# Japanese RARE-constructions and the nature of the passive

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#### Abstract

In this paper, we argue that the RARE-constructions in Japanese are all genuinely passives in the sense that they involve either demotion or removal of an argument in the syntax. For the analysis, we suggest that the RARE-constructions are derived with a passive element, Pass(ive), whose essential function is to suppress an argument of its sister predicate. The constant and variable properties across different types of RARE-constructions are attributed to the interactions of Pass with the other elements involved in their derivations such as Aff(ect) and T(ense). The paper also discusses the nature of ni and niyotte, both of which are often considered to be elements introducing a demoted 'agent' argument. We suggest that the different distributions between the two arise because the former is a semantically vacuous argument introducer, whereas the latter is a semantically contentful 'causer' introducer. If the analyses presented in this paper are tenable, the paper will constitute a support for the views that passives do not necessarily involve suppression of an 'external' argument and that so-called non-canonical passives can also be a true passive to the extent that its derivation involves Pass.

Keywords: passive, passivization, direct passive, indirect passive, demotion, Japanese

#### 1 Introduction

The constructions called "passives" exhibit a wide range of properties across languages. Of the various properties exhibited by the purported passives in the world languages, it has long been noted that the defining characteristic of the passive should be suppression of an external argument (Comrie 1977; Marantz 1984; Shibatani 1985; Baker 1988; Keenan and Dryer 2007; Legate 2012, 2014; Bruening 2013; Bruening and Tran 2015; Williams 2015). Under this criterion, some of the constructions previously thought passives have been claimed not to be passives but something else. For instance, some of the BI/DUOC-constructions in Vietnamese were argued not to be the passive, contra the traditional analysis of the constructions, but instead to be the active accompanied by an argument introducer that brings about some not-at-issue entailment of suffering or benefit (Bruening and Tran 2015). The so-called "passives of passives" and "passives of unaccusatives" in Turkish have also been suggested to be the impersonal that projects a null pronoun in the internal argument position, not the "passive" that involves suppression of an internal argument (Legate et al. 2020).

The constructions with the morpheme -(r) are in Japanese are generally called the passive in Japanese literature; yet, they do not show uniform properties, and they are often categorized into two distinct types, namely, "direct" and "indirect" RARE-constructions (see Hoshi 1999 and Iwasaki 2018, among others, for reviews). The former is exemplified in (1a), and the latter in (1b).

- (1) a. Hanako-ga sensei-ni sikar-are-ta. Hanako-nom teacher-by scold-pass-pst 'Hanako was scolded by the teacher.'
  - b. Hanako-ga sensei-ni musume-o sikar-are-ta.
     Hanako-NOM teacher-by daughter-ACC scold-PASS-PST
     'Hanako was affected by the daughter's being scolded by the teacher.'

Roughly speaking, in both (1a) and (1b), the referent of the surface subject, *Hanako*, is interpreted to be affected by the event described by the rest of the sentence, where the term "affected" is used with

the sense that it has in common use, covering both "affected theme" (i.e., patient; Dowty 1991) and "affected experiencer" (Bosse, Bruening, and Yamada 2012). In (1a), *Hanako* refers to the affected theme of the scolding event, and in (1b), it refers to the affected experiencer of the scolding event. So, in both sentences, the surface subject is an affected argument of some sort, which would function as the direct object in the active in the sense of Dowty (1991); accordingly, they are grouped together as the passive. Upon close inspection, however, the subjects in the two sentences have different semantics from each other: while the subject is affected directly within the verbal event in (1a) (it is the patient participant of the scolding event), it is affected only indirectly by the verbal event in (1b) (it is not a participant of the scolding event itself) (cf. Washio 1993). So, they are distinguished from each other and referred to as the direct or the indirect RARE-construction, respectively.<sup>1</sup>

The two types of RARE-constructions show some syntactic differences as well. One of the differences is that intransitive verbs are not allowed in the direct RARE-construction as in (2a-b), but they are allowed in the indirect RARE-construction as in (3a-b) (see Sect. 2 for more differences between the two).<sup>2</sup>

- (2) a. \* Ame-ni fur-are-ta.
  rain-by fall-PASS-PST
  Intended: 'It was fallen by rain.'
  - b. \* Taroo-ni hasir-are-ta.Taro-by run-PASS-PSTIntended: 'It was run by Taro.'
- (3) a. Hanako-ga ame-ni fur-are-ta.
  Hanako-nom rain-by fall-pass-pst
  'Hanako was affected by being fallen by rain.'
  - b. Hanako-ga Taroo-ni hasir-are-ta.
     Hanako-Nom Taro-by run-PASS-PST
     'Hanako was affected by being run by Taro.'

If the sole criterion identifying a construction as the passive were suppression of an external argument, the indirect RARE-construction might not be the passive at all since it is permitted to involve an unaccusative verb which lacks an external argument as in (3a). Nonetheless, we argue that Japanese RARE-constructions are all actually passives, suggesting that the defining feature of the passive should be suppression of any argument rather than of an external argument.

Specifically, we define the passive as a construction that involves a passive element, *Pass(ive)*, shown below (Bruening 2013).

(4) 
$$[\mathbf{Pass}] = \lambda P_{\langle \mathbf{e}, \mathbf{st} \rangle}(\exists \mathbf{x})[P((\mathbf{x}))] (= \lambda P_{\langle \mathbf{e}, \mathbf{st} \rangle}[P] \text{ or } \lambda P_{\langle \mathbf{e}, \mathbf{st} \rangle} \exists \mathbf{x}[P(\mathbf{x})])$$

The essential function of Pass is to suppress an argument in the syntax. It does so by requiring its complement to be an unsaturated predicate of type  $\langle e, st \rangle$ . That is, the passive head, by requiring its complement

<sup>1.</sup> It has been claimed that the RARE-constructions can be further categorized into some distinct types. The direct RARE-constructions, for instance, have been suggested to be distinguished into "-ni" RARE-constructions and "-niyotte" RARE-constructions (Kuroda 1979, 1992); and the indirect RARE-constructions have been suggested to be distinguished into "gapped" RARE-constructions and "gapless" RARE-constructions (Kubo 1992). In this paper, we focus on the distinction between the direct and indirect RARE-constructions, while discussing the other categorizations when necessary.

<sup>2.</sup> Ishizuka (2010) reports that the indirect RARE-construction with an unergative verb is judged unacceptable by the native speakers of Japanese with no background in linguistics. The questionnaire surveys that she conducted do not provide any supporting context for the presented examples, and in the out-of-the-blue context, an example like (3b) indeed sounds bad. However, the fact that an example is judged unacceptable without a supporting context does not necessarily mean that it cannot be generated in grammar. It may be just that the example is judged infelicitous because there seems to be no appropriate context in which the example might ever be used: if an example cannot be used in *any* context that one can imagine, it might as well be just taken to be a bad expression. But an example like (3b) has been generally considered to be grammatical in the literature, and the native speakers of Japanese that we have consulted find it acceptable with a supporting context (e.g., the context for (3b) can be: Taro's room is right above Hanako's room, and Taro's running around in his room makes Hanako distressed because of the loud banging noise that it generates). Ishizuka (2010, 140–142) herself also uses supporting contexts to argue that examples that are initially judged unacceptable can in fact be generated in grammar. Based on these considerations, we maintain with much of the previous literature that the indirect RARE-construction can be formed out of an unergative verb.

to remain open, prevents an argument from being projected within the complement predicate.

In addition to the essential function of Pass noted above, we suggest that Pass in Japanese has the following language-specific properties: (i) it requires an XP to occupy its specifier at some point in the derivation (i.e., it has the [EPP]) (cf. Collins 2005; Ishizuka 2010), and (ii) it optionally existentially quantifies over an unsaturated variable of the complement as indicated by the parentheses in (4). The requirement of Pass to have its specifier occupied may be satisfied by a demoted argument with the postposition -ni 'by', although, as we will argue in the following sections, it does not necessarily have to be the -ni phrase that satisfies the requirement. And the ability of Pass to existentially quantify over an unsaturated variable enables Pass to have an argument not projected in the syntax at all. The unsaturated argument of the complement predicate, then, will be either realized as the oblique -ni phrase at Spec,PassP ("demoted") or existentially closed ("(syntactically) removed"). We contend that the RARE-constructions in Japanese all make use of Pass in their derivations, and consequently, involve either demotion or removal of an argument in the syntax. Therefore, they are genuinely passives.

The information about what type of argument can undergo demotion or removal is not specified in the denotation of Pass. We propose that the type of argument that can be demoted or removed is determined in terms of the selectional specification of Pass in each language. In English, for instance, Pass selects for agentive VoiceP (Bruening 2013); consequently, the passive in English is in general compatible with transitive verbs (e.g., The book was reviewed by the newspaper) or unergative verbs (e.g., The bed was slept in by the queen), but not with unaccusative verbs (e.g., \*The hotel was remained in by the king). In the case of Japanese, on the other hand, we suggest that Pass selects for any VoiceP as its complement, under the assumption that Japanese has agentive Voice that comes with transitives and unergatives (Kratzer 1996) as well as expletive Voice that comes with unaccusatives (Schäfer 2008). This means that, in principle, the passive can be formed out of any class of verbs in Japanese so long as it comes with a VoiceP layer in the structure. But as noted in (2)–(3), the picture is more complicated, and intransitive verbs are not allowed in the direct RARE-construction while they are allowed in the indirect RARE-construction. As will be shown in Sect. 2, the direct and indirect RARE-constructions show further differences with respect to the compatibility with -ni and -niyotte (which are often taken to correspond to by in English passives) as well as the possibility of argument demotion/removal. The non-uniform properties of the RARE-constructions as such are attributed to the language-specific properties of Pass in Japanese as well as the interactions of the passive head with the other elements involved in the derivation, including (i) Aff(ect) (Bosse, Bruening, and Yamada 2012), which selects for PassP as its complement and introduces a non-selected affected experiencer argument in its specifier, and (ii) T(ense), which we assume to have the structural case feature, [NOM], that should be discharged through the spec-head relation with an NP that has not been assigned any case (cf. Shibatani 1978; Takezawa 1987).

