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THE TRANSITIVE LIGHT VERB IN PASSIVE CON-
STRUCTIONS: A MINIMALIST PERSPECTIVE*

INTRODUCTION

In the recent Minimalist Program framework (Chomsky (2001, 2008), etc.), it has been proposed that the structure of passives is the same as that of unaccusatives, as in (1), and that an accusative Case value is never assigned in passives and unaccusatives.

$$[_{vP} \nu [_{VP} V DP]]$$

The light verb ν in (1) has the following properties: (i) it does not assign an external θ -role; (ii) it does not assign an accusative Case value; and (iii) it does not form a phase. In contrast to this light verb, the transitive light verb ν^* in the structure of an active transitive sentence, as in (2), has the opposite properties: (i) it assigns an external θ -role; (ii) it assigns an accusative Case value; and (iii) it forms a phase.

$$[_{v^*P} DP_1 [_{v^*} \nu^* [_{VP} V DP_2]]]$$

DP₁ = external argument, DP₂ = internal argument

Under Minimalism, Case assignment is realized through the syntactic operation *Agree*. In (2), the probe ν^* has the uninterpretable ϕ -features, and they agree with the interpretable ϕ -features of the goal DP₂. As a consequence, ν^* receives the value of the ϕ -features from DP₂ and assigns the accusative Case value to DP₂. Moreover, the probe ν^* *External-Merges* the external argument DP₁ and assigns the external θ -role to it. Through these operations, the probe ν^* heads a phase. On the other hand, the light verb ν in (1) does not have these properties, and it is not a probe.

Thus, in Chomsky's (2001, 2008) framework, the internal argument in passives and unaccusatives cannot be assigned an accusative Case value, and it is assigned a

* This article is a revised version of my M. A. thesis, Osaka University, in January, 2009. I am indebted to Koji Fujita and Sadayuki Okada for their invaluable comments and suggestions. I would like to express my sincere gratitude to Yukio Oba for helping me from the outset of this study. All remaining errors and inadequacies are, of course, my own.

nominative Case value through the agreement with T. In addition, the light verb v in both constructions projects no external argument.

With respect to passives in Japanese, Hoshi (1994, 1999) also proposes that an external θ -role is suppressed, and that an internal argument is assigned Case by T (or Infl in his system) because abstract Case of the verb is absorbed. Accordingly, the structure of Japanese passives that he assumes roughly corresponds to (1) in that neither an external θ -role nor an accusative Case value is assigned.

Although passives and unaccusatives seem to have the same structure as long as the discussions above are all tenable, we can find some differences between them, which indicate that passive sentences are not consistent with (1). As we will see below, in passives, an external θ -role must be assigned, and an accusative Case value can also be assigned. Matsuoka (2003) suggests that an agent argument is projected as specifier of the transitive light verb v^* (in his system, v) in Japanese passives. I basically agree with his idea, but I will modify his proposal because he does not mention the agreement of v^* in passives that is directly related to accusative Case assignment.

The aims of this thesis are to prove that the structure of passives is not the same as that of unaccusatives and to propose a structure of passives containing the transitive light verb v^* , by demonstrating the existence of an implicit external argument and the assignment of an accusative Case value in the passive.

The organization of this thesis is as follows. In section 2, I point out the differences between passives and unaccusatives and the problems with Chomsky (2001, 2008) and Hoshi (1994, 1999), by illustrating some examples of accusative Case assignment in passives. In section 3, I introduce Matsuoka's (2003) analysis and point out some problems. Then, I modify his claim and propose a structure of passives that contains the transitive light verb v^* instead of the light verb v . section 4 demonstrates that the proposed structure can adequately explain why accusative Case assignment is possible in the passive of the Double Object Construction (DOC) in some dialects of English and in some other languages as well as in the passive of the Possessor-Raising Construction in Japanese and in some Ukrainian passive sentences. In section 5, I discuss some problems that arise from my proposal and suggest solutions for them. I argue *be* and *have* in passive constructions in section 6. Section 7 presents the conclusion of this thesis.

SOME DIFFERENCES BETWEEN PASSIVES AND UNACCUSATIVES

2.1 Implication of an External Argument

Hoshi (1991, 1994, 1999) distinguishes the *niyotte* passive from the *ni* direct passive in Japanese, as shown in (3).

- a. Sensei-ga gakusei-ni hihans-are-ta. (*ni* direct passive)
 teacher-NOM student-by criticize-PASS-PAST
 ‘The teacher_i was affected by his student’s criticizing
 him_i.’
- b. Sensei-ga gakusei-ni yotte hihans-are-ta. (*niyotte* passive)
 teacher-NOM student-to owing criticize-PASS-PAST
 ‘The teacher was criticized by his student.’
- (Hoshi 1999: 196)

According to Hoshi (1991, 1999), English also has two types of passives, the *get* passive and the *be* passive, as in (4), and the *ni* direct passive and the *niyotte* passive correspond to the *get* passive and the *be* passive, respectively.

- a. John got arrested by the police. (*get* passive)
- b. John was arrested by the police. (*be* passive)
 (ibid.: 199)

Following his distinction, I will treat only the *niyotte* passive as the Japanese counterpart to the English *be* passive.¹ Henceforth, in this thesis, “passives” refers to *be* passives in English and *niyotte* passives in Japanese.

As I have mentioned in section 1, both Chomsky (2001, 2008) and Hoshi (1994, 1999) claim that an external θ -role is never assigned in passives, just as in unaccusatives, and that, minor details aside, the structure of passives is essentially (1). However, it is observed that the behavior of passives in English is different from that of unaccusatives, as shown in (5).

- a. The ship was sunk to collect the insurance. (passive)
- b. * The ship sank to collect the insurance. (unaccusative)

Passives can be compatible with a rationale clause while unaccusatives cannot. According to Jaeggli (1986) and Baker et al. (1989), there is an implicit external argument in passive sentences. In (5a), the implicit argument can control into the rationale clause. On the other hand, unaccusative sentences do not contain such an argument. Hence, the grammaticality of (5a). This kind of difference can also be observed in Japanese, as in (6).²

¹ Hoshi (1991, 1994, 1999) also points out the difference between *ni* direct passives and *niyotte* passives. According to his analysis, the subject of the former is base-generated in the matrix subject position and receives an (additional) external θ -role that is not assigned in its active counterpart as shown by the gloss in (3a), whereas that of the latter is moved from the object position. In this thesis, however, I do not discuss the difference between the constructions because it is beyond the scope of this thesis, and I focus only on the *niyotte* passive, which is derived by the direct movement of an internal argument to the subject position.

² In the gloss, LC (Lexical Causative) indicates a morpheme that is attached to a root to form a causative alternant. See Matsuoka (2003) for details.

- a. Hokenkin-o eru tameni, (sagisi-niyotte) fune-ga
 insurance-ACC get for (fraud-by) ship-NOM
 sizum-er-are-ta.
 sink-LC-PASS-PAST
 ‘The ship was sunk (by a fraud) to collect the insurance.’
 (passive)
- b. *Hokenkin-o eru tameni, fune-ga sizum-ta.
 (sizum-ta → sizunda)
 insurance-ACC get for ship-NOM sink-PAST
 ‘The ship sank to collect the insurance.’
 (unaccusative)

This fact is not consistent with the claim that the structure of passives corresponds to (1) because the light verb *v* never assigns an external θ -role.

Furthermore, Jaeggli (1986) points out that the NP in a passive *by*-phrase is interpreted as bearing the external θ -role of the passivized predicate, as illustrated in (7).

- a. Bill was killed by Mary. (Agent)
 b. The package was sent by John. (Source)
 c. The letter was received by Bill. (Goal)
 d. That professor is feared by all students. (Experiencer)
 (Jaeggli 1986: 599)

Fox and Grodzinsky (1998) claim that there is a mechanism, *θ -transmission*, that transfers the θ -role from the logical subject position to the position of the *by*-phrase. They suggest that if it were not for an implicit external argument, the *by*-phrase would not be assigned various θ -roles as shown in (7) because the preposition *by* itself does not have the relevant θ -marking property. This supports the analysis that there must be an implicit external argument in passives in English. This phenomenon can also be found in Japanese passives, as in (8).

- a. Taroo-ga Hanako-niyotte koros-are-ta. (Agent)
 Taro-NOM Hanako-by kill-PASS-PAST
 ‘Taro was killed by Hanako.’
- b. Nimotu-ga Ken-niyotte okur-are-ta. (Source)
 package-NOM Ken-by send-PASS-PAST
 ‘The package was sent by Ken.’
- c. Tegami-ga daihyoosya-niyotte uketor-are-ta. (Goal)
 letter-NOM representative-by receive-PASS-PAST
 ‘The letter was received by the representative.’

- d. [Sono bookun]-ga [ookuno simin]-niyotte
 [the tyrant]-NOM [many citizens]-by
 osorer-are-tei-ru. (Experiencer)
 fear-PASS-PROGRESSIVE-PRES
 ‘The tyrant is feared by many citizens.’

Since *niyotte* ‘by’ itself does not assign various θ -roles to its object as shown in (8), Hoshi’s (1994, 1999) claim that an external θ -role is suppressed in passives and that a *niyotte*-phrase optionally appears as an adverbial phrase is not consistent with this fact. This constitutes part of the evidence that (1) does not represent the structure of passives.³

2.2 Accusative Case Assignment

As I have already discussed, structural accusative Case cannot be assigned in the structure of passives proposed in Chomsky (2001, 2008) and Hoshi (1994, 1999). In this section, however, I will present some passive sentences in which structural accusative Case is assigned.

2.2.1 The Passive of the DOC

First, we take up the passive of the DOC as in (9).

- a. Mary was sent a letter. (IO-passive)
 b. ?*A letter was sent Mary. (DO-passive)
 (Larson 1988: 362–363)

For expository purposes, I will call sentences (9a) and (9b) “the IO-passive” and “the DO-passive,” respectively. The subject of the IO-passive is the indirect object (IO), while that of the DO-passive is the direct object (DO). In most dialects of English, the DO-passive is considered unacceptable. It has been assumed that this is because IO is assigned structural Case while DO is assigned inherent Case. This explanation supports the idea that structural accusative Case is never assigned in passives. Accordingly, it is only IO that can agree with T and be the subject of the passive DOC. On the other hand, DO does not agree with T because inherent Case is still assigned in the passive.

