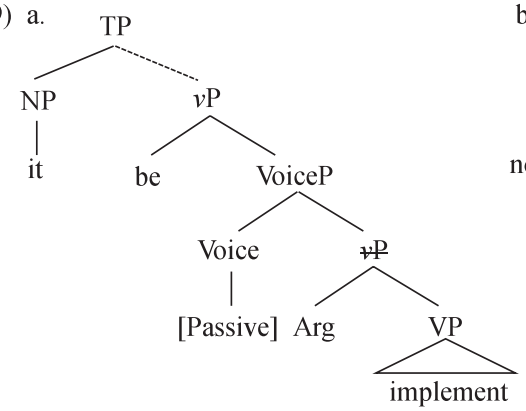
(i) John-ga eigo ?-o/ -ga waka-ru.
John-NOM English-ACC/ -NOM understand-Pres.
'John understands English.'

(ii) Mary-ga John-ni eigo-o/ *-ga wakar-ase-ru.
Mary-NOM John-DAT English-ACC/ -NOM understand-Cause-Pres.
'Mary makes John understand English.'

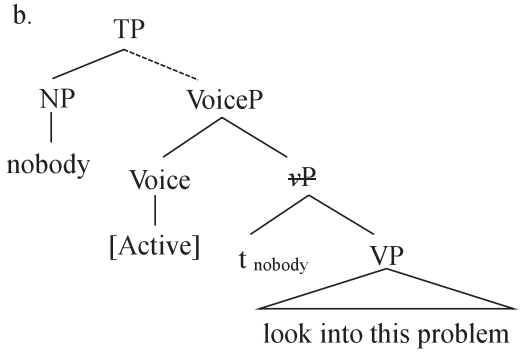
In (i), the NP *eigo* 'English' with accusative Case is marginal. In (ii), on the other hand, *eigo* with accusative Case is completely acceptable. These examples illustrate that the causative verb *-(s)ase* 'cause' assigns accusative Case to the embedded object *eigo*. He proposes that Case-valuation determines phases and then, small clause *v*P complement in (ii) does not constitute a phase because *wakar-(u)* 'understand' does not value Case.

[2] Collins (2005) also proposes that VoicePs are independent from *v*Ps in the discussion of passive sentences. He proposes in addition that VoicePs, and not *v*Ps, are phases.

(29) a.



b.



In (29a), the elided *v*P does not contain Voice with the feature [Passive]. In (29b), the NP *nobody* moves to TP spec and then the elided *v*P does not contain the feature [Active]. In this case, Merchant (2013) assumes that the trace of *nobody* is structurally equivalent to the agent of the antecedent part (*Arg* in the structure) though their contents are not identical. His proposal that Voice is an independent head and is not included in the target of the ellipsis successfully accounts for voice mismatch in VP ellipsis.[3]

Given this, let us go back to (25), repeated below as (30a).

(30) a. A kabusiki gaisya$_i$-ga B kabusiki gaisya-ni zibun-zisin$_i$-no kogaisya-o
A corporation-NOM B corporation-DAT self-GEN subsidiary-ACC

tubus-ase-ta.
put out of business-Cause-Past

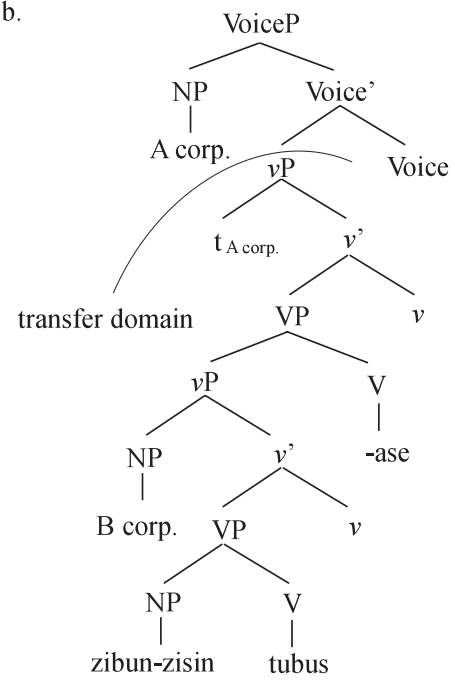
'A corporation made B corporation put itself's subsidiary out of business.'

[3] Merchant (2013) points out that not VPs but *v*Ps are elided in VP ellipsis. A relevant example is given in (iii).

(iii) This can [$_{vP}$ v_{unacc} [$_{VP}$ freeze (this)]]. *Please do. <[$_{vP}$ v_{trans} [$_{VP}$ freeze this]]>

If *v*P is the target of ellipsis, (iii) is predicted to be fine because the antecedent part and the elided part are identical. However, the fact is to the contrary. He proposes that the antecedent *v* is not equivalent to the elided *v* in this example and that this accounts for the ungrammaticality.

b.