This paper is organized as follows. In Sect. 2, we present the parallel behaviors of the direct and the indirect RARE-constructions, based on which we argue that the indirect RARE-construction is the passive to the extent that the direct RARE-construction is the passive. Towards the end of the section, we introduce some complications that must be addressed if the RARE-constructions were to be given a uniform passive account. In Sect. 3, we propose that the passive in any language involves the passive head introduced above, and claim that both the direct and the indirect RARE-constructions involve the passive head. In this section, the specific derivations of the RARE-constructions are presented along with the interactions between the passive head and the other syntactic elements involved in their derivations, offering an account of the peculiar behaviors of the two types of RARE-constructions. In Sect. 4, we discuss the nature of *-ni* and *-niyotte*, both of which are often considered to introduce a demoted agent argument in the passive in Japanese. Building on Bruening (2013) and Fukuda (2011), among others, we claim that *-ni* is a semantically vacuous postposition that provides its own argument to its sister open predicate, thereby saturating the unsaturated variable of the predicate; and *-niyotte* is an adjunct element

<sup>3.</sup> Note that not all transitive verbs can be passivized in English: e.g., *John has a new car* vs. \*A new car is had by *John* (Jackendoff 1972; Keenan and Dryer 2007; Williams 2015). It may be assumed that verbs like have, although transitive in English, do not come with agentive Voice, and consequently, cannot undergo passivization (contrary to, e.g., own, which can be passivized as in *The house is owned by my sister*, and thus can be taken to come with agentive Voice).

that introduces a causer argument into the structure. The different distributions of -ni and -niyotte in the RARE-constructions will be addressed under this view. Finally, in Sect. 5, we summarize the paper and conclude that the RARE-constructions can be given a uniform syntactic analysis while having the complications introduced in Sect. 2 successfully accounted for.

## 2 Japanese RARE-constructions are passives

The passive status of the direct RARE-construction is rather clear as its derivation appears to involve the grammatical processes that are involved in what is generally considered the passive in other languages. Specifically, as compared to the active in (5a), the direct RARE-construction in (5b) can be characterized by three derivational properties, namely, (i) suppression of an external argument, (ii) absorption of accusative case, and (iii) promotion of an internal argument to the clausal subject position. These properties are what are claimed to be the properties of the canonical passive in a language like English (Perlmutter and Postal 1984; Baker, Johnson, and Roberts 1989).

- (5) a. Neko-ga inu-o oikake-ta. cat-NOM dog-ACC chase-PST 'A cat chased a dog.'
  - b. Inu<sub>i</sub>-ga neko-ni t<sub>i</sub> oikake-rare-ta. dog-NOM cat-by chase-PASS-PST 'A dog was chased by a cat.'

It is not immediately obvious, however, if the indirect RARE-construction is also the passive since, as will be shown later in this section, it exhibits some patterns different from the direct variant and thus must involve at least some grammatical processes that are not involved in the canonical passive. However, the indirect RARE-construction shows certain characteristics that are also shown by the direct RARE-construction. If the characteristics common to the two types of RARE-constructions are the reflections of the essential feature of the passive, then the indirect RARE-construction may as well be considered the passive even though it is derived somewhat differently from the direct RARE-construction.

The most obvious characteristic of the indirect RARE-construction shared by the direct RARE-construction is that the selected argument of the stem verb that would function as the subject in the active is marked with the postposition -ni 'by'. So, the sole argument of the unaccusative in (6a) and the unergative in (7a) as well as the external argument of the transitive in (8a) are marked with -ni in the corresponding indirect RARE-construction in (6b), (7b), and (8b), respectively.

- (6) a. Taroo-ga sin-da.

  Taro-NOM die-PST

  'Taro died.'
  - b. Hanako-ga Taroo-ni sin-are-ta.
     Hanako-NOM Taro-by die-PASS-PST
     'Hanako was affected by being died by Taro.'
- (7) a. Taroo-ga hasit-ta.

  Taro-NOM run-PST

  'Taro ran.'
  - b. Hanako-ga Taroo-ni hasir-are-ta. Hanako-nom Taro-by run-pass-pst 'Hanako was affected by being run by Taro.'
- (8) a. Sensei-ga Taroo-o home-ta. teacher-NOM Taro-ACC praise-PST 'The teacher praised Taro.'

b. Hanako-ga sensei-ni Taroo-o home-rare-ta.
 Hanako-NOM teacher-by Taro-ACC praise-PASS-PST
 'Hanako was affected by Taro's being praised by the teacher.'

In both types of the RARE-constructions shown in (5) and in (6)–(8), the highest argument of the stem verb is marked with -ni. The -ni phrase in the direct RARE-construction must be a demoted argument, considering that the direct RARE-construction is obviously passive. If the -ni phrase in the indirect RARE-construction, it can be interpreted to mean that the -ni phrase in the indirect RARE-construction is also a demoted argument. And if passivization is characterized as "demotion of whichever role is bound by [the subject] in the active" (Williams 2015, 281), then both the direct and the indirect RARE-constructions can be considered the passive.

In fact, the NPs marked with -ni in the direct and indirect RARE-constructions pattern together exhibiting different behaviors from the goal argument marked with -ni in the ditransitive (Sadakane and Koizumi 1995). For instance, it has been reported that the -ni phrase in the direct RARE-construction cannot host a floating numeral quantifier as in (9), while the -ni phrase in the ditransitive can as in (10). The -ni phrase in the indirect RARE-construction appears to pattern with that in the direct RARE-construction and does not allow a floating numeral quantifier as in (11a-c).

- (9) \* Taroo-ga sensei-ni san-nin home-rare-ta.

  Taro-NOM teacher-by 3-CL praise-PASS-PST

  Intended: 'Taro was praised by three teachers.' (Goro 2006, 237)
- (10) Sensei-ga gakusei-ni san-nin hanataba-o age-ta. teacher-NOM student-DAT 3-CL bouquet-ACC give-PST 'The teacher gave a bouquet to three students.' (Goro 2006, 237)
- (11) a. \* Hanako-ga gakusei-ni san-nin sin-are-ta.

  Hanako-Nom student-by 3-CL die-PASS-PST

  Intended: 'Hanako was affected by being died by three students.'
  - b. \* Hanako-ga gakusei-ni san-nin hasir-are-ta.

    Hanako-NOM student-by 3-CL run-PASS-PST
    Intended: 'Hanako was affected by being run by three students.'
  - c. \* Taroo-ga sensei-ni san-nin ronbun-o home-rare-ta.

    Taro-NOM teacher-by 3-CL paper-ACC praise-PASS-PST

    Intended: 'Taro was affected by the paper being praised by three teachers.' (Goro 2006, 237)

It needs to be noted that the patterns of a floating numeral quantifier are not as straightforward as it appears in the examples above, since the judgment of the RARE-construction in which a floating numeral quantifier is associated with the -ni phrase varies across speakers and examples, and not only syntactic but also semantic and pragmatic factors seem to be involved in licensing a floating numeral quantifier (see Kitagawa and Kuroda 1992 and Kitagawa 2018). Ishizuka (2010, 186) also points out that there exist cases where the -ni phrase in the ditransitive cannot host a floating numeral quantifier. Since it is beyond the scope of this paper, we will not attempt to identify the exact environments where a floating quantifier can be licensed. The point of the examples in (9)–(11) is that the -ni phrases in the direct and indirect RARE-constructions can be the same element, contra, e.g., Miyagawa (1989) who suggests that the -ni phrase in the direct RARE-construction is an adjunct PP whereas that in the indirect RARE-construction is a dative-marked argument NP.

The -ni phrases in the direct and indirect RARE-constructions behave similarly in the cleft construction as well. While -ni in the direct RARE-construction must appear in the focus position of a cleft construction as in (12), -ni in the ditransitive must not as in (13); and the indirect RARE-construction patterns with the former as illustrated in (14a–c).

- (12) Taroo-ga home-rare-ta-no-wa Tanaka sensei\*(-ni)-da. Taro-NOM praise-PASS-PST-NMZ-TOP Tanaka teacher\*(-by)-cop 'It is by Mr. Tanaka that Taro was praised.' (Goro 2006, 237)
- (13) Taroo-ga hanataba-o age-ta-no-wa Hanako(??-ni)-da. Taro-Nom bouquet-ACC give-PST-NML-TOP Hanako(??-DAT)-COP 'It is Hanako to whom Taro gave a bouquet.' (Goro 2006, 237)
- (14) a. Hanako-ga sin-are-ta-no-wa Taroo\*(-ni)-da. Hanako-nom die-pass-pst-nml-top Taro\*(-by)-cop 'It is by Taro that Hanako was affected by being died.'
  - b. Hanako-ga hasir-are-ta-no-wa Taroo\*(-ni)-da. Hanako-nom run-pass-pst-nml-top Taro\*(-by)-cop 'It is by Taro that Hanako was affected by being run.'
  - c. Taroo-ga ronbun-o home-rare-ta-no-wa Tanaka sensei\*(-ni)-da.