According to Ura (2000), however, a DO-passive sentence like (9b) can be acceptable in British English, and Culicover and Jackendoff (2005) also admit that such a passive sentence is grammatical for some speakers at least. If their claim is correct,

³ There may be a demoted external argument somewhere in the structure of passives. If such is the case, passive verbs must be able to assign the external θ -role, a property which the light verb *v* does not have. Hence, we must assume a structure of passives other than (1) in order to explain (5)–(8).

what assigns the Case to IO in the DO-passive and to DO in the IO-passive in that dialect of English?

In addition, Norwegian DOCs present a similar puzzle. In this language, we find both the IO-passive and the DO-passive, as in (10).⁴

- a. Marit ble gitt en bok. (IO-passive)
 Mary was given a book
 ‘Mary was given a book.’
- b. ^{??}En bok ble gitt Marit. (DO-passive)
 a book was given Mary
 ‘A book was given (to) Mary.’

Ura (2000) claims that both the Case of IO in the DO-passive and that of DO in the IO-passive are structural accusative Case in English and Norwegian. If so, we can claim that there is accusative Case assignment in passives.

A more obvious example of accusative Case assignment in passives can be found in Japanese. According to Miyagawa and Tsujioka (2004), (11) is the passive of the DOC in Japanese, and *nimotu* ‘package’ in (11) is assigned accusative Case.

- Taroo-ga nimotu-**o** okur-are-ta.
 Taro-NOM package-ACC send-PASS-PAST
 ‘Taro was sent a package.’
 (Miyagawa and Tsujioka 2004: 16)

They do not mention whether this accusative Case is structural or inherent, but they claim that the DO-passive as in (12) is not the passive of the DOC but the passive of the Prepositional Dative Construction (PDC) because (13) is unacceptable.

- Nimotu-ga Taroo-niyotte Hanako-ni okur-are-ta.
 package-NOM Taro-by Hanako-NI send-PASS-PAST
 ‘A package was sent (to) Hanako by Taro.’
 (ibid.: 19)
- * Nimotu-ga Taroo-niyotte gakusei-ni futa-ri okur-are-ta.
 package-NOM Taro-by students-NI 2-CL send-PASS-PAST
 ‘A package was sent two students by Taro.’
 (ibid.)

⁴ According to my Norwegian informant, a sentence like (10b) is not so acceptable. However, if we substitute the verb *tildete* ‘award’ for the verb *gi* ‘give,’ the DO-passive becomes fairly acceptable, as in (i).

(i) Prisen ble tildelt Marit.
 prize.the was awarded Mary
 ‘The prize was awarded (to) Mary.’

A numeral quantifier may float off its host only if the host is a DP. Considering this point, they claim that *gakusei-ni* ‘students-NI’ in (13) is not a DP but a PP and conclude that DO cannot be passivized in the DOC in Japanese.

However, most of my informants, who do not accept (13), accept the following sentences:

- a. Tokubetusyoo-ga sootyoo-niyotte uti-no gakusei-ni
 [special prize]-NOM president-by 1.PL-GEN students-DAT
 san-nin okur-are-ta.
 3-CL award-PASS-PAST
 ‘The special prize was awarded (to) our three students by the president.’
- b. Sityoosya-ni sanzyuu-nin, terebikyoku-niyotte purezento-ga
 audiences-DAT 30-CL [television station]-by presents-NOM
 okur-are-ta.
 give-PASS-PAST
 ‘(Lit.) (To) thirty audiences, the presents were given by the television station.’

Note that both *okur* ‘award’ in (14a) and *okur* ‘give’ in (14b) are homonyms of *okur* ‘send’ in (11)–(13). Some of my informants do not accept (14), but they give (14) the same score as the following active sentence of the DOC, which Miyagawa and Tsujioka (2004) treat as a grammatical sentence:

- Taroo-ga gakusei-ni futa-ri nimotu-o okutta.
 Taro-NOM students-DAT 2-CL package-ACC sent
 ‘Taro sent two students a package.’

(Miyagawa and Tsujioka 2004: 7)

It seems natural to assume that those who do not accept (14) reject quantifier float from a dative argument itself. Given that sentences like (14) are acceptable for some speakers at least, IO in the DO-passive is not a PP but a DP. This contradicts Miyagawa and Tsujioka’s analysis.

Then, what is the difference between (13) and (14)? Consider the following examples:

- a. Nimotu-ga Ken-niyotte kokkyoo-ni okur-are-ta.
 package-NOM Ken-by border-to send-PASS-PAST
 ‘A package was sent to the border by Ken.’
- b. *Tokubetusyoo-ga syusyoo-niyotte kokkyoo-ni
 [special prize]-NOM [Prime Minister]-by border-to
 okur-are-ta.
 award-PASS-PAST
 ‘The special prize was awarded to the border by the Prime Minister.’

- c. * Purezento-ga terebikyoku-niyotte kokkyoo-ni okur-are-ta.
presents-NOM [television station]-by border-to give-PASS-PAST
'The presents were given to the border by the television station.'

According to Miyagawa and Tsujioka, the verb *okur* 'send' can take both the possessive goal, i.e. the DP variant of IO, and the locative goal, i.e. the PP variant of IO. The contrast between (16a) and (16b, c) shows that *okur* 'award' in (16b) and *okur* 'give' in (16c) cannot take the locative goal, and this is why *kokkyoo-ni* 'to the border' cannot appear in (16b, c).⁵ It seems possible that (12) and (13) are interpreted either as the DOC or as the PDC, but let us assume that there is a strong preference for interpreting the DO-passive of the verbs that can take both the possessive goal and the locative goal to be the PDC.⁶ Thus, (12) and (13) can be interpreted only as the PDC. On the other hand, since verbs like *okur* 'award' and *okur* 'give' cannot take the locative goal, such verbs appear only in the DOC and are never used in the PDC. Accordingly, the sentences in (14) are interpreted as the DOC, and the IOs in (14) are DPs. Therefore, since DO can be passivized, as in (14), we can conclude that the accusative Case of DO is structural at least in the following passive sentences:

- a. Hanako-ga sootyoo-niyotte tokubetusyoo-o
Hanako-NOM president-by [special prize]-ACC
okur-are-ta.
award-PASS-PAST
'Hanako was awarded the special prize by the president.'
- b. Sityoosya-ga terebikyoku-niyotte purezento-o
audience-NOM [television station]-by presents-ACC
okur-are-ta.
give-PASS-PAST
'The audience was given the presents by the television station.'

This means that structural accusative Case is assigned in the passive of the DOC in Japanese.

⁵ A similar observation in English can be found in Rappaport Hovav and Levin (2008). They claim that *give*-type verbs only take possessional goals, while *throw*- and *send*-type verbs may also take spatial goals. This can be confirmed by the following contrast:

- (i) a. * Where did you give the ball?
b. Where did you throw the ball? To third base.
c. Where did you send the bicycle? To Rome.

(Rappaport Hovav and Levin 2008: 137)

Give-type verbs cannot be compatible with the locative *wh*-word *where*, but *throw*- and *send*-type verbs may be. I thank Koji Fujita (personal communication) for pointing this out to me.

⁶ In fact, judgments on (13) vary among my informants, although most of them judged (13) unacceptable. Thus, indeed there is a preference to interpret (12) and (13) to be the PDC, but some native speakers may interpret those sentences as the DOC. I am not sure why such a preference should exist, and I leave this issue for future research.

2.2.2 *The Passive of the Possessor-Raising Construction*

We can also find accusative Case assignment in the passive of the Possessor-Raising Construction, as in (18).

Naomi-ga Ken-niyotte atama-o tatak-are-ta.
 Naomi-NOM Ken-by head-ACC hit-PASS-PAST
 ‘Naomi was hit on the head by Ken.’

Ken Hiraiwa (personal communication) points out to me that the accusative Case in (18) is structural. One might object to this idea because the active counterpart of (18) is unacceptable, as in (19), and this passive sentence may be classified as “the adverbial passive.”

?? Ken-ga Naomi-o_i [_{e_i} atama]-o tatai-ta.
 Ken-NOM Naomi-ACC head-ACC hit-PAST
 ‘Ken hit Naomi on the head.’

(Hiraiwa 2008: 4)

If so, this might not be evidence for the claim that there is accusative Case assignment in passives. According to Hiraiwa (2008), however, the unacceptability of (19) can be avoided if scrambling is applied, as in (20).

Naomi-o_i Ken-ga omoikkiri e_i atama-o tatai-ta.
 Naomi-ACC Ken-NOM hard head-ACC hit-PAST
 ‘Ken hit Naomi hard on the head.’

(ibid.: 7)

According to his analysis, in fact, the unacceptability of (19) comes from the Double-*o* Constraint (DoC, cf. Harada (1973)). Thus, (18) is a “regular” passive, and this supports the claim that structural accusative Case can be assigned in passives. Again, one might oppose this suggestion, since *atama* ‘head’ in (18) and (19) cannot be passivized, as in (21).

* Atama-ga_i Ken-niyotte Naomi-o _{t_i} tatak-are-ta.
 head-NOM Ken-by Naomi-ACC hit-PASS-PAST
 ‘(Lit.) The head was hit Naomi by Ken.’

If we assume that the possessee (*atama*) is lower than the possessor (*Naomi*) in the base position, we can conclude that the unacceptability of (21) arises precisely because of the problem of closeness. The possessee cannot undergo A-movement over

the possessor.⁷ Consequently, (21) just violates the MLC (Minimal Link Condition). Furthermore, Hiraiwa (2008) claims that the DoC is a constraint only on structural accusative Case:

A Phase Theory of the DoC

Multiple identical occurrences of the structural accusative Case value cannot be morphophonologically realized within a single Spell-Out domain at Transfer.

(Hiraiwa 2008: 13)

This predicts that the DoC is irrelevant to (23) because the Case of *kyuuna saka* ‘steep slope’ in (23) is generally taken to be an instance of inherent Case.⁸

Ken-wa [kyuuna saka]-o zityensya-o issyookenmei
 Ken-TOP [steep slope]-ACC bicycle-ACC hard
 osi-ta.
 push-PAST
 ‘Ken pushed the bicycle hard on the steep slope.’