As noted in section 4.1, Charnavel and Sportiche (2013) propose that there is a functional phrase XP over *v*P and it is a phase. With Merchant's (2013) proposal, we can assume that VoiceP is this XP. In (30b), not *v* but Voice is a phase head.[4] This automatically yields the result that small clause *v*Ps are not phases. As Charnavel and Sportiche (2013) assume, the subject *A kabusiki gaisya* 'A corporation' first moves to VoiceP spec and then its complement *v*P is transferred to the C-I interface. At this point, *zibun-zisin* 'self' and its antecedent *A kabusiki gaisya* 'A corporation' are in the same *v*P. Hence, *zibun-zisin* in the object position of the small clause *v*P complement receives its interpretation from *A kabusiki gaisya* and satisfies Condition (A).

The hypothesis that Voice, as a phase head, takes a *v*P complement leads to a solution for an independent, outstanding problem in Japanese syntax. Let us first consider the following examples:

(31) a. Taroo-wa Hanako-ni hasir-ase-ta.
Taroo-TOP Hanako-DAT run-Cause-Past

'Taroo made Hanako run.'

[4] This coincides with Collin's (2005) conclusion that VoiceP above *v*P is the phase, mentioned in footnote 2.

b. Taroo-wa Hanako-o hasir-ase-ta.
Taroo-TOP Hanako-ACC run-Cause-Past

'Taroo made Hanako run.'

In these examples, the causee *Hanako* can be in either dative or accusative. This contrasts with (32).

(32) a. Taroo-wa Hanako-ni gyuunyuu-o nom-ase-ta.
Taroo-TOP Hanako-DAT milk-ACC drink-Cause-Past

'Taroo made Hanako drink milk.'

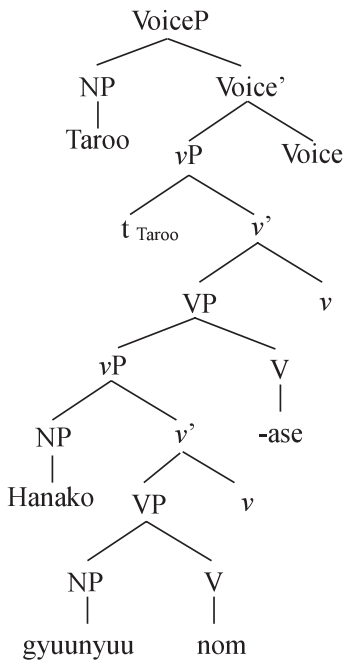
b. *Taroo-wa Hanako-o gyuunyuu-o nom-ase-ta.
Taroo-TOP Hanako-ACC milk-ACC drink-Cause-Past

'Taroo made Hanako drink milk.'

In these examples, a transitive verb with an accusative object is embedded under the causative *-(s)ase*. In this case, the causee cannot be in accusative but must be in dative. The phenomenon is known as the double-*o* effect since Harada (1973).

The double-*o* effect has resisted an analysis because (32b), for example, contains two *v*Ps, one embedded and one in the matrix. However, if Voice, instead of *v*, is the phase head and is the locus of accusative Case, the phenomenon is no longer mysterious. The structure of (32b) would be as in (33).

(33)



As there is only one Voice head in the structure, two NPs cannot be valued for accusative.[5]

6. Conclusion

This paper has reported that the behavior of plain anaphors in Japanese supports Charnavel and Sportiche's (2013) cyclic application of Condition (A). First, I reviewed their analysis of plain anaphors with inanimate antecedents and confirmed that most plain anaphors in Japanese exhibit the rigid locality. Then, I introduced their cyclic application of Condition (A) and pointed out that Japanese plain anaphors in the embedded subject position could pose a problem for the condition. In section 4, I introduced Saito's (2011) hypothesis on the absence of feature inheritance in Japanese and argued that given this hypothesis, Charnavel and Sportiche's (2013) Condition (A) successfully accommodates the potentially problematic examples. Then, in section 5, I considered plain anaphors in sentences with complex predicates. I pointed out that small clause *v*P complements do not constitute phases as initially observed by Takahashi (2011). Then, to explain this, I adopted Merchant's (2013) proposal that VoiceP occurs independently of *v*P and argued that they constitute phases instead of *v*Ps. I showed that this fits well with Charnavel and Sportiche's (2013) Condition (A) and leads to an explanation for why small clause *v*P complements are not phases.

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[5] I was informed by Mamoru Saito that Koji Shimamura and Susanne Wurmbrand have been entertaining a similar analysis of the double-*o* effect in their ongoing crosslinguistic investigation of complex predicates in terms of the Voice-*v*-V structure.

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