    Taro-NOM paper-ACC praise-PASS-PST-NMZ-TOP Tanaka teacher\*(-by)-COP

    'It is by Mr. Tanaka that Taro was affected by his paper's being praised.' (Goro 2006, 237)

It has also been reported that the NP marked with -ni in the direct RARE-construction cannot undergo relativization as in (15), whereas the NP marked with -ni in the ditransitive can as in (16) (Ishizuka 2010). The NP marked with -ni in the indirect RARE-construction cannot be relativized as shown in (17a-c), patterning yet again with the direct RARE-construction.

- \* [Doroboo-ga t<sub>i</sub> tukamae-rare-ta] keisatukan<sub>i</sub>-ga yuumei-ni nat-ta.
  [thief-nom catch-pass-pst] police.officer-nom famous-dat become-pst
  Intended: 'The policeman by whom the thief was caught became famous.' (modified from Ishizuka 2010, 97)
- (16) [Sensei-ga t<sub>i</sub> hon-o watasi-ta] gakusei<sub>i</sub>-ga yorokon-da.
  [teacher-NOM book-ACC hand-PST] student-NOM be.pleased-PST
  'The student to whom the teacher handed a book was pleased.' (modified from Ishizuka 2010, 98)
- (17) a. \* [Sensei-ga t<sub>i</sub> sin-are-ta] gakusei<sub>i</sub>-ga kono tegami-o nokosi-ta.

  [teacher-nom die-pass-pst] student-nom this letter-acc leave-pst

  Intended: 'The student by whom the teacher was affected by being died left this letter.'
  - b. \* [Hahaoya-ga t<sub>i</sub> oyog-are-ta] kodomo<sub>i</sub>-ga warat-ta.
     [mom-NOM swim-PASS-PST] child-NOM laugh-PST
     Intended: 'The child by whom Mom was affected by being swum laughed.'
  - c. \* [Gakusei-ga t<sub>i</sub> ronbun-o home-are-ta] sensei<sub>i</sub>-ga betuno gakusei-o yon-da. [student-nom paper-acc praise-pass-pst] teacher-nom different student-acc call-pst Intended: 'The teacher by whom the student was affected by his paper's being praised called another student.'

The parallel patterns of the -ni phrase in both types of RARE-constructions, distinct from the patterns of the -ni phrase in the ditransitive, suggest that the -ni phrase in the indirect RARE-construction is the same element as that in the direct RARE-construction. If the -ni phrase in the latter is not a dative-marked noun phrase but a postposition phrase, then so must be the -ni phrase in the former. In the same vein, if the -ni phrase in the latter is not a normally projected dative argument but a demoted argument in an oblique phrase, so must be the -ni phrase in the former.

Yet another piece of evidence for the passive status of the indirect RARE-construction comes from the possibility of argument removal and the accompanying existential interpretation. When transitive verbs are involved, the agent argument marked with -ni in both the direct and indirect RARE-constructions can be omitted as shown in (18a) and (18b), respectively, just as the agent argument marked with by in the English passive can.

- (18) a. Inu-ga (neko-ni) oikake-rare-ta. dog-NOM (cat-by) chase-PASS-PST 'A dog was chased (by a cat).'
  - b. Hanako-wa (sensei-ni) musume-o sikar-are-ta.
     Hanako-TOP (teacher-by) daughter-ACC scold-PASS-PST
     'Hanako was affected by the daughter's being scolded (by a teacher).

And when it is omitted, the missing argument is interpreted existentially, again just like that in the English passive. The existential interpretation of the missing argument in the direct and indirect RARE-constructions can be demonstrated by the facts that (i) it can be the inner antecedent of a following sluiced wh-phrase (Chung, Ladusaw, and McCloskey 1995; Legate 2014; Tomioka and Kim 2017), (ii) it cannot be bound or controlled (Bhatt and Pancheva 2006; Bruening and Tran 2015), (iii) it cannot license a reflexive pronoun<sup>4</sup> (Alexiadou, Anagnostopoulou, and Schäfer 2018), and (iv) it takes obligatory narrow scope with respect to negation (cf. Chung and Ladusaw 2004), among others. The respective cases are exemplified below, where the 'a' sentences are instances of the direct RARE-construction and the 'b' sentences instances of the indirect RARE-construction.

- (19) The missing argument can be the inner antecedent of a sluiced wh-phrase
  - a. Watasi-wa Hanako-ga home-rare-ta-to kii-ta-ga dare-ni-ka-wa wakara-nai I-TOP Hanako-NOM praise-PASS-PST-COMP hear-PST-but who-DAT-Q-TOP know-NEG 'I heard that Hanako was praised, but I don't know by whom.'
  - b. Watasi-wa Hanako-ga Taroo-o home-rare-ta-to kii-ta-ga dare-ni-ka-wa wakara-nai.

    I-TOP Hanako-NOM Taro-ACC praise-PASS-PST-COMP hear-PST-but who-DAT-Q-TOP know-NEG
    'I heard that Hanako was affected by Taro's being praised, but I don't know by whom (Taro was praised).'
- (20) The missing argument cannot be bound or controlled
  - a. Subete-no kisya-wa syusyou-ga intabyuus-are-ru koto-o nozon-de i-ru. all-GEN reporter-TOP prime.minister-NOM interview-PASS-PRS thing-ACC want-CONN be-PRS 'Every reporter wants the Prime Minister to be interviewed (by someone).'
    - \*'Every reporter; wants the Prime Minister to be interviewed by them;.'
  - b. Subete-no kisya-wa syusyou-ga musume-o intabyuus-are-ru koto-o nozon-de all-GEN reporter-TOP prime.minister-NOM daughter-ACC interview-PASS-PRS thing-ACC want-CONN i-ru.

be-PRS

- 'Every reporter wants the Prime Minister to be affected by the daughter's being interviewed (by someone)'
- \*'Every reporter<sub>i</sub> wants the Prime Minister to be affected by the daughter's being interviewed by them<sub>i</sub>'
- (21) The missing argument cannot license a reflexive pronoun
  - a. \* Hanataba-ga zibun-ni age-rare-ta.
    bouquet-NOM self-DAT give-PASS-PST
    Intended: 'A bouquet was given to himself/herself.'
- 4. This is not entirely clear in some languages like English, as there are cases in which a reflexive pronoun appears to be licensed by the missing argument of a passive as exemplified below.
  - (i) a. Such privileges should be kept to oneself. (Collins 2005, 101; originally from Baker, Johnson, and Roberts 1989)
    - b. Damaging testimony is always given about oneself in secret trials. (Collins 2005, 101; originally from Roberts 1987)

However, Alexiadou, Anagnostopoulou, and Schäfer (2018) point out that examples like (ia–b) are rather impossible across languages, and that the reported cases in English literature all involve modality or negation (which is pointed out to them by Norbert Hornstein). Based on these considerations, we assume with Alexiadou, Anagnostopoulou, and Schäfer that the missing argument of a passive itself is not a licenser of a reflexive pronoun.

b. \* Hanako-ga zibun-ni hanataba-o age-rare-ta.
 Hanako-NOM self-DAT bouquet-ACC give-PASS-PST
 Intended: 'Hanako was affected by a bouquet's being given to himself/herself.'
 (where 'himself/herself' = the bouquet-giver)

- (22) The missing argument takes obligatory narrow scope
  - a. Kabe-ga nur-are-nakat-ta.
    wall-NOM paint-PASS-NEG-PST
    'It was not the case that the wall was painted by someone.' (¬ > ∃)
    \*'There was someone who did not paint the wall.' (∃ > ¬)
  - b. Hanako-ga kabe-o nur-are-nakat-ta.

Hanako-NOM wall-ACC paint-PASS-NEG-PST

'It was not the case that Hanako was affected by the wall's being painted by someone.'  $(\neg > \exists)$ 

\*'There was someone such that Hanako was affected by the wall's not being painted by him/her.'  $(\exists > \neg)$ 

The examples in (19)–(22) all indicate that the missing agent argument in the RARE-constructions is existential not pronominal, showing that both the direct and the indirect RARE-constructions can involve existential quantification like the passive in English.

The discussion so far suggests that the -ni phrase in the indirect RARE-construction is the same element with the -ni phrase in the direct RARE-construction: they are both an argument demoted to an oblique phrase, which is in principle allowed to be removed in the syntax through existential quantification. If demotion or removal of an argument is the essential feature of the passive as this paper contends, then the indirect RARE-construction must be categorized as the passive together with the direct RARE-construction.

There are a few complications for the unified view, however. First, intransitive verbs cannot be used in the direct RARE-construction, while they can in the indirect RARE-construction. This is illustrated in (2a–b) and (3a–b), repeated below.

- (23) a. \* Ame-ni fur-are-ta.
  rain-by fall-PASS-PST
  Intended: 'It was fallen by rain.'
  - b. \* Taroo-ni hasir-are-ta.

    Taro-by run-pass-pst
    Intended: 'It was run by Taro.'
- (24) a. Hanako-ga ame-ni fur-are-ta.
  Hanako-NOM rain-by fall-PASS-PST
  'Hanako was affected by being fallen by rain.'
  - b. Hanako-ga Taroo-ni hasir-are-ta.
     Hanako-Nom Taro-by run-pass-pst
     'Hanako was affected by being run by Taro.'

It is not immediately clear why the above contrast arises if both the direct and indirect RARE-constructions are the passive.

Second, although the -ni phrase can be omitted and interpreted existentially when the RARE-constructions are transitive-based as illustrated in (18)–(22), this is not possible when they are intransitive-based as shown below. In (25a–b), the missing argument is intended to be existential; the examples are not ungrammatical if the missing argument is interpreted to be a null pronoun referring to a specific individual in the context.