(ibid.: 5)

If his claim is correct, the accusative Case in (18) must be structural; otherwise, we cannot account for the unacceptability of (19).

2.2.3 The Ukrainian Passive

Finally, let us look at the Ukrainian passive. Ukrainian has an obvious example of accusative Case assignment in some passive sentences. The following is a case in point:⁹

Ja spodivajusja, [ščo cej žart ne bude
 I hope that this joke_{ACC} NEG will be
 vykorystano “Pravdoju Ukrajinjy”].
 used_[-AGR] Pravda_{INST} of Ukraine
 ‘I hope that this joke won’t be used by *Ukrainian Pravda*.’

(Lavine and Freidin 2002: 259)

According to Lavine and Freidin (2002), some passive sentences in this language have an accusative subject, and the accusative Case in (24) is not inherent but structural. If Ukrainian has the same structure of passives as English, this is another piece of evidence for the claim that there is accusative Case assignment in passives. I will

⁷ Ken Hiraiwa (personal communication) also suggests the same explanation.

⁸ This inherent Case is called “the accusative of situation.”

⁹ Lavine and Freidin (2002) call an example such as (24) “Accusative Unaccusative.”

explain this phenomenon in section 4.

To summarize, in passives, an external argument must be implied, and accusative Case assignment is possible. On the other hand, unaccusative sentences do not have such properties. These properties of passives are consistent not with the light verb v in (1) but with the transitive light verb v^* in (2). Therefore, the structure of passives must not be the same as that of unaccusatives, as in (1). Rather, it should be similar to that of active transitive sentences.

PROPOSAL

3.1 *The Structure of Passives*

If we assume the transitive light verb v^* in passives, then we must answer the question of which argument receives an external θ -role and which argument is assigned accusative Case. Recall that v^* assigns an accusative Case value and an external θ -role to some DP. In addition, we must consider how to raise an internal argument to the subject position, since v^*P is a phase and this raising seems to violate the Phase-Impenetrability Condition (PIC), as in (25).

Phase-Impenetrability Condition

In phase α with head H, the domain of H is not accessible to operations outside α , only H and its edge are accessible to such operations.

(Chomsky 2000: 108)

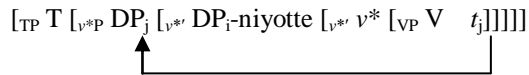
Matsuoka (2003) proposes that the *niyotte*-phrase of passives in Japanese is projected as specifier of the transitive light verb v^* , pointing out that it behaves as an argument.¹⁰ He claims that the NP marked by *niyotte* ‘by’ in (26) is generated as an argument rather than as an adjunct, because it can serve as the antecedent of a reflexive anaphor, as in (26a), and induce a violation of Condition C, as in (26b).

- a. Sono booru-ga John_i-niyotte karezisin_i-ni butuk-e-rare-ta.
 that ball-NOM John-by himself-DAT bump-LC-PASS-PAST
 ‘That ball was bumped by John_i against himself_i.’

¹⁰ In Matsuoka (2003), the transitive light verb v^* is represented as v , but I use v^* to distinguish it from the light verb of unaccusatives.

- b. * Sono booru-ga kare_i-niyotte [John_i-no kuruma]-ni
 that ball-NOM he-by John-GEN car-DAT
 butuk-e-rare-ta.
 bump-LC-PASS-PAST
 ‘That ball was bumped by him_i against John_i’s car.’
 (Matsuoka 2003: 177)

The structure of passives that he proposes is as follows:



Matsuoka (2003) adopts Chomsky’s (2001) proposal that the head of $v^*\text{P}$ optionally has an EPP-feature and triggers the movement of an internal argument to a specifier of $v^*\text{P}$ and claims that DP_j , which is an internal argument, is raised to $\text{SPEC-}v^*$ in (27).¹¹

Although his analysis can explain why there is an implicit external argument in passives, two problems remain. Firstly, if the internal argument is raised to $\text{SPEC-}v^*$, which element will agree with v^* ? If the internal argument agrees with v^* , then it will be assigned an accusative Case value, contrary to fact. According to Chomsky (2001, 2008), v^* has the uninterpretable ϕ -features, and it must agree with an element that has matched interpretable ϕ -features; otherwise, the derivation crashes. One might propose that v^* loses its uninterpretable ϕ -features or its Case assigning property in passives.¹² Given that such an analysis is correct, we cannot explain the fact that accusative Case is assigned in some passive sentences, as observed in section 2.2. Therefore, we must clarify how the uninterpretable ϕ -features of v^* are valued.

Secondly, what causes the head of $v^*\text{P}$ to have an EPP-feature? If it can have an EPP-feature in the active, the following ungrammatical sentences will be generated:

- a. * Hanako-ga Taroo-niyotte nagur-ta. (nagur-ta \rightarrow nagutta)
 Hanako-NOM Taro-by hit-PAST
 ‘(Lit.) Hanako hit by Taro.’
 (Intended meaning: ‘Hanako was hit by Taro.’)
- b. * Hanako-ga Taroo-ga nagur-ta. (nagur-ta \rightarrow nagutta)
 Hanako-NOM Taro-NOM hit-PAST
 ‘(Lit.) Hanako Taro hit.’
 (Intended meaning: ‘Hanako was hit by Taro.’ or ‘Taro hit Hanako.’)

Therefore, we must elucidate when the head of $v^*\text{P}$ has an EPP-feature.

¹¹ Note that this EPP-feature is different from the one that raises a *wh*-phrase to the outer $\text{SPEC-}v^*$, and that the position to which the internal argument is raised is an A-position.

¹² Matsuoka (2001) proposes this kind of analysis. He assumes that the passive morpheme absorbs Case of a verb, and that this forces an internal argument to move to the specifier of IP.

Jaeggli (1986) and Baker et al. (1989) propose that it is the passive morpheme *-en* that receives both an external θ -role and accusative Case. This means that what distinguishes the passive from the active is the existence of the passive morpheme. Taking this into consideration, I assume a projection above VP, which I call VoiceP, and I propose the following structure for both actives and passives:¹³

$$[{}_{v^*P} EA [v^* [{}_{VoiceP} Voice [{}_{VP} V IA]]]]$$

EA = external argument, IA = internal argument

The Voice of actives is $-\emptyset$, which is a phonetically null element, but the Voice of passives is the passive morpheme *-en*. I propose that *-en* corresponds to *-(r)are* in Japanese. The structure (29) means that v^* selects Voice itself under the bare phrase structure theory. Adopting Matsuoka's (2003) proposal, I suggest that IA in (29) is raised to SPEC- v^* above EA in passives, but that IA is not raised to that position in actives. In addition, I propose that EA in actives is DP, but that EA in passives is IMP, which is a phonetically null element.¹⁴ In order to support this proposal, I suggest the following conditions:¹⁵

- a. v^* merges DP iff v^* selects $-\emptyset$.
- b. v^* merges IMP and is assigned an EPP-feature iff v^* selects *-en*.

EA in passives may overtly appear as a *niyotte*-phrase in Japanese. Following Matsuoka's observation as in (26), I suggest that in Japanese IMP may be realized as a *niyotte*-phrase, but that it is never realized as DP. This is why *niyotte*-phrases can bear various θ -roles, as in (8). In English, on the other hand, I propose that IMP cannot be realized as a *by*-phrase, which appears as an adverbial phrase, and that the θ -role of the *by*-phrase is transferred from IMP as we have observed in section 2.1. This proposal is basically the same as Fox and Grodzinsky's (1998) assumption that θ -transmission involves the transmission of a θ -role that is otherwise realized by an implicit argument.¹⁶ Moreover, the conditions in (30) can exclude sentences like (28). Since v^* selects $-\emptyset$ in (28), v^* cannot merge the *niyotte*-phrase nor be assigned an EPP-feature that raises IA to SPEC- v^* above EA.¹⁷

¹³ In an earlier version of this study, I assumed VoiceP only in the structure of passives, which I called "PMP (Passive Morpheme Phrase)." I thank Koji Fujita (personal communication) for pointing out to me that I should also assume some VoiceP in actives if I assume one in passives.

¹⁴ I suggest that IMP corresponds to PRO or *pro*, adopting Fujita's (1994) analysis.

¹⁵ I will discuss these conditions in detail in section 6.

¹⁶ For the interpretation of *by*-phrases and its relationship with children's difficulty with passive constructions, see Fox and Grodzinsky (1998).

¹⁷ Koji Fujita (personal communication) points out to me that the condition (30b) can also exclude the following sentence:

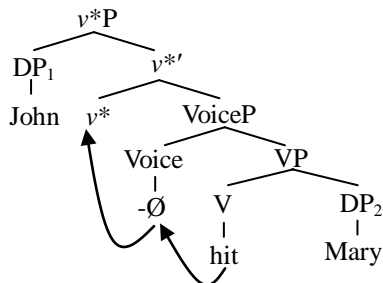
- (i) * Taroo-ga Hanako-o nagur-are-ta.
Taro-NOM Hanako-ACC hit-PASS-PAST
(Intended meaning: 'Taro hit Hanako.')

This is because v^* in (i) merges DP *Taro* and is not assigned an EPP-feature, although it selects *-en*.

To sum up, the structure of the active transitive sentence is (31), and its passive counterpart is (32).

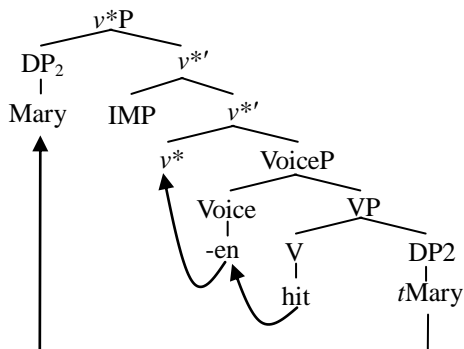
a. John hit Mary.

b.



a. Mary was hit (by John).

b.

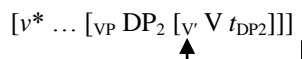


In (31), VP is selected by $-\emptyset$, and then $VoiceP$ is selected by v^* . As I have mentioned above, v^* has the Agree feature (the uninterpretable ϕ -features), which agrees with DP_2 *Mary*, and v^* assigns an accusative Case value to DP_2 . v^* also assigns an external θ -role to its specifier; thus, DP_1 *John* receives this θ -role. On the other hand, in (32), the passive morpheme $-en$ is the head of $VoiceP$. This $VoiceP$ is selected by v^* , and v^* merges IMP . v^* assigns an external θ -role to IMP , and it functions as an implicit external argument in passives. Moreover, DP_2 *Mary* is raised to $SPEC-v^*$ by the EPP-feature of v^* . T agrees with DP_2 , and DP_2 is raised to $SPEC-T$ in the later derivation. In both (31) and (32), I propose that V adjoins to $Voice$, and that V - $Voice$ complex adjoins to v^* .

However, the question of which element agrees with the Agree feature of v^* remains unsolved. I will answer this question in the next section.

3.2 *Two Chains*

As I have discussed above, we obtain one A-chain of DP₂ in (32) when DP₂ is raised to SPEC-*v**. In addition to this A-chain, I suggest that there is another A-chain in (32). In the derivation of an active transitive sentence like (31), Chomsky (2008) claims that the Agree feature of *v** is inherited by V, and that DP₂ must be raised to SPEC-V in (31). It follows that we obtain one A-chain through the agreement between *v**-V and DP₂ in (31), as illustrated below:



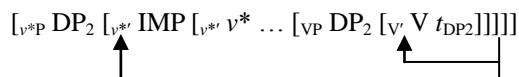
What about the derivation of passives? Although I have suggested that DP₂ agrees with the EPP-feature of *v** and is raised to SPEC-*v**, DP₂ in fact agrees with the Agree feature of *v** at the same time, if we adopt the Principle of Simultaneity proposed by Hiraiwa (2005).

The Principle of Simultaneity

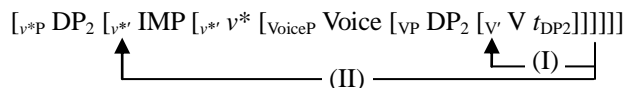
Apply operations simultaneously in parallel at a probe level.

(Hiraiwa 2005: 44)

According to Hiraiwa’s proposal, (34) is a principle that conforms to the Earliness Principle presented by Pesetsky (1989). If we assume *v** in the derivation of passives and it agrees with DP₂, the same A-chain as in (33) must also exist in (32). This means that two A-chains are created simultaneously in the derivation of passives, as shown in (35).¹⁸



The derivation shown in (35), however, appears to have one problem: these two A-chains have different Case values. As I illustrate in (36), Chain (I) has the accusative Case value, but Chain (II) does not have any Case value:

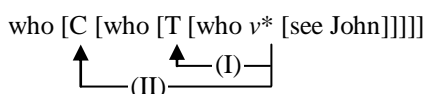


¹⁸ Masao Ochi (personal communication) points out to me that it seems redundant that V “remerges” DP₂ at its specifier because the relationship between V and DP₂ does not change after the raising of DP₂ to SPEC-V in both (33) and (35). I basically agree with this, but what I would like to stress here is that we have two relationships between *v** and DP₂; one is related with the Agree feature of *v** and the other with the EPP-feature of *v**. For expository purposes, I keep assuming that DP₂ is raised to SPEC-V.

One might wonder whether such a derivation is possible, but we can observe a similar movement in the derivation of a sentence like (37).

Who saw John?

Chomsky (2008) claims that the Agree feature of C is also inherited by T, and that *who* is raised from SPEC- v^* to SPEC-T and SPEC-C at the same time in the derivation of (37). This is because the Agree feature, inherited by T from C, raises *who* to SPEC-T, while the EF (edge-feature) of C raises it to SPEC-C. The result is (38).



In (38), Chain (I) has the nominative Case value, but Chain (II) does not have any Case value. In order to account for these phenomena, I propose the following principle:

The Case Value Selection Principle

If two Chains are created simultaneously, either Case value is selected at Transfer.

If the value of Chain (II) is selected in (38), *who* does not have any Case value at Transfer and this derivation crashes at the interface level. On the other hand, if the value of Chain (I) is selected, *who* has the nominative Case value at Transfer and this derivation converges. Consequently, only selecting the value of Chain (I) is possible in (38).

I suggest that the principle (39) can also be applied to the derivation (36). If the value of Chain (I) is selected in (36), DP_2 has the accusative Case value at Transfer. This means that DP_2 has already been assigned a Case value and become inactive at the v^*P phase-level, and that T cannot agree with DP_2 at the CP phase-level. Thus, the Agree feature, inherited by T from C, cannot agree with any element, and this causes the derivation to crash. On the other hand, if the value of Chain (II) is selected, DP_2 has no Case value at the v^*P phase-level, and it can agree with T. Therefore, this derivation converges. One might ask why it is not a problem that DP_2 does not have any Case value at the Transfer of the v^*P phase. This is because A-movement does not leave a trace/copy, as proposed in Lasnik (1999a). The copies of DP_2 transferred at the v^*P phase-level are the lower copies, which are deleted, while the copy at SPEC- v^* is not transferred at the v^*P phase-level, since it is at the edge of v^* . Consequently, the principle (39) is valid, and only selecting the value of Chain (II) is possible in the derivation (36).

In the next section, I will show that the structure of passives I have proposed here can adequately explain the phenomena we observed in section 2.

SOME CONSEQUENCES

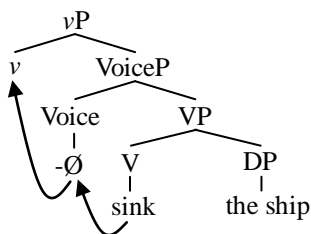
4.1 Presence of an Implicit Argument

As I have discussed in section 3, the transitive light verb v^* exists in the derivation of passives. This tells us why passives can be compatible with a rationale clause while unaccusatives cannot, as in (5), which is repeated in (40).

- a. The ship was sunk to collect the insurance. (passive)
- b. *The ship sank to collect the insurance. (unaccusative)

Recall that this difference depends on whether there is an implicit external argument. One of the properties of v^* is to assign an external θ -role to some argument. In the structure of passives I proposed in (32), this θ -role is assigned to IMP, and it functions as an implicit external argument. On the other hand, I suggest that the structure of unaccusatives is (41).

- a. The ship sank.
- b.



Since (41a) is an active sentence, VP is selected by $-\emptyset$, and then VoiceP is selected by v . The light verb v assigns neither an external θ -role nor any Case value. Accordingly, there is no implicit argument involved in unaccusatives. The DP *the ship* is assigned a nominative Case value by T in the later derivation because vP is not a phase.¹⁹

¹⁹ It has been known that the unaccusative also behaves differently from the middle as follows:

- (i) a. The boat sank all by itself.
- b. *Bureaucrats bribe easily all by themselves.

(Keyser and Roeper 1984: 405)

According to Keyser and Roeper (1984), *all by itself* in (ia) means “totally without external aid.” This notion reflects that there is no external argument in unaccusatives, but some implicit external argument exists in middles. We can predict this difference if we assume the structure of middles as shown in (iia) and the condition (iib), in addition to the conditions in (30).

- (ii) a. [_{VP} bureaucrats_i [_{v*} IMP_{arb} [_{v*} v^* [_{VoiceP} -MID [_{VP} bribe t_i]]]]]
- b. v^* merges IMP_{arb} and is assigned an EPP-feature iff v^* selects -MID.

I propose that IMP_{arb} is basically the same as PRO_{arb} proposed in Stroik (1995), and that the head of

Therefore, what distinguishes passives from unaccusatives is the existence of v^* in the structure.

4.2 *Absence of Passive Unaccusative*

In this section, I would like to answer the question why there is no passive unaccusative. This question may sound strange, but if the sentence (42a) is an active sentence, there seems to be no a priori reason why its passive counterpart (42b) should be excluded.

- a. Fune-ga sizum-ta. (sizum-ta → sizunda)
 ship-NOM sink-PAST
 ‘The ship sank.’
- b. * Fune-ga (Ken-niyotte) sizum-are-ta.
 ship-NOM (Ken-by) sink-PASS-PAST
 ‘(Lit.) The ship was affected (by Ken) letting it sink.’
- c. Fune-ga (Ken-niyotte) sizum-er-are-ta.
 ship-NOM (Ken-by) sink-LC-PASS-PAST
 ‘The ship was sunk (by Ken).’

In the literature (e.g. Jaeggli (1986)), it has been stated that the passive morpheme is an argument that receives an external θ -role and accusative Case; thus, it can be compatible with only verbs that assign both of them.²⁰ This notion can be captured in the present framework by assuming the selectional restriction of light verbs, as in (43).

v^* may select *-en*, but v may not.

(43) can exclude (42b) because the light verb of (42b) is v and it may not select the passive morpheme. On the other hand, since the light verb of (42c) is v^* , it may select the passive morpheme and (42c) is grammatical. This is why there is no passive unaccusative.

One might point out that the unaccusative verb *arrive* can appear in passives, as in (44).

The solution was arrived at. (Hornstein and Weinberg 1981: 86)

VoiceP in middles is *-MID*. Although both $-\emptyset$ and *-MID* are phonetically null elements in English, according to Fujita (1994), these two morphemes are phonetically different in Japanese where we have the paradigm of *kowas* ‘transitive *break*’ and *kowas-er* ‘middle *break*.’ I also suggest that middles cannot be compatible with rationale clauses because middle sentences are generally stative. The stative reading in middles may come from *-MID*, but I leave this issue for future research.

²⁰ According to Fujita and Matsumoto (2005), not only transitive verbs but unergative verbs also have such properties.

According to my informants, however, (44) is different from a “true” unaccusative sentence like (45a), since we can find a difference between (46a, b).

- a. John arrived at the station.
- b. * The station was arrived at.
- a. There arrived a man at the station.
- b. * There arrived a man at the solution.

I assume that *arrive* in (44) should be classified as a kind of unergative verb licensing the construction of pseudopassive.