(25) a. \* Hanako-ga sin-are-ta.

Hanako-NOM die-PASS-PST

Intended: 'Hanako was affected by being died (by someone).'

Direct			Indirect		
unacc.	unerg.	tr.	unacc.	unerg.	tr.
Х	х	0	0	0	0
_	_	(ni)	*(ni)	*(ni)	(ni)
_	_	(niyotte)	*niyotte	*niyotte	(niyotte)

Table 1: The patterns of Japanese RARE-constructions (Note: x indicates 'impossible', o indicates 'possible', and – indicates 'not applicable')

b. \* Hanako-ga hasir-are-ta.
 Hanako-NOM run-PASS-PST
 Intended: 'Hanako was affected by being run (by someone).'

The fact that an oblique phrase is obligatory in the intransitive-based indirect RARE-construction can be particularly problematic for the view being pursued in this paper, in that such a pattern is rarely (if at all) attested in the passive across languages. In general, if the passive in a language allows an oblique phrase, it also allows the oblique phrase to be omitted entirely (e.g., the passive in English). Some languages are reported to have the passive obligatorily omit an argument as exemplified below (Lazdina 1966; Dryer 1994), but no language other than Japanese (assuming that the RARE-constructions are passives) seems to require the passive to have an oblique phrase while prohibiting the oblique phrase from being omitted.

- (26) Es tieku macits (\*no mates).

  I am taught (\*by mother)
  - 'I am taught.' (Latvian; Keenan and Dryer 2007, 331; originally from Lazdina 1966)

Lastly, the *-niyotte* phrase, which is often taken to introduce an agent argument in Japanese passives, is generally allowed in the transitive-based (direct or indirect) RARE-constructions as in (27a–b), but it is disallowed in the unaccusative-based or unergative-based (indirect) RARE-constructions as shown in (28a–b).

- (27) a. Inu-ga neko-ni/niyotte oikake-rare-ta. dog-NOM cat-by/owing.to chase-PASS-PST 'A dog was chased by a cat.'
  - b. Hanako-ga sensei-ni/niyotte musume-o sikar-are-ta.

    Hanako-NOM teacher-by/owing.to daughter-ACC scold-PASS-PST

    'Hanako was affected by the daughter's being scolded by the teacher.
- (28) a. Hanako-ga Taroo-ni/\*niyotte sin-are-ta. Hanako-NOM Taro-by/owing.to die-PASS-PST 'Hanako was affected by being died by Taro.'
  - Hanako-ga Taroo-ni/\*niyotte hasir-are-ta.
     Hanako-NOM Taro-by/owing.to run-PASS-PST
     'Hanako was affected by being run by Taro.'

Notice that *Taroo* in (28b) is the agent of *hasir*- 'run', suggesting that the incompatibility of *-niyotte* in the intransitive-based RARE-construction is not simply because the demoted argument is not an agent.

In short, it appears that the transitive-based (direct and indirect) RARE-constructions uniformly show passive-like behaviors, but the intransitive-based ones show mixed syntactic properties, obscuring the nature of the RARE-constructions. The patterns of the RARE-constructions are summarized in Table 1. The view that the RARE-constructions are all passives would offer a straightforward account of the distribution of the morpheme -(r)are and the postposition -ni that is accompanied by the morpheme. In order to maintain this view, however, it appears that the following issues must be addressed at the very least:

<sup>5.</sup> Thanks to Benjamin Bruening for pointing this out.

- A. Why are intransitive verbs incompatible with the direct RARE-construction, but they are compatible with the indirect RARE-construction?
- B. Why can the -ni phrase be omitted and interpreted existentially in the transitive-based (direct and indirect) RARE-constructions, but this is not possible in the intransitive-based (indirect) RARE-construction?
- C. Why is the *-niyotte* phrase allowed in the transitive-based (direct and indirect) RARE-constructions but not in the intransitive-based (indirect) RARE-construction?

In the remainder of this paper, we address these issues with the approach proposed in Sect. 3.

## 3 A syntactic account of the RARE-constructions in Japanese

Following Bruening (2013), we first suggest that the passive is a construction that involves a passive element, *Pass(ive)*, shown below.

(29) 
$$[\![ \mathbf{Pass} ]\!] = \lambda P_{\langle e, st \rangle}(\exists x)[P((x))] (= \lambda P_{\langle e, st \rangle}[P] \text{ or } \lambda P_{\langle e, st \rangle}\exists x[P(x)])$$

According to the denotation of Pass in (29), the complement of the passive head has to be an open predicate of type  $\langle e,st \rangle$ . By requiring its complement to remain semantically open as such, Pass prevents an argument from being normally projected in its complement predicate. We suggest that this is one of the universal features of Pass across languages. That is, the passive in any language is viewed to involve a predicate whose argument is not projected the way it would be in the active. Another feature of Pass that we claim is universal is the ability to existentially quantify over an unsaturated variable. Whether it is optional or obligatory, Pass in any language is capable of existentially quantifying over a variable; if a given head is inherently incapable of doing so, then it is not a passive head.

The universal features of Pass lead to the essential characteristic of the passive. The passive always involves an argument that is not projected in the usual way due to the requirement of Pass to take an open predicate; and the unprojected argument can be omitted in the structure due to the ability of Pass to existentially quantify over an unsaturated variable. That is, the passive is characterized to involve either demotion or (syntactic) removal of an argument. Note that Pass itself does not specify the type of argument that it can prevent from being projected in the usual way. It merely requires its complement to remain semantically open. So, in principle, the passive may involve demotion or removal of *any* argument, unless it is blocked by some other factors in the grammar of a given language.

We propose that -(r) are is the morphological realization of Pass in Japanese, and accordingly, the RARE-constructions all involve Pass in their derivation. We further suggest that Pass in Japanese has the following language-specific properties in addition to the universal features introduced above.

First, Pass in Japanese is specified to select for an element of category Voice as its complement. We assume that Voice comes in two variants: agentive Voice, which combines with transitives or unergatives (Kratzer 1996), and semantically vacuous expletive Voice, which combines with unaccusatives (Schäfer 2008; Alexiadou, Anagnostopoulou, and Schäfer 2015). The denotations of the two Voice heads are shown in (30a–b).

(30) a. 
$$[Voice_{ag}] = \lambda x \lambda e[agent(e,x)]$$
  
b.  $[Voice_{expl}] = \lambda P[P]$ 

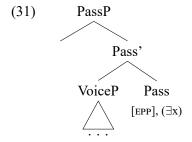
We claim that Pass in Japanese is underspecified such that it does not distinguish between agentive and expletive Voice. What this means is that the RARE-constructions in Japanese are, in principle, compatible with any class of verbs as long as it comes with a VoiceP layer, contrary to a language like English, in which Pass is specified to select for agentive Voice (Bruening 2013), and thus the passive is compatible only with transitive and unergative verbs (Perlmutter and Postal 1984). If certain verbs cannot be used in the RARE-constructions, it is attributed to independent factors in the grammar of Japanese.

Second, Pass in Japanese has the [EPP]. The [EPP] introduces a position in which the unprojected argument within the complement of Pass may be projected as an oblique phrase. We assume that the

[EPP] on Pass is not necessarily checked by the oblique phrase; any XP can check the [EPP] as long as it occupies Spec,PassP at some point in the derivation.<sup>6</sup> As for -ni that comes with the oblique argument at Spec,PassP, we assume that it corresponds to by in English passives in the sense of Bruening (2013): it is an element that provides an NP argument for its sister predicate.

Finally, Pass in Japanese optionally existentially quantifies over an unsaturated variable of its complement. Due to the optionality of existential quantification, the unprojected argument may be either omitted or projected as an oblique phrase at Spec,PassP. Languages may differ as to whether the existential quantification is optional or obligatory. In a language like Japanese, it is optional as indicated in (29); in a language like Latvian exemplified in (26), on the other hand, it is obligatory, meaning that the denotation of Pass in this language lacks the parentheses around the existential operator as in  $\lambda P_{(e,st)} \exists x [P(x)]$ .

To summarize, the RARE-constructions in Japanese are all derived through the passive head in (29); and the language-specific features of the passive head in Japanese cause the RARE-constructions to all be associated with the partial structure illustrated in (31).



In what follows, we elaborate the proposal with specific analyses of the RARE-constructions. We will call the RARE-constructions simply passives, hereafter.

#### 3.1 Derivations of the direct passive

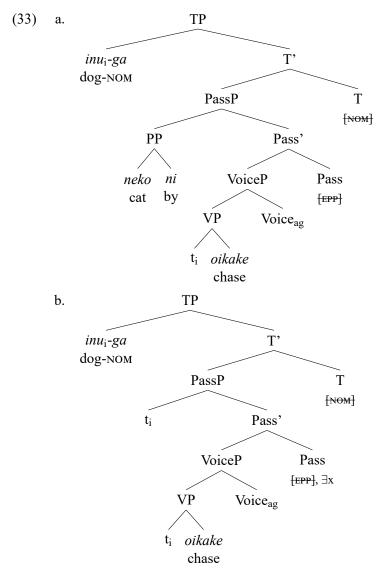
In the direct passive in Japanese, the theme argument appears in the surface subject position, and the agent argument either appears as an oblique phrase marked with the postposition -ni or is omitted and interpreted existentially.

(32) Inu-ga (neko-ni) oikake-rare-ta. dog-NOM (cat-by) chase-PASS-PST 'A dog was chased (by a cat).'

The direct passive with and without the oblique phrase in (32) is derived as in (33a) and (33b), respectively.

<sup>6.</sup> In principle, then, the VP complement of Voice may be able to check off the [EPP] on Pass along the lines of the smuggling approach to the passive (Collins 2005; see Ishizuka 2010 for the analysis of Japanese RARE-constructions under the smuggling approach). We will set aside this possibility by assuming that VP as a whole cannot escape from VoiceP because in order to do so, it must first move to the edge of the VoiceP phase (Chomsky 2000), but such movement is not licensed as it is too local (Bošković 1994; Abels 2003; Boeckx 2007). Even if VP could move out of VoiceP in certain environments (e.g., in the ditransitive where there is ApplP intervening between VoiceP and VP), the theme argument inside the moved VP, we assume, would not be able to move to Spec,TP due to the freezing effect (Culicover and Wexler 1977; Wexler and Culicover 1980), leading to a derivational crash.

A reviewer raises some fundamental questions about the [EPP], including the questions of what exactly is the nature of [EPP], why the [EPP] exists on some heads but not on others, and how it can be learned that certain heads have the [EPP] while others don't. Although these questions are of great importance and should be addressed eventually, we will have to leave to future research the task of looking for answers to these questions. We believe the presence of the [EPP] on Pass is worth assuming, even though more fundamental questions rerding the assumption could not be addressed for now, in that, as will be discussed below in the text, the simple assumption provides a principled account of the different behaviors between the direct and the indirect RARE-constructions, consequently making it possible to see both the constructions as the passive.



In both (33a) and (33b), the agentive Voice head does not project an argument in the specifier, having VoiceP remain an open predicate of type  $\langle e,st \rangle$ ; accordingly, VoiceP can be taken by Pass as the complement. The paths of the derivation diverge from this point on according to whether or not the passive head existentially quantifies over the unsaturated variable of VoiceP.

In (33a), Pass does not existentially quantifies over the unsaturated variable of VoiceP, and behaves like an identity function with the semantic requirement that its complement be a function of type  $\langle e, st \rangle$ . Consequently, Pass does not contribute any truth-conditional semantics at all to the structure, and Pass' merely inherits the semantics of VoiceP that contains the unsaturated variable. Pass, by virtue of being a semantically deficient functional head, cannot project its own argument in the specifier. The unsaturated variable, however, can be saturated by the oblique -ni phrase base-generated at Spec,PassP. As noted above, we assume that the postposition -ni in the Japanese passive corresponds to the preposition by in the English passive in the sense of Bruening (2013). Bruening suggests that by combines with an individual argument and a function argument of type  $\langle e, st \rangle$  in turn, where the former is of category N and the latter of category Voice. We suggest that -ni in Japanese has the same semantic requirements with by as illustrated in the denotation below, but it differs from by in that it syntactically requires the second argument to be of category Pass rather than of Voice.

(34) 
$$[\![\mathbf{ni}]\!] = \lambda x \lambda P_{\langle e, st \rangle} \lambda e[P(e, x)]$$
 (Bruening 2013, 25)

In this view, the unsaturated variable of Pass' is saturated by the -ni phrase, by means of -ni supplying its own argument to Pass'. The semantic composition from VoiceP to PassP in (33a) then will proceed as follows.

```
(35) a. [\![ \textbf{VoiceP} ]\!] = \lambda x \lambda e [\![ chase(e,t_i) \& agent(e,x)] ]
b. [\![ \textbf{Pass} ]\!] = \lambda P_{\langle e,st \rangle} [\![ P] ]
c. [\![ \textbf{Pass'} ]\!] = \lambda x \lambda e [\![ chase(e,t_i) \& agent(e,x)] ]
d. [\![ \textbf{ni} ]\!] = \lambda y \lambda P_{\langle e,st \rangle} \lambda e' [\![ P(e',y)] ]
e. [\![ \textbf{PP} ]\!] = \lambda P_{\langle e,st \rangle} \lambda e' [\![ P(e',cat)] ]
f. [\![ \textbf{PassP} ]\!] = \lambda e' [\![ chase(e',t_i) \& agent(e',cat)] ]
```

At the point where the -ni phrase saturates the open variable of Pass', it also checks the [EPP] on Pass by virtue of occupying Spec,PassP. The theme argument of oikake- 'chase' then moves to Spec,TP and checks off the [NOM] on T; and the derivation converges as all the relevant features have been properly checked off.

In (33b), on the other hand, Pass existentially quantifies over the unsaturated variable of VoiceP. In this case, Pass' does not have an open variable, so the -ni phrase does not appear at Spec,PassP. If it appeared at Spec,PassP, semantic composition would not be able to proceed any further due to type mismatch between PP and Pass' (PP is of type  $\langle \langle e, st \rangle, st \rangle$  and Pass' in this case is of type  $\langle st \rangle$ ). As for the [EPP] on Pass, it is checked by the theme argument stopping by Spec,PassP before moving further to Spec,TP. When the theme arrives at Spec,TP, it gets nominative case and discharges the [NOM] on T. Spec,PassP is not a case position, whereas Spec,TP is; accordingly, the theme argument is allowed to move cyclically as illustrated in (33b). The semantic composition from VoiceP to PassP in (33b) is illustrated below.

```
(36) a. [VoiceP] = \lambda x \lambda e[chase(e,t_i) \& agent(e,x)]
b. [Pass] = \lambda P_{\langle e,st \rangle} \exists y [P(y)]
c. [Pass'] = [PassP] = \lambda e \exists y [chase(e,t_i) \& agent(e,y)]
```

Note here that syntactic feature checking and semantic composition work independently of each other. That is, the fact that *inu* 'dog' occupies Spec,PassP at some point in the derivation in (33b) does not necessarily mean that it has to undergo semantic composition with Pass'. The moving NP merely checks off the syntactic feature of Pass, and it does nothing more. The open variable of VoiceP is existentially quantified over by Pass independently of the feature checking procedure.

It has been noted in (23a-b) that intransitive verbs are not compatible with the direct passive in Japanese. The ungrammaticality of (23a-b) can be given a simple account under the current approach. If an intransitive verb is used in the direct passive, the lone argument selected by the verb is demoted by Pass and marked with the postposition -ni. Since nominative case cannot be assigned to the -ni phrase in Japanese (\*Taroo-ni-ga ... 'Taro-by-NOM ...'), the [NOM] on T cannot be discharged, and accordingly the derivation crashes.<sup>7</sup>

In short, in order for the derivation of a direct passive to converge, a caseless nominal is required that checks off the [NOM] on T. Although transitive verbs can provide such a nominal after an argument being demoted by Pass, intransitive verbs cannot; therefore, the former can but the latter cannot be used in the direct passive. The current approach, in this sense, is essentially the case absorption analysis proposed by Miyagawa (1989) restated from a syntactic perspective.<sup>8</sup>

The analysis so far addresses two of the three derivational properties of the canonical passive in Japanese, i.e., suppression of an external argument (which is attributed to the denotation of Pass) and promotion of an internal argument to the clausal subject position (which is attributed to the [NOM] on T). As for the last derivational property of the canonical passive, namely, absorption of accusative case, we assume that it is due to a version of Burzio's Generalization presented below (see Legate 2014, 90–91 for relevant discussion).

<sup>7.</sup> We assume with Fukui (1986) and Miyagawa (1989), among others, that Japanese lacks a (phonetically null) expletive NP.

<sup>8.</sup> The current approach differs from Miyagawa (1989) in the sense that the former is syntactic whereas the latter is lexicalist in nature, and the former claims that -ni in both the direct and indirect passives is a postposition, whereas the latter claims that -ni in the direct passive is a postposition but -ni in the indirect passive is dative case. See Sect. 2 for evidence which shows that -ni in the indirect passive is a postposition just as -ni in the direct passive is.

(37) Burzio's Generalization (revised further from Legate 2014, 91)
All and only the elements that (i) can assign a θ-role to the subject and (ii) have a subject merged into their specifier can assign accusative case to an object.

The original generalization in Burzio (1986) states that all and only the *verbs* that can assign a  $\theta$ -role to the subject can assign accusative case to an object. Legate (2014) revised the original generalization so that it would hold for structures built on the split-VP hypothesis (Chomsky 1995; Kratzer 1996), which takes an external argument to be projected by an element outside the projection of a lexical verb. The version of Burzio's Generalization in (37) is slightly modified from Legate's revised generalization in such a way that "the Voice heads" in Legate's revised generalization is replaced by "the elements".9 According to the generalization in (37), if an element which assigns a  $\theta$ -role to the subject projects the subject in the specifier, then it can assign accusative case to an object (although it does not have to), but if an element which assigns a  $\theta$ -role to the subject does not project the subject in the specifier, then it cannot assign accusative case to an object. This means that the agentive Voice head in the passive cannot assign accusative case, since it is prevented from projecting a subject in its specifier due to the semantic requirement of Pass. In other words, as the projection of agentive Voice is taken by Pass, the Voice head is blocked to project a subject in the specifier, and consequently in accordance with the generalization in (37), it is incapable of assigning accusative case. As a result, accusative case is not assigned to the object in the direct passive, having the object capable of moving to the subject position to check off the [NOM] on T.

### 3.2 Derivations of the indirect passive

Unlike in the direct passive, intransitive verbs are allowed in the indirect passive as shown in (24a-b), repeated below.

- (38) a. Hanako-ga ame-ni fur-are-ta.

  Hanako-NOM rain-by fall-PASS-PST

  'Hanako was affected by being fallen by rain.'
  - b. Hanako-ga Taroo-ni hasir-are-ta.
     Hanako-NOM Taro-by run-PASS-PST
     'Hanako was affected by being run by Taro.'