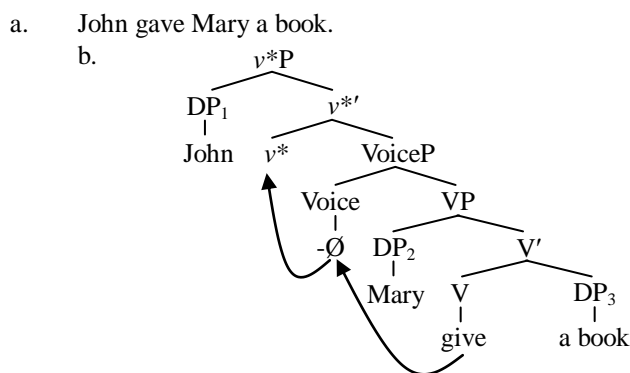
4.3 *v** and Accusative Case Assignment

In the previous sections, we have seen that *v** must exist in the derivation of passives because one of the properties of *v**, that of external θ -role assignment, is consistent with the behavior of passives. In the remaining subsections, I will focus on the other property of *v**, namely accusative Case assignment.

4.3.1 *The Passive of the DOC*

In this subsection, I focus on the passive of the DOC. As we have seen in section 2.2.1, there seems to be structural accusative Case assignment in the passive of the DOC in those dialects and languages where both the IO-passive and the DO-passive are possible. I would like to discuss whether structural accusative Case assignment is possible in passives. Therefore, I will treat only the DOCs of languages where both passives are acceptable.

First, I propose the structure of the active DOC as in (47).



In (47), I suggest that *v** agrees with DP₂ and DP₃ simultaneously, adopting Multiple Agree proposed by Hiraiwa (2005), as in (48).

MULTIPLE AGREE (multiple feature checking) with a single probe is a single simultaneous syntactic operation; AGREE applies to all the matched goals at the same derivational point *derivationally simultaneously*.

(Hiraiwa 2005: 38)

This is why both DPs have the same Case value, namely the accusative Case value.

According to Hiraiwa (2005), however, the two goals that agree with the same probe do not necessarily have the same Case value. The following are examples of nominative-genitive conversion in the Possessor-Raising Construction in Japanese:

- a. John-**ga** se-**ga** taka-i riyuu
 John-NOM height-NOM high-PRS.ADN reason
 ‘the reason why John is so tall’ [Nom-Nom]
- b. John-**no** se-**ga** taka-i riyuu
 John-GEN height-NOM high-PRS.ADN reason
 ‘the reason why John is so tall’ [Gen-Nom]
- c. John-**ga** se-**no** taka-i riyuu
 John-NOM height-GEN high-PRS.ADN reason
 ‘the reason why John is so tall’ [Nom-Gen]
- d. John-**no** se-**no** taka-i riyuu
 John-GEN height-GEN high-PRS.ADN reason
 ‘the reason why John is so tall’ [Gen-Gen]

(ibid.: 119–120)

He suggests that *John* and *se* ‘height’ in (49) Multiple-Agree with the same probe, and that the actual values of Case are determined at Transfer; therefore, the nominative and genitive Case values are freely assigned.

If the same thing happens to the DOC in Japanese, we can claim that *Hanako* and *tokubetusyoo* ‘special prize’ in (50) Multiple-Agree with the same probe, namely v^* .²¹

Sootyoo-ga Hanako-ni tokubetusyoo-o okur-ta.
 (okur-ta → okutta)
 president-NOM Hanako-DAT [special prize]-ACC award-PAST
 ‘The president awarded Hanako the special prize.’

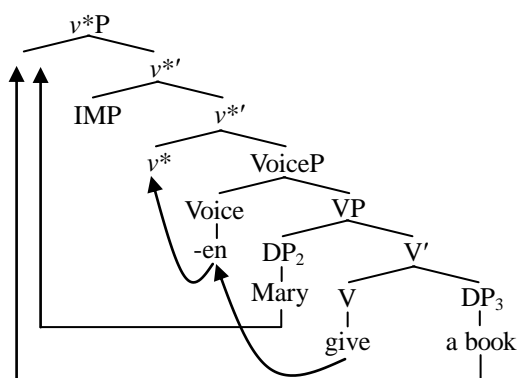
Accordingly, I propose that some dialects of English and Japanese have the same structure of the DOC as in (47).²²

²¹ I am not sure why dative and accusative Case values cannot be freely assigned in the DOC in Japanese. However, freedom of Case value assignment is not a necessary condition for Multiple Agree. According to Ken Hiraiwa (personal communication), it is possible to assume that both *Hanako* and *tokubetusyoo* ‘special prize’ Multiple-Agree with v^* in (50).

²² I also suggest that the structure of the DOC in Norwegian is the same as (47).

4.3.1.1 *The Structure of the Passive DOC*

Now, let us apply the structure of passives proposed in section 3 to the DOC. As we have seen, the head of VoiceP *-en* selects VP in passives. Thus, I propose that the structure of the passive DOC is (51).



Under the Principle of Simultaneity and Multiple Agree, v^* agrees with DP_2 and DP_3 simultaneously in (51). However, as I have proposed in section 3, the element that is raised to SPEC- v^* will not have a Case value because the Chain that has no Case value is selected to agree with T in the later derivation. Furthermore, if we follow Chomsky's (1995) notion of equidistance as in (52), DP_2 and DP_3 are equidistant from v^* , since both DPs are in the same minimal domain.

γ and β are equidistant from α if γ and β are in the same minimal domain.
(Chomsky 1995: 356)

Consequently, either DP can be raised to SPEC- v^* by the EPP-feature of v^* , and we can obtain both the IO-passive and the DO-passive in some dialects of English, Japanese, and Norwegian, where the structure of the passive DOC is (51). In both passives, the DP that is not raised to SPEC- v^* is assigned the same Case value as in the active because it agrees with v^* not only in the active but also in the passive. We can verify this from the examples of Japanese DOCs, as in (53).

- a. Sootyoo-ga Hanako-**ni** tokubetusyoo-**o** okur-ta.
(okur-ta → okutta)
president-NOM Hanako-**DAT** special.prize-**ACC** award-PAST
'The president awarded Hanako the special prize.'
(active)
- b. Hanako-ga sootyoo-niyotte tokubetusyoo-**o** okur-are-ta.
Hanako-NOM president-by special.prize-**ACC** award-PASS-PAST
'Hanako was awarded the special prize by the president.'
(IO-passive)

- c. Tokubetusyoo-ga sootyoo-niyotte Hanako-**ni**
 [special prize]-NOM president-by Hanako-**DAT**
 okur-are-ta.
 award-PASS-PAST
 ‘The special prize was awarded (to) Hanako by the president.’
 (DO-passive)

This supports the claim that v^* exists even in the structure of passives; otherwise, these phenomena cannot be explained. In addition to these Japanese examples, we can answer why the Case values of the non-subject arguments in the IO-passive and the DO-passive are the same as in the active counterpart in some dialects of English and Norwegian.²³

4.3.1.2 The Case of DO: Inherent vs. Structural

We have seen that the structure (51) can derive both passives of the DOC. In fact, we can find examples of both in certain dialects and languages. I have assumed that IO and DO are assigned structural Case in those dialects and languages, but I would like to confirm whether this is correct in order to prove that v^* assigns these Case values. Most researchers admit that IO is assigned structural Case in English, Japanese, and Norwegian. On the other hand, some researchers claim that DO is assigned inherent Case, and this is claimed to be the reason for the marginality of the DO-passive in most dialects of English.

Here I would like to claim that DO is actually assigned structural Case even in those dialects of English where the DO-passive is unacceptable. There are some cases in which an inherent Case argument is the subject. The most well-known example is the Icelandic Quirky subject, as in (54).

- | | | | |
|-------------------------|----------------------------|--------------------------|-----------------------|
| Henni | leiddust/*?leiddist | þeir. | |
| her _{DAT.3.SG} | bored _{3.PL/3.SG} | they _{NOM.3.PL} | |
| | ‘She was bored with them.’ | | (Taraldsen 1995: 307) |

Here, the Case of *henni* ‘her’ is inherent Quirky dative. Notice that this inherent Case subject does not agree with T.²⁴ If inherent Case subjects are generally unable to

²³ Ken-ichi Takami (personal communication) asks me how one can account for the unacceptability of the following example with the structure (51):

- (i) ?*Bob was knit a sweater by Sam. (Pinker 1989: 221)

This is an example of the passive of so-called *for*-dative verbs. Interestingly, Pinker (1989) claims that these verbs show piecemeal passivizability, and that not all *for*-dative verbs are unpassivizable. He proposes that this phenomenon is related to the patienthood of IO. In addition, Goldberg (2002) states that the following passive sentence is acceptable, although the verb *cook* is a *for*-dative verb:

- (ii) Mel was cooked a fine dinner by the new chef. (Goldberg 2002:331)

Thus, I assume that this problem is irrelevant to syntax, but I leave this for future research.

²⁴ According to Hiraiwa (2005), “default” agreement obtains in a structure where T’s only goal is a quirky element or its goals have different feature values.

agree with T, DO will not agree with T in the passive DOC in those dialects where the DO-passive is acceptable. Contrary to this prediction, as we see in (55), which are British English examples, T agrees with DO in the DO-passive of the DOC.

- a. The book was given Mary (by John).
 b. These letters were sent Mary (by John). (Ura 2000: 247)

Thus, it is untenable to claim that DO in the DOC is assigned inherent Case in those dialects of English in which the DO-passive is acceptable. Moreover, most of those who do not accept the DO-passive alter their judgments if IO is a pronoun, as illustrated in (56).²⁵

- a. The book was given her (by John).
 b. These letters were sent her (by John). (ibid.)

Again, DOs in (56) agree with T. Therefore, we can conclude that DO is assigned structural Case in the DOC in most dialects of English.

To summarize this subsection, there must be accusative Case assignment in passives at least in some dialects and languages where the DO-passive is acceptable, and this is only possible if we assume v^* in the structure of passives, although problems remain with respect to why the DO-passive is often unacceptable (see Amano (1998) and Ura (2000) for discussion).

4.3.2 *The Passive of the Possessor-Raising Construction*

As I have discussed in section 2.2.2, the passive of the Possessor-Raising Construction in Japanese, as in (18), which is repeated in (57), gives us another piece of evidence for the claim that accusative Case is assigned in passives.

- Naomi-ga Ken-niyotte atama-o tatak-are-ta.
 Naomi-NOM Ken-by head-ACC hit-PASS-PAST
 ‘Naomi was hit on the head by Ken.’