Notice first that an additional nominal is involved in the indirect passive of intransitives in (38a-b), compared to the corresponding direct passive. In the previous subsection, we claimed that intransitives are incompatible with the direct passive because there is no nominal that can discharge the [NOM] on T. Then, since there is an additional nominal involved in the indirect passive, the grammaticality of examples like (38a-b) may follow from the current analysis.

Recall from Sect. 1 that the surface subject of the indirect passive is not a required participant of the event denoted by the stem verb; i.e., it is not an argument selected by the stem verb itself. To account for this fact, we follow Bosse, Bruening, and Yamada (2012) and assume that the surface subject in the indirect passive is introduced by Aff(ect) shown in (39), which takes an event property of type  $\langle st \rangle$ , introduces an experiencing event, and projects an experiencer argument in its specifier.<sup>10</sup> The event

<sup>9.</sup> The modification has been made so that the generalization can account for not only the absence of accusative case in the transitive-based direct passive but also the presence of accusative case in the transitive-based indirect passive. See the next subsection for discussion of the presence of accusative case in the transitive-based indirect passive.

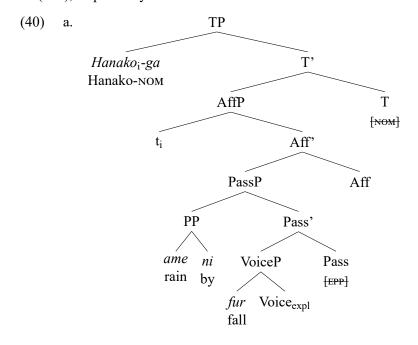
<sup>10.</sup> Washio (1993) argues that the indirect passive is interpreted to have an adversative or neutral reading depending on whether the subject is pragmatically related to the object. He offers a conceptual analysis of the interpretive variation of the indirect passive, whose main idea is that a single lexical item like -(r) are may be associated with multiple conceptual structures according to the linguistic and/or pragmatic contexts (cf. Jackendoff 1990). Washio does not provide a syntactic analysis of the (direct or indirect) passive, and his conceptual analysis is compatible with a number of syntactic analyses of the passive, including the one proposed in this paper (e.g., the AFF function that he assumes at the conceptual structure of the indirect passive may as well be encoded into the syntax as Aff in (39)). After all, Washio's analysis holds at the conceptual level, and how a conceptual representation would be linked to the syntax can be an independent matter (see Washio 1993, 87, endnote

property denoted by the complement of Aff is conventionally implicated as the source of the experiencing event.

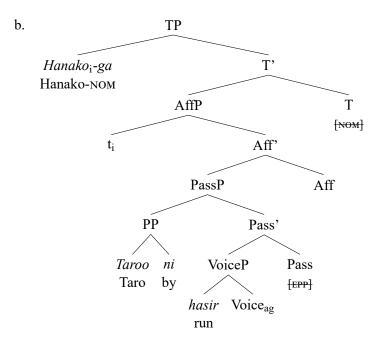
(39)  $[\![\mathbf{Aff}]\!] = \lambda P_{\langle st \rangle} \lambda x \lambda e[P(e) \& \exists e'[experience(e') \& experiencer(e',x)]: \forall e''[P(e'') \rightarrow source(e'',e')]]$  (Bosse, Bruening, and Yamada 2012, 1210)

We suggest that Aff selects for PassP in Japanese. This is not only compatible with the high attachment site of Aff in Japanese observed by Bosse, Bruening, and Yamada, but it also offers an account of the fact that the highest selected argument of the stem verb must be demoted and marked with the postposition *-ni* in the indirect passive.

According to the view sketched above, the possibility of intransitive verbs in the indirect passive can be analyzed as follows: the [NOM] on T is checked by the affected experiencer argument introduced by Aff, while the [EPP] on Pass is checked by the *-ni* phrase; accordingly, unlike the case of direct passives, the derivation converges even when intransitive verbs are used. The derivations for the unaccusative-based indirect passive in (38a) and the unergative-based indirect passive in (38b) are illustrated in (40a) and (40b), respectively.



<sup>14).</sup> Note, however, that the conceptual structures proposed by Washio must not be carried over to the syntax at face value. Washio assumes that the indirect passive in Japanese and the so-called "retained object construction" in Korean (which has the same surface form with the Japanese indirect passive; Yeon 1991, 2005) has the same syntactic structure, and he takes the causative-passive ambiguity to arise in the retained object construction only for conceptual, not syntactic, reasons. Evidence suggests that this is not true; see Yeon (2005), Bosse, Bruening, and Yamada (2012), Kim (2014), Jo (2020a), among others, for relevant discussion.



The above analysis also provides an account of why the -ni phrase cannot be omitted in the intransitive-based indirect passive: if it is omitted, the [EPP] on Pass can never be checked off, because there is no XP within VoiceP that can check the [EPP] instead. As noted earlier, syntactic feature checking and semantic composition work independently of each other. So, semantically, there will be no problem even if the -ni phrase is omitted, since the unsaturated variable of VoiceP can be existentially quantified over by Pass. The reason for the impossibility of argument removal in the intransitive-based indirect passive is purely syntactic.

As for their semantics, the semantic composition from PassP to AffP for the structure in (40a) proceeds as follows (the semantic composition for (40b) proceeds in exactly the same way). In (41), we are abstracting away from the movement of the affected experiencer to Spec,TP, and the composition process is presented as if the affected experiencer, *Hanako*, were at Spec,AffP.

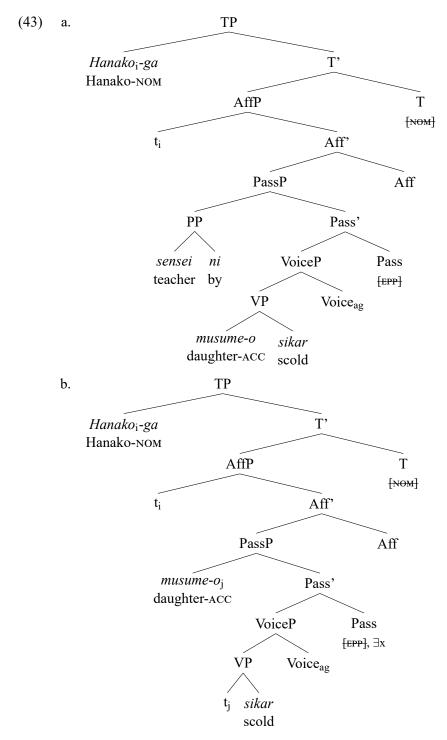
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(41) a. [\![\mathbf{PassP}]\!] = \lambda e[\![\mathrm{fall}(e,\mathrm{rain})]\!]
b. [\![\mathbf{Aff}]\!] = \lambda P_{\langle \mathrm{st} \rangle} \lambda x \lambda e'[\![P(e') \& \exists e''[\![\mathrm{experience}(e'') \& \mathrm{experience}(e'',x)]\!]
\forall e'''[\![P(e''') \to \mathrm{source}(e''',e'')]\!]
c. [\![\mathbf{Aff'}]\!] = \lambda x \lambda e'[\![\mathrm{fall}(e',\mathrm{rain}) \& \exists e''[\![\mathrm{experience}(e'') \& \mathrm{experience}(e'',x)]\!]
\forall e'''[\![\mathrm{fall}(e''',\mathrm{rain}) \to \mathrm{source}(e''',e'')]\!]
d. [\![\mathbf{AffP}]\!] = \lambda e'[\![\mathrm{fall}(e',\mathrm{rain}) \& \exists e''[\![\mathrm{experience}(e'') \& \mathrm{experience}(e'',\mathrm{Hanako})]\!]
\forall e''''[\![\mathrm{fall}(e''',\mathrm{rain}) \to \mathrm{source}(e''',e'')]\!]
```

As the result of the composition illustrated above, the structure in (40a) is interpreted to mean that the raining event precedes Hanako's experiencing event where it is implicated that its raining is the source of Hanako's experiencing. In other words, Hanako has a (positive or negative) experience because of its raining, or simply put, 'Hanako is affected by its raining'.

Turning to the transitive-based indirect passive, the *-ni* phrase can be omitted and interpreted existentially as it is in the direct passive.

(42) Hanako-ga (sensei-ni) musume-o sikar-are-ta. Hanako-NOM (teacher-by) daughter-ACC scold-PASS-PST 'Hanako was affected by the daughter's being scolded (by a teacher).

The derivations of (42) with and without the -ni phrase are illustrated in (43a) and (43b), respectively.



In (43a), the [EPP] on Pass is checked by the -ni phrase, and the [NOM] on T by the affected experiencer. In (43b), the [EPP] on Pass is checked by the accusative-marked theme that moves string vacuously to Spec,PassP, while the [NOM] on T is again checked by the affected experiencer. In both cases, the derivation converges as all the relevant syntactic features are properly checked off. Recall that Spec,PassP is not a case position. This is why the accusative-marked NP is allowed to move into Spec,PassP to check the [EPP] in (43b). It was argued in Sect. 3.1 that for the same reason, the caseless theme argument is allowed to move successive-cyclically to Spec,PassP to check the [EPP] on Pass, and then to Spec,TP to check the [NOM] on T in the derivation of the direct passive.

The difference between the transitive-based direct and indirect passives regarding accusative case marking, namely, the fact that the object of a lexical verb is assigned accusative case in the transitive-based indirect passive in (43a-b), whereas it is not in the transitive-based direct passive in (33a-b),

follows from the version of Burzio's Generalization assumed in Sect. 3.1. The version of Burzio's Generalization states that accusative case can be assigned to an object by an element (it does not necessarily have to be a type of Voice head) if the element assigns a  $\theta$ -role to the subject and has the subject merged into its specifier. According to the generalization, Aff must be able to assign accusative case if needed, since the head assigns an experiencer  $\theta$ -role to the subject and has the subject merged into its specifier. Therefore, unlike in the direct passive (which does not involve Aff in the derivation), the object of a lexical verb can be assigned accusative case in the indirect passive.

The semantic composition from PassP to AffP in (43a) and (43b) proceeds as in (44) and (45), respectively, abstracting away from the A-movement operations.

a.  $[PassP] = \lambda e[scold(e,daughter) \& agent(e,teacher)]$ 

```
b. [\![\mathbf{Aff}]\!] = \lambda P_{\langle st \rangle} \lambda x \lambda e'[P(e') \& \exists e''[experience(e'') \& experiencer(e'',x)]:
\forall e'''[P(e''') \rightarrow source(e''',e'')]]
c. [\![\mathbf{Aff'}]\!] = \lambda x \lambda e'[scold(e',daughter) \& agent(e',teacher) \& \exists e''[experience(e'') \& experiencer(e'',x)]:
\forall e'''[scold(e''',daughter) \& agent(e''',teacher) \rightarrow source(e''',e'')]]
d. [\![\mathbf{AffP}]\!] = \lambda e'[scold(e',daughter) \& agent(e',teacher) \& \exists e''[experience(e'') \& experiencer(e'',Hanako)]:
\forall e'''[scold(e''',daughter) \& agent(e''',teacher) \rightarrow source(e''',e'')]]
(45) a. [\![\mathbf{PassP}]\!] = \lambda e \exists x[scold(e,daughter) \& agent(e,x)]
b. [\![\mathbf{Aff}]\!] = \lambda P_{\langle st \rangle} \lambda y \lambda e'[P(e') \& \exists e''[experience(e'') \& experiencer(e'',y)]:
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- $\forall$ e'''[P(e''')  $\rightarrow$  source(e''',e'')]]

  c.  $[[\mathbf{Aff'}]] = \lambda y \lambda e' \exists x [scold(e',daughter) \& agent(e',x) \& \exists e''[experience(e'') \& experiencer(e'',y)]:$   $\forall$ e'''[scold(e''',daughter) & agent(e''',x)  $\rightarrow$  source(e''',e'')]]
  - d.  $[AffP] = \lambda e' \exists x [scold(e',daughter) \& agent(e',x) \& \exists e'' [experience(e'') \& experience(e'',Hanako)]: \forall e''' [scold(e''',daughter) \& agent(e''',x) \rightarrow source(e''',e'')]]$

AffP in (44) asserts that the teacher scolded the daugher and Hanako has an experience with the implicature that the teacher's scolding of the daugher is the source of that experience; and AffP in (45) asserts that someone scolded the daugher and Hanako has an experience with the implicature that the daughter's being scolded (by someone) is the source of that experience.

Under the current approach, the essential characteristics of the direct and indirect passives follow from the presence or absence of a single syntactic head, Aff, in their derivations. Semantically, the surface subject in the direct passive is not a participant of an experiencing event that is independent of the verbal event, whereas that in the indirect passive is. This is due to the semantics that Aff introduces into the structure. And syntactically, the direct passive has an active counterpart, whereas the indirect passive does not. The fact that the indirect passive does not have an active counterpart is demonstrated below.

- (46) a. Taroo-ga kodomo-ni nak-are-ta.

  Taro-NOM child-by cry-PASS-PST

  'Taro was affected by being cried by the child.'
  - b. \* Kodomo-ga Taroo-ni nai-ta. child-NOM Taro-DAT cry-PST Intended: 'The child cried on Taro.'

(44)

- (47) a. Hanako-ga sensei-ni Taroo-o sikar-are-ta.

  Hanako-NOM teacher-by Taro-ACC scold-PASS-PST

  'Hanako was affected by Taro's being scolded by the teacher.'
  - b. \* Sensei-ga Hanako-ni Taroo-o sikar-ta. teacher-NOM Hanako-DAT Taro-ACC scold-PST Intended: 'The teacher scolded Taro on Hanako.'

The indirect passive has such a syntactic characteristic distinct from its direct counterpart, because Aff, which is responsible for the derivation of the indirect passive, selects for PassP as noted earlier. Aff is

simply incompatible with a derivation that does not involve Pass; so, the indirect passive does not have a corresponding active sentence. As expected, the subject in (46a) and (47a) has to be interpreted as an affected experiencer; that is, the subject necessarily experiences some positive or negative influence from the verbal event.

In that regard, some of the constructions that were previously thought the indirect passive must be not the indirect passive but the direct passive in the sense that they do have an active counterpart. The example in (48a), for instance, must be the direct passive which superficially looks like the indirect passive whose active counterpart is (48b).

- (48) a. Hanako-ga Taroo-ni Ziroo-o syookais-are-ta. Hanako-nom Taro-by Jiro-ACC introduce-PASS-PST 'Hanako had Jiro introduced by Taro.'
  - b. Taroo-ga Hanako-ni Ziroo-o syookaisi-ta.
    Taro-NOM Hanako-DAT Jiro-ACC introduce-PST
    'Taro introduced Jiro to Hanako.'

Contrary to (46a) and (47a), the surface subject in (48a) does not have to be interpreted as an affected experiencer (although it can be pragmatically). The example in (48a) can be interpreted as neutrally as (48b) without any connotation of affectedness, supporting the claim that the example in (48a) is the direct passive which does not involve Aff.

In (48), the goal argument is promoted to be the surface subject in the passive of a three-place predicate. Japanese also allows promotion of the theme argument to the surface subject position in the passive of a three-place predicate. In this case, the demoted agent argument has to be marked with *-niyotte* instead of *-ni* as shown below.

(49) Ziroo-ga Taroo-niyotte/\*ni Hanako-ni syookais-are-ta. Jiro-NOM Taro-owing.to/\*by Hanako-DAT introduce-PASS-PST 'Jiro was introduced to Hanako by Taro.'

The discussion relevant to an example like (49) is presented in Sect. 4.

#### 3.3 Remarks on the behaviors of zibun 'self'

We have argued that the -ni phrase in the indirect passive is an argument demoted to an oblique phrase as the -ni phrase in the direct passive is. An issue that is often noted as a potential problem for the unified view concerns the behaviors of zibun 'self': zibun cannot be anteceded by the -ni phrase in the direct passive as in (50a), whereas it can be anteceded by the -ni phrase in the indirect passive as in (50b) (McCawley 1972; Kuno 1973; Hoshi 1999; Ishizuka 2010; the examples are from Murasugi and Sugisaki 2008, 269).

- (50) a.  $Taroo_i$ -wa  $Hanako_j$ -ni  $zibun_{i/*j}$ -no heya-de nagur-are-ta. Taro-TOP Hanako-by self-GEN room-LOC hit-PASS-PST ' $Taro_i$  was hit by  $Hanako_j$  in  $self_{i/*j}$ 's room.'
  - b. Taroo<sub>i</sub>-wa Hanako<sub>j</sub>-ni zibun<sub>i/j</sub>-no heya-de sawag-are-ta.

    Taro-TOP Hanako-by self-GEN room-LOC make.noise-PASS-PST 'Taro<sub>i</sub> was affected by Hanako<sub>i</sub>'s making noise in self<sub>i/j</sub>'s room.'

The contrast in (50a-b) might seem to indicate that the -ni phrases in the direct and indirect passives are different in nature as in, e.g., Miyagawa (1989) who suggests that -ni in the direct passive is a postposition, whereas -ni in the indirect passive is dative case. However, this does not necessarily have to be the case, and the contrast in (50a-b) may as well be given an account while maintaining the view that the -ni phrases in the direct and indirect passives are the same element.

Nishigauchi (2014), building on Speas (2004), suggests that *zibun* is bound by an element that occupies the specifier of POVP (Point-Of-View Phrase)<sup>11</sup>, claiming that the binding facts of *zibun* which have often been attributed to pragmatic factors can be accounted for from a syntactic perspective. According to Nishigauchi, the element occupying Spec,POVP, which binds *zibun*, is either an overt NP or *pro*; in the former case, the value of *zibun* is determined by the NP occupying Spec,POVP itself, while in the latter case, the value of *zibun* is determined by an NP which non-obligatorily controls *pro* that occupies Spec,POVP.

In this view, *Taroo* in (50a) can be taken to antecede *zibun* because *Taroo* occupies Spec,POVP at some point in the derivation before it moves to Spec,TP. This is illustrated below, where movement is indicated by Arabic numerals, and the binding relation is indicated by lowercase letters.

The reason why *Hanako* cannot antecede *zibun* in (50a) is also clear: it is because *Hanako* cannot move to Spec,POVP leaving behind the postposition -*ni*.

Turning to the case of (50b), all that needs to be done now to account for the binding facts in (50b) is to assume that POVP may occur in an event domain. This appears to be a reasonable assumption as it is not far-fetched to think that any event in a clause can be specified to be presented from some individual's point of view (see also Charnavel 2020 who argues that the logophoric operator OP<sub>log</sub> which binds an ("exempt") anaphor may appear in a phase domain). Under this assumption, there are two possibilities of POVP in (50b): one for the experiencing event introduced by Aff and the other for the main event introduced by the main verb. Now, as for *Taroo* in (50b), it can be viewed to antecede *zibun* by occupying Spec,POVP before it moves to Spec,TP as illustrated below.

POVP in (52) encodes some individual's perspective for the experiencing event introduced by Aff. If, as assumed above, POVP can occur for the main event introduced by the main verb as well, the possibility of *Hanako* anteceding *zibun* in (50b) will also be accounted for. For concreteness, assume that POVP for the main event occurs immediately above VP, then the derivation of (50b) up to PassP will proceed along the lines of (53).