Again, the active counterpart of (57) is not acceptable, as illustrated in (58) (=19), but this unacceptability comes from the DoC.

- ?? Ken-ga Naomi-o_i [_{e_i} atama]-o tatai-ta.
 Ken-NOM Naomi-ACC head-ACC hit-PAST
 ‘Ken hit Naomi on the head.’

Recall that the DoC effect is triggered when multiple identical occurrences of the

²⁵ It is assumed that this is because an unstressed pronoun in English behaves as a clitic in syntax.

structural accusative Case value are morphophonologically realized within a single Spell-Out domain at Transfer.

According to Mihara and Hiraiwa (2006), in (58), *Naomi* and *atama* ‘head’ are in the same Spell-Out domain, and they Multiple-Agree with the same probe and are assigned structural accusative Case. Consequently, more than one structural accusative Case is morphophonologically realized within the same Spell-Out domain. This violates the DoC; hence, the unacceptability of (58).

At the same time, this means that the DoC effects can be obviated if there is only one accusative element in the same Spell-Out domain. As we have observed in section 2.2.2, scrambling of one of the accusative elements to the sentence-initial position or to the position in front of various *v**P/VP adverbs (e.g. *omoikkiri* ‘hard’) suppresses the DoC effects. Moreover, Hiraiwa (2008) points out that the DoC effects can be obviated by replacing one of the accusative Case-particles with a focus particle, as shown in (59).

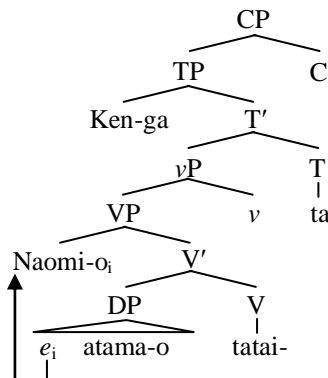
PF Case-suppression

- a. Ken-ga Naomi-*mo/dake/sae/wa*_i [_{e_i} atama]-o tatai-ta.
 Ken-NOM Naomi-also/only/even/TOP head-ACC hit-PAST
 ‘Ken hit also/only/even Naomi on the head.’
- b. Ken-ga Naomi-*o*_i [_{e_i} atama-*mo/dake/sae/wa*] tatai-ta.
 Ken-NOM Naomi-ACC head-also/only/even/TOP hit-PAST
 ‘Ken hit Naomi also/only/even on the head.’

(Hiraiwa 2008: 8)

From these facts, we can conclude that the Multiple Agree in (58) itself does not trigger the DoC effects, but that only the morphophonological realization of more than one structural accusative Case within a single Spell-Out domain violates the DoC.

Furthermore, Hiraiwa (2008) proposes (60) as the structure of (58).^{26, 27}



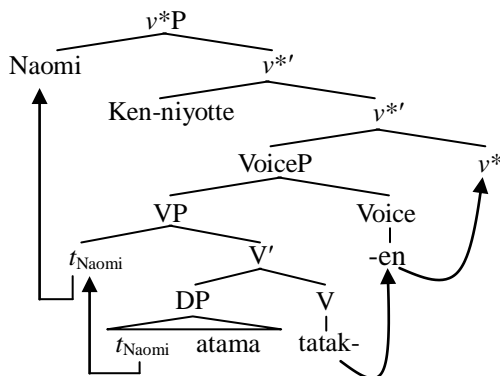
(Hiraiwa 2008: 14)

²⁶ In Hiraiwa (2008), the transitive light verb *v** is represented as *v*.

²⁷ Mihara and Hiraiwa (2006) assume another projection ‘AspP’ between *v* and VP, and they propose that the possessor (*Naomi*) and the possessee (*atama* ‘head’) are in the following configuration:

(i) [_{AspP} Naomi_i [_{Asp'} [_{VP} [_{DP} ti atama] V] Asp]]

Adapting this structure to the current passive structure, I propose (61) as the structure of (57).



In the derivation (61), VP is selected by the head of VoiceP *-en* as I have discussed, and this VoiceP is selected by v^* . Then, v^* merges the *niyotte*-phrase. *Ken-niyotte* ‘by Ken’ is assigned the external θ -role by v^* . Although *Naomi* and *atama* ‘head’ Multiple-Agree with v^* , *Naomi* is raised to SPEC- v^* by the EPP-feature of v^* and will not have a Case value because the Chain with no Case value is selected to agree with T in the later derivation. On the other hand, *atama* ‘head’ is assigned accusative Case just as in its active counterpart.

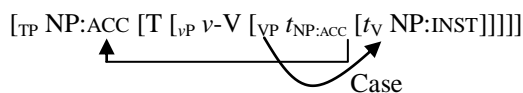
This phenomenon also requires the assumption that v^* exists in the passive structure. If we do not assume v^* in passives, we cannot explain why *atama* ‘head’ in (57) is assigned structural accusative Case.

4.3.3 The Ukrainian Passive

Finally, I would like to discuss the example of the Ukrainian passive as in (24), which I repeat here as (62).

Ja spodivajusja, [ščo cej žart ne bude
 I hope that this joke_{ACC} NEG will be
 vykorystano “Pravdoju Ukrajinjy”].
 used_[-AGR] Pravda_{INST} of Ukraine
 ‘I hope that this joke won’t be used by *Ukrainian Pravda*.’

[-AGR] in (62) means “no-agreement,” and Lavine and Freidin (2002) point out that this language has T that lacks agreement features while retaining the EPP-feature. They propose that *cej žart* ‘this joke’ in (62) is assigned the accusative Case value by v , which corresponds to v^* in the present framework, and that T’s EPP-feature raises it to SPEC-T. They suggest that the derivation of (62) is like (63).



They claim that this movement is distinguished from the discourse-oriented short-distance scrambling of arguments. They also state that scrambling disrupts focus projection, but that the displacement of the internal argument does not disrupt focus projection in (62). In addition, only the structurally Case-marked direct object undergoes Genitive of Negation (GenNeg). This is a syntactic operation where the direct object is obligatorily marked genitive (GEN) when it is lower than NEG. In contrast, lexically Case-marked NPs fail to undergo such a process. They point out that the direct object in a sentence like (62) undergoes GenNeg, as illustrated in (64), and that this is the evidence that *cej žart* ‘this joke’ in (62) is assigned structural accusative Case.²⁸

Na druhyj den' ne bilo najdeno joho čovna.
 on next day NEG was found_[-AGR] his boat_{GEN}
 ‘On the following day his boat wasn’t found.’

(Lavine and Freidin 2002: 267)

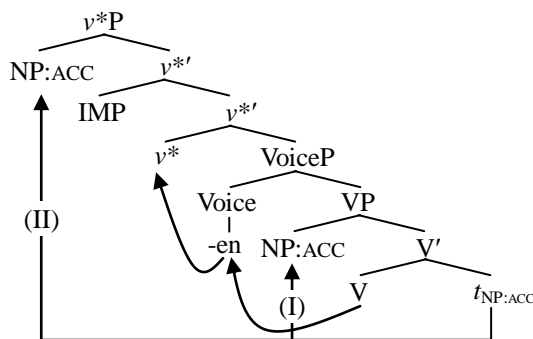
However, if we assume that structural Case is assigned only by a probe, v is a probe and vP corresponds to a phase in (63). It follows that T, which is outside the phase vP , cannot access NP:ACC due to the PIC. Accordingly, T’s EPP-feature is not satisfied and this derivation crashes, contrary to fact. We thus have to conclude that the derivation (63) is untenable.

In contrast, the present passive structure can derive (62) without violating the PIC. Recall the Case Value Selection Principle in (39), which is repeated as (65).

The Case Value Selection Principle

If two Chains are created simultaneously, either Case value is selected at Transfer.

We have two Chains of NP:ACC, as I show in (66).²⁹



²⁸ Here I do not discuss the word order in (64). See Lavine and Freidin (2002) for details.

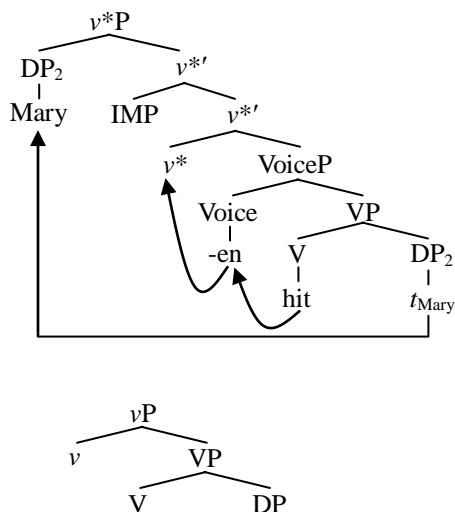
²⁹ I omit NP:INST for the sake of simplicity.

In section 3.2, I have proposed that the Case value of Chain (II) is selected in passives in English, Norwegian, and Japanese. In the Ukrainian passive, however, I propose that the Case value of Chain (I) is selected. This is because T lacks agreement features in this kind of passive and NP:ACC will not be assigned any Case value through the derivation if the value of Chain (II) is selected. The value of Chain (I) must be selected so that the derivation can converge. In addition, NP:ACC is raised to SPEC- v^* by the EPP-feature of v^* . Therefore, T can access NP:ACC without violating the PIC, and it is raised to SPEC-T by T's EPP feature if we adopt Lavine and Freidin's (2002) claim that an NP whose Case has been valued previously is not necessarily frozen in place.

This phenomenon cannot be explained without assuming v^* in the structure of the passive; otherwise, we have no way of assigning an accusative Case value in a sentence like (62). This fact is another piece of evidence to support my proposal.

SPEC- v^* AND EXPLETIVES

We have seen that the structure of passives in (32), repeated as (67), can predict various phenomena of passives that are not consistent with the structure in (1), whose tree diagram version I illustrate in (68).



Nevertheless, (67) appears to have some problems, and (68) might be superior to (67). As I have mentioned in section 3, v^* in (67) is assigned an EPP-feature, and it may follow that expletives can be External-Merged at SPEC- v^* above IMP, and that DP₂ cannot be raised to that position in such a derivation. There are two expletives in English, namely, *there* and *it*. Consider the case where the expletive *there* is Exter-

nal-Merged at SPEC- v^* . This type of derivation is excluded because the element that can agree with T is only the expletive *there*, and it does not have all ϕ -features to value T's uninterpretable ϕ -features (see Chomsky (2001, 2004)).^{30, 31} However, the expletive *it* has enough ϕ -features to value T's uninterpretable ϕ -features. It seems possible to External-Merge the expletive *it* at SPEC- v^* . If this were the case, the following ungrammatical sentence would be grammatical, contrary to fact:

*It was expected Sue's late arrival. (Pesetsky and Torrego 2001: 356)

Miyagawa (2008) distinguishes v^*P/vP from CP and calls the former *Argument Structure* and the latter *Expression Structure*. In order to exclude (69), I suggest the following condition:

Expletives cannot be External-Merged in Argument Structures.

An Expression Structure is necessarily accompanied by an Argument Structure. Accordingly, an expletive can always have its associate in the Argument Structure as soon as it is External-Merged in the Expression Structure. Moreover, when an expletive in the Expression Structure is *Internal-Merged* into the higher Argument Structure, it can be treated in the same way as an argument, since it always has its associate in the lower Argument Structure. On the other hand, if an expletive is External-Merged in the Argument Structure, there is no chance for the expletive to have its associate. Such a derivation crashes at the interface. Therefore, I propose that expletives are introduced into the derivation only to satisfy the requirement in Expression Structures. If the condition (70) is on the right track, expletives are never External-Merged at SPEC- v^* in passives, and an internal argument must be Internal-Merged at that position. Accordingly, the element that agrees with T is the internal argument, and the expletive *it* cannot be merged at SPEC-T in this type of sentence. This is why (69) is ungrammatical. In (69), the internal argument *Sue's late arrival* is Internal-Merged at SPEC- v^* . Then, T agrees with it, and there is no chance of merging the expletive *it*.

One might claim that (70) also appears to exclude the following grammatical sentence, contrary to fact:

It was expected that Sue would arrive late.
(Pesetsky and Torrego 2001: 356)

³⁰ I suggest that IMP (or a *niyotte*-phrase in Japanese) does not have an uninterpretable Case-feature and is inactive when T merges with v^*P .

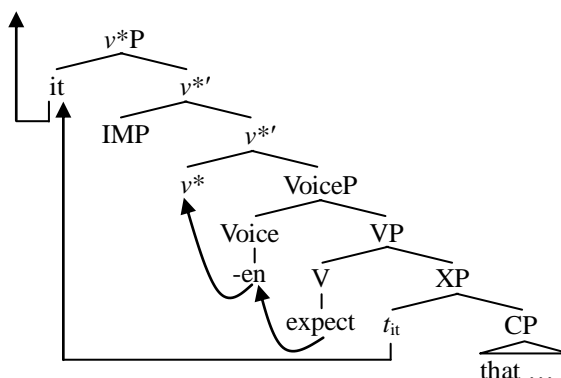
³¹ I propose that the expletive *there* is External-Merged at SPEC-T, and that the internal argument *a book* is Internal-Merged at SPEC- v^* in (ib).

(i) a. * There has been put a book on the table.
b. There has been a book put on the table.

(Lasnik 1999b: 88)

See also Julien (2006) for discussion.

However, we can consider that the expletive *it* in (71) is in fact Internal-Merged at SPEC- v^* , as in (72), and that it is not External-Merged at SPEC- v^* , since we can obtain its active counterpart as in (73).^{32, 33}



Someone expected it that Sue would arrive late.

Furthermore, if the expletive *it* is not included in the numeration, then *that Sue would arrive late* is Internal-Merged at SPEC- v^* and it agrees with T. Consequently, we obtain the following passive sentence.³⁴

³² Although I am not sure what projection XP in (72) corresponds to, we can find many examples like (73). The following sentences are all taken from *the British National Corpus*
 <<http://scn02.corpora.jp/~sakura04/cgi-bin/login1.cgi>>:

- (i) ... I would have thought it that the message would have got over to me honourable members before now.
- (ii) Now all the others are telling it that it's got to be the one to welcome the Ship.

³³ One might ask whether the analysis here is also compatible with the following examples:

- (i) a. It was surprising that John came back at midnight.
- b. It isn't certain who came to the party.

It seems natural to assume that the derivation of (i) differs from that of (ii) only in that the expletive *it* is included in the numeration in the former but not in the latter.

- (ii) a. That John came back at midnight was surprising.
- b. Who came to the party isn't certain.

Both (i) and (ii) are active sentences. Hence, I propose that (ia) and (iia) have the same derivation as in (iii).

- (iii) [_{CP1} C [_{TP} α [_T [_{vP} V [_{VoiceP} - \emptyset] [_{VP} was [_{AP} surprising [_{CP2} that ...]]]]]]]]]

To satisfy T's EPP-feature, the expletive *it* is External-Merged at α in (ia), and CP₂ is Internal-Merged at α in (iia). In (iii), CP₁, which includes TP, corresponds to an Expression Structure, and vP corresponds to an Argument Structure, which contains CP₂. Accordingly, the derivation of (i) does not violate the condition in (70) because α is a position in the Expression Structure.

³⁴ Koji Fujita (personal communication) points out to me that this analysis can also be applied to the following active-passive pair:

- (i) a. We took (it) for granted that he would pass the exam.
- b. It was taken for granted that he would pass the exam.

That Sue would arrive late was expected.

(Pesetsky and Torrego 2001: 356)

Therefore, we can conclude that the structure (68) is not superior to the structure (67), and that there is no problem in assuming that the structure of passives is (67).

FURTHER ISSUES

In this section, I argue the possibility that the transitive light verb v^* is divided into two types. At the same time, I focus on the structural position of *be* and *have* as in the following examples:

- a. John was not killed (by Mary).
- b. John must not be killed (by Mary).
- a. John had them paint his house.
- b. John had his house painted (by them).

Typically, English passive sentences accompany *be*, as in (75). (75a) shows that *be* in passives overtly raises to T, but if a modal auxiliary appears, it seems to stay in situ, as in (75b). In addition, *his house* in (76a) can be passivized within the complement domain of *have*, as in (76b). Note that *be* does not appear in such a case. As we will see below, I suggest that these phenomena are much related to lexical properties.

6.1 Three Types of Light Verb

I have proposed that the difference between actives and passives depends on what the transitive light verb v^* selects as its complement, as in (30), which I repeat in (77).

- a. v^* merges DP iff v^* selects $-\emptyset$.
- b. v^* merges IMP and is assigned an EPP-feature iff v^* selects *-en*.

However, it is still a mystery why v^* may select either $-\emptyset$ or *-en*, whereas v selects only $-\emptyset$, as I have proposed in (43). Thus, let us assume that the transitive light verb v^* is divided into two types: v^*_a and v^*_p . Both transitive light verbs basically share the same property, that is, the assignment of an accusative Case value and an external θ -role. They differ in that the former selects $-\emptyset$ and merges DP as its specifier while the latter selects *-en*, merges IMP, and is assigned an EPP-feature. Consequently, we have three types of light verb, v , v^*_a , and v^*_p . The complement and the specifier of these light verbs are as follows:

	complement	specifier
v^*_a	$-\emptyset$	DP
v^*_p	-en	IMP
v	$-\emptyset$	/

6.2 The Difference between English Passives and Japanese Passives

It is controversial why English passive sentences need *be* but Japanese ones do not. Hasegawa (1990) answers this question by assuming English passive predicates are adjectival while Japanese ones are verbal. She proposes that the structure of English passives and that of Japanese passives are as follows:³⁵

The Structure of English Passives

- a. The child was scolded by the teacher.
- b. $[_{IP} \text{ the child}_j [_{I'} \text{ was } [_{AP} t_j [_{A} \text{ scold}_i\text{-en}]] [_{VP} (\text{by}) \text{ the teacher } t_i t_j]]]]$

The Structure of Japanese Passives

- a. Kodomo-ga sensei-ni sikar-are-ta.
child-NOM teacher-by scold-PASS-PAST
'The child was scolded by the teacher.'
- b. $[_{IP} \text{ kodomo}_j\text{-ga } [_{I'} [_{VP1} t_j [_{VP2} \text{ sensei-ni } t_j t_i] \text{ sikar}_i\text{-are}] \text{-ta}]]$

According to her analysis, since English passive predicates are adjectival, they cannot form a sentence for themselves. This is why English passive sentences generally require *be*.

Indeed some passive predicates behave as an adjective in English, but not all passive predicates do so. Consider following examples:

- a. a $[_{A} \text{ broken}]$ radio
- b. A cup was broken.
- a. * the $[_{A} \text{ fed (to the baby)}]$ peas
- b. Peas were fed to the baby.
- a. * the $[_{A} \text{ sat-on}]$ chair
- b. The chair was sat on.

(modified from Carrier and Randall 1992: 192–194)

Although only (81a) is an example of adjectival passive, if all English passive predicates behave as an adjective as Hasegawa claims, it is a mystery why (82a) and (83a) are impossible. Furthermore, not all passive predicates in English can be modified by

³⁵ Hasegawa (1990) does not distinguish the *niyotte* passive and the *ni* direct passive.

the adverb *very*, as illustrated below.

- a. They were very impressed.
 b. * They were very killed.

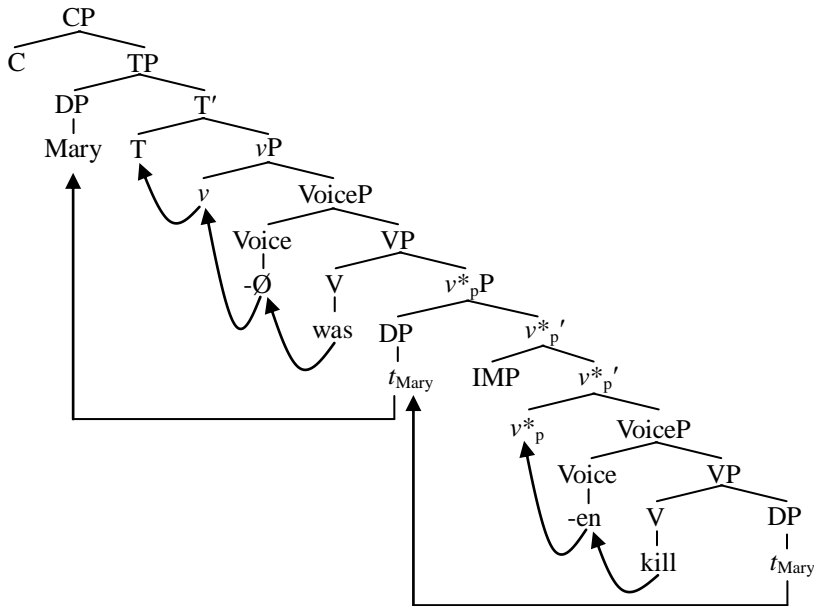
Therefore, it seems untenable to treat English passive predicates as an adjective, and we must find another way to explain the difference between English passives and Japanese passives.

To solve this problem, let us assume that T in Japanese can select all the light verbs in (78), but that T in English cannot select v^*_p P. Chomsky (2001) claims that parametric variation across languages is restricted to the lexicon. Thus, whether the passive needs to accompany *be* depends on the lexical property of T in the language.

Since T in English does not select v^*_p P, I suggest that v^*_p P in English needs to be selected by the unaccusative verb *be*. Therefore, *be* typically appears in English passive sentences.

To sum up, I propose that the structure of English passives is as follows:³⁶

- a. Mary was killed (by John).
 b.



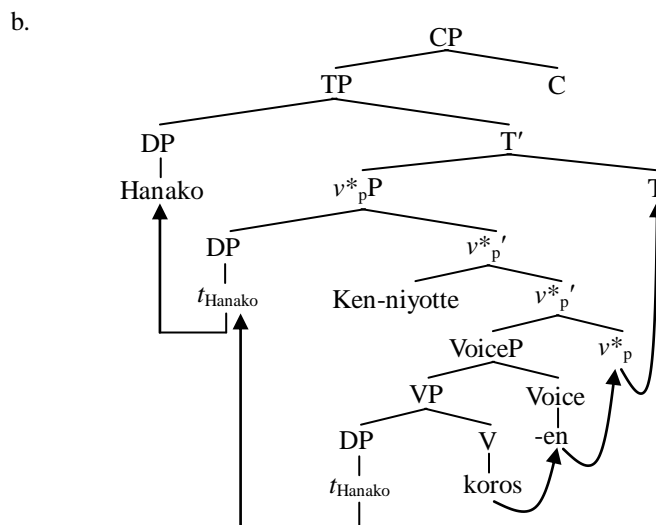
According to Lasnik (1999b), T (in his system, Infl) in (85) has a strong feature, and *be* is raised to T. On the other hand, if a modal auxiliary appears, as in (75b), *be* is

³⁶ Here I adopt Lasnik's (1999b) proposal that *be* is fully inflected in the lexicon.

raised to v via Voice but not raised to T. This is because T's strong feature is checked or deleted by the modal auxiliary.³⁷

In contrast, T in Japanese can select v^*_pP , and the structure of Japanese passives corresponds to (86).

- a. Hanako-ga Ken-niyotte koros-are-ta.
 Hanako-NOM Ken-by kill-PASS-PAST
 'Hanako was killed by Ken.'



Therefore, the difference between English passives and Japanese passives arises from the lexical property of T in each language.

6.3 The have Passive

As we have seen in the previous section, v^*_pP is selected by *be* in English. Since the following sentence is ungrammatical, it seems natural to assume that *be* cannot select v^*_aP as its complement:

- * John was kill Mary.
 (Intended meaning: 'John killed Mary.')

On the other hand, both v^*_aP and v^*_pP seem to be selected by *have*, as in (88) (= (76)).

³⁷ For V-to-T raising and verbal morphology, see Lasnik (1999b) and Bobaljik (1994).

- a. John had them paint his house.
- b. John had his house painted by them.

I propose that *have* in (88) is a transitive verb, and that *them* in (88a) and *his house* in (88b) are assigned an accusative Case value. I call sentences like (88b) “*have* passives.”

Recall that a transitive verb is a verb that is selected by the transitive light verb v^* (in the present framework, v^*_a or v^*_p), and that v^* assigns an external θ -role as well as an accusative Case value. Accordingly, *John* in (88) must be assigned an external θ -role. It has been observed that this external θ -role is Causer or Experiencer. Ritter and Rosen (1993) argue that the interpretation of *have*'s argument as Causer or Experiencer comes from the role it plays in the event, and that any ambiguity can be resolved through context and knowledge of the world. Accordingly, the external argument of *have* is Causer or Experiencer and should not be inanimate, as illustrated below.

*The confusion had Mary leave in a hurry. (Givón (1975: 75))

Furthermore, we can find some differences between *have* and *make* as follows:

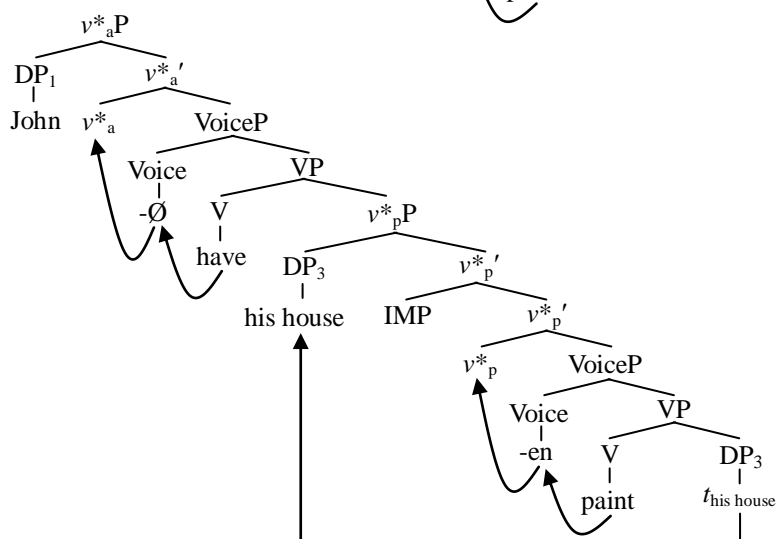
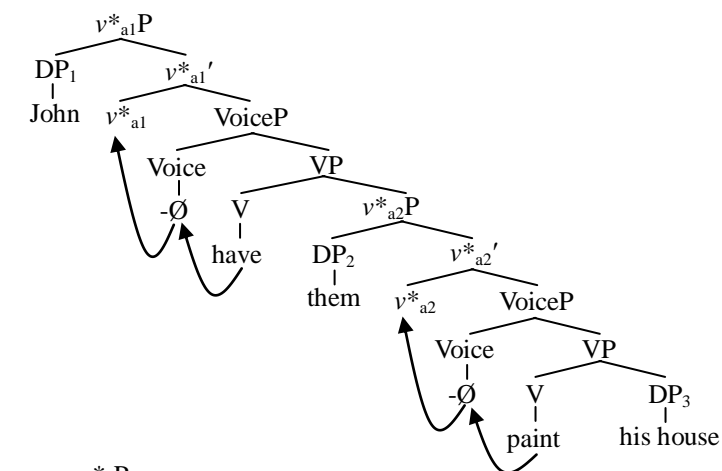
- a. * John had it seem likely that Bill had lied.
- b. John made it seem likely that Bill had lied.
- a. * The minister of finance had there be major cuts in the military budget.
- b. The minister of finance made there be major cuts in the military budget.

(Ritter and Rosen (1993: 541–542))

Make may take an expletive subject in the complement clause, but *have* may not. It has been assumed that expletives may appear only in non-thematic positions. Consequently, Ritter and Rosen (1993) claims that *make* selects IP as its complement while *have* takes a bare VP complement. They propose the following structures:

... [v^* make [$_{IP}$ Subj [$_{I'} I$...
 ... [v^* have [$_{VP}$ Subj [$_{V'} V$...

Following their analysis, I assume that *have* takes either v^*_aP or v^*_pP as its complement, and I propose (94) as the structure of (88a) and (95) as the structure of (88b).



In (94), *have* selects $v^*_{a2}P$. *them* is assigned an accusative Case value by v^*_{a1} , and v^*_{a1} projects the external argument *John*. On the other hand, *have* in (95) selects $v^*_{p}P$. *his house* is raised from the base position to SPEC- v^*_{p} by the EPP-feature of v^*_{p} . Next, *his house* is assigned an accusative Case value by v^*_{a} , and v^*_{a} projects the external argument *John*.

To summarize this section, whether the passive requires *be* or not depends on the lexical property of T. In addition, $v^*_{p}P$ can be selected by not only *be* but also *have*. If it is selected by *have*, an additional external argument, i.e. Experiencer/Causer, is projected, since *have* is a transitive verb. Accordingly, the difference between the *have* passive and the *be* passive is the existence of the Experiencer/Causer argument.

CONCLUSION

In this thesis, I have demonstrated that the structure of passives is different from that of unaccusatives. In the literature, it has been assumed that these two constructions have the same structure because there is no overt external argument and no accusative Case assignment in both constructions. I have proved that this assumption is not empirically correct by demonstrating that there is an implicit external argument in passives and that an accusative Case value is assigned in some passive sentences. These phenomena cannot be explained without assuming the transitive light verb v^* in the derivation of passives.

Following Multiple Agree and the Principle of Simultaneity presented by Hiraiwa (2005), I have proposed that an internal argument agrees with both the Agree feature and the EPP-feature of v^* simultaneously in the passive. With this proposal, the internal argument can be raised to SPEC-T without violating the PIC. By assuming v^* in the structure of passives, I have suggested that the internal argument is assigned an accusative Case value through the agreement with v^* in some Ukrainian passives, while it is not assigned any Case value through this agreement in passives in the other languages. In addition, if there is another internal argument, it can be assigned the same Case value as in its active counterpart.

Furthermore, dividing the transitive light verb into two types makes it possible to account for why the passive typically requires *be* in English but not in Japanese. We have also observed that passivization occurs within the complement domain of *have*. In such a sentence, the external θ -role Experiencer/Causer is assigned to the external argument of *have*, and an accusative Case value is assigned to the internal argument that is raised to SPEC- v^* P in the complement domain of *have*.

I have presented some evidence of accusative Case assignment in passives and have accounted for those phenomena under the Minimalist Program framework by proposing the structure (67).

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