Note that in (53), the element that occupies Spec,POVP and accordingly binds *zibun* is *pro*. Crucially, *pro* that appears at Spec,POVP, according to Nishigauchi (2014), is non-obligatory control *pro* which need not be c-commanded by an antecedent. This means that *pro* at Spec,POVP in (53) can be controlled by *Hanako* inside PP, functioning as an element that mediates between *Hanako* and *zibun* and has *zibun* be anteceded by *Hanako* on the surface.

The above account may extend to the contrast between the simple transitive and the SASE-causative shown in (54a) and (54b), respectively.

(54) a. Hanako<sub>i</sub>-ga Taroo<sub>j</sub>-o zibun<sub>i/\*j</sub>-no heya-de nagut-ta. Hanako-NOM Taro-ACC self-GEN room-LOC hit-PST 'Hanako<sub>i</sub> hit Taro<sub>j</sub> in self<sub>i/\*j</sub>'s room.'

<sup>11.</sup> Nishigauchi (2014) uses POVP as a cover term that refers to Speech Act Phrase (SAP), Evidential Phrase (EvidP), Epistemological Phrase (EpisP), Evaluative Phrase (EvalP), Benefective Phrase (BenefP), and Deixis Phrase (DeixP). Nishigauchi categorizes the former four as the "sentient class" and the latter two as the "axis class", whose exact positions in the structure may differ from each other. As the distinction between the two classes of POVPs is tengential to the current discussion, we will use the term POVP in the text while having POVP refer exclusively to the phrases that belong to what Nishigauchi calls the sentient class.

b. Hanako<sub>i</sub>-ga Taroo<sub>j</sub>-o zibun<sub>i/j</sub>-no heya-de sin-ase-ta.
 Hanako-Nom Taro-ACC self-GEN room-LOC die-CAUS-PST 'Hanako<sub>i</sub> let Taro<sub>j</sub> die in self<sub>i/j</sub>'s room.'

Both the examples in (54a–b) have the transitive frame in which *Hanako* is the surface subject and *Taroo* the surface object. But as indicated in the examples, *zibun* in the former cannot, while that in the latter can, be anteceded by the object *Taroo*. Under the present account, the contrast can be attributed to the fact that the causative involves a causing event introduced by the causative element in addition to the main event introduced by the main verb (Pylkkänen 2008). Specifically, in the case of (54a), the example involves a single hitting event as a simple transitive, so POVP can appear only for the hitting event, whose specifier should be occupied by *Hanako*, the highest argument involved in the hitting event. Accordingly, *Hanako* can but *Taroo* cannot antecede *zibun* in (54a). On the other hand, the causative example in (54b) involves two events, the causing event introduced by the causative element and the dying event introduced by *sin*-'die'. This means that the example has two possible occurrences of POVP: one for the causing event and the other for the dying event. If POVP occurs for the causing event and *Hanako*, the initiating argument of the causing event, occupies Spec,POVP, then *zibun* is anteceded by *Hanako*. Alternatively, if POVP occurs for the dying event and *Taroo*, the sole argument of the dying event, occupies Spec,POVP, then *zibun* is anteceded by *Taroo*. This way, either *Hanako* or *Taroo* can antecede *zibun* in (54b).

The event-based account of *zibun* presented in this subsection is rather sketchy, but it certainly shows that the behaviors of *zibun* do not necessarily mean that the *-ni* phrases in the direct and indirect passives are different from each other. That is, despite the contrast exemplified in (50a–b), both the direct and indirect passives *can* be analyzed to be genuinely passives involving a demoted argument. Leaving the task of developing a more comprehensive theory of *zibun* to future research, we conclude, based on the analysis in this subsection as well as the discussion in Sect. 2, that the *-ni* phrases in the direct and indirect passives are both an argument demoted to an oblique phrase.

## 4 The nature of -ni and -nivotte phrases

It has been suggested above that the [NOM] on T is responsible for the incompatibility of intransitive verbs in the direct passive, and the [EPP] on Pass is responsible for the impossibility of argument removal in the intransitive-based indirect passive. These are the answers to two of the three complications for the unified view of the RARE-constructions advocated in this paper (see Sect. 2). The last complication for the unified view is that the *-niyotte* phrase is allowed in the transitive-based (direct and indirect) passive as in (55a–b), but it is disallowed in the intransitive-based (indirect) passive as in (56a–b).

- (55) a. Inu-ga neko-ni/niyotte oikake-rare-ta.
  dog-NOM cat-by/owing.to chase-PASS-PST
  'A dog was chased by a cat.'
  - b. Hanako-wa sensei-ni/niyotte musume-o sikar-are-ta.

    Hanako-TOP teacher-by/owing.to daughter-ACC scold-PASS-PST

    'Hanako was affected by the daughter's being scolded by the teacher.
- (56) a. Hanako-ga Taroo-ni/\*niyotte sin-are-ta. Hanako-NOM Taro-by/owing.to die-PASS-PST 'Hanako was affected by being died by Taro.'
  - b. Hanako-ga Taroo-ni/\*niyotte hasir-are-ta. Hanako-nom Taro-by/owing.to run-pass-pst 'Hanako was affected by being run by Taro.'

As noted in Sect. 2, the incompatibility of *-niyotte* in the intransitive-based indirect passive is not simply because *-niyotte* can only introduce an agent argument (cf. Goro 2006). The sole argument of an unergative verb like *hasir-* 'run' is an agent, yet it is still prohibited from being introduced by *-niyotte* 

as shown in (56b). This suggests that the pattern in (55)–(56) calls for a syntactic, not a semantic, explanation. In fact, under the current approach, the above pattern can be given an account along the same lines as the possibility of argument removal in the Japanese passive. The *-niyotte* phrase can be used instead of the *-ni* phrase, and the *-ni* phrase can be omitted and interpreted existentially, in exactly the same environment: namely, when the passive is transitive-based. And in both cases, it is attributable to the mandatory requirement of Pass to have the specifier at some point in the derivation.

To elaborate, recall first that the -ni phrase can be omitted in the transitive-based passives because the stem verb projects an internal argument which moves to Spec,PassP and checks off the [EPP] on Pass. In the intransitive-based passive, on the other hand, the stem verb involves only a single argument that is demoted to be the -ni phrase at Spec,PassP. This means that if the -ni phrase is omitted, there remains no XP which checks the [EPP] on Pass; hence, the -ni phrase cannot be omitted. Now, it has been pointed out in the literature that -niyotte is not the same as -ni (Goro 2006; Ishizuka 2010; Fukuda 2011). First, it is not a simple postposition but a morphologically complex element: -niyotte can be decomposed into -ni 'DAT', yor- 'owe, be attributable', and -te 'CONN', where yor- can be used as an independent predicate as exemplified below (Goro 2006).

- (57) a. Seikoo-wa kinben-ni yor-u. success-TOP diligence-DAT owe-PRS 'Success is determined according to diligence.'
  - b. rooden-ni yor-u kasai short.circuit-DAT owe-PRS fire 'a fire caused by a short circuit'

Also, whereas -ni introduces whatever is the highest argument that is selected by the stem verb, -niyotte appears to impose its own selectional requirement on the NP that it introduces. For example, -ni can introduce the experiencer of a psych verb, but -niyotte cannot as shown in (58) (Kinsui 1997; Park and Whitman 2003; Ishizuka 2010; Fukuda 2011).

(58) Kare-no Haru-no Umi-wa ooku-no hito-ni/#niyotte ais-are-te i-ru. he-GEN spring-GEN sea-TOP many-GEN person-by/#owing.to love-PASS-CONN be-PRS 'His Spring Sea is loved by many people.' (Park and Whitman 2003)

Furthermore, -ni and -niyotte can co-occur in a single passive sentence as in (59) (Ishizuka 2010, 164). 12

(59) Biru-ga Dokutaa Heru-niyotte kikaizyuu-ni hakais-are-ta.
building-NOM Doctor Hell-owing.to machine.monster-by destroy-PASS-PST
'Dr. Hell caused the building to be destroyed by a machine monster.' (Literal: 'Owing to Dr. Hell, the building was destroyed by a machine moster.')

Based on these considerations, we claim with Fukuda (2011) that *-niyotte* is an element that introduces a causer argument, forming an adjunct phrase that attaches to the topmost extended verbal projection right before it is taken by an inflectional head. The denotation of *-niyotte* that we propose is shown below.

(60) 
$$[\text{niyotte}] = \lambda x \lambda P_{(st)} \lambda e \exists e'[\text{cause}(e',e) \& \text{causer}(e',x) \& P(e)]$$

An example like (i) may further support the view that -niyotte is not the same element with -ni in the passive. Note, however, that when -niyotte is used in the unaccusative, the NP that it introduces needs to be an event-denoting nominal like kikin 'famine' rather than an entity-denoting one like Dokutta Heru 'Doctor Hell'. If the NP introduced by -niyotte is an entity-denoting nominal, the result will not be entirely natural as in ?#Ooku-no hito-ga Dokutta Heru-niyotte siboosi-ta (Intended: 'Many people died because of Dr. Hell'). This might be due to some pragmatic factors, but unfortunately, we do not have a concrete answer to this issue and so will have to leave it to future research. The issue does not affect the analysis presented in the text, in that when the discussion is limited to the passive, the fact still remains that -niyotte and -ni are different elements in the passive.

<sup>12.</sup> It appears that -niyotte can also appear in the unaccusative as in (i), whose derivation does not involve demotion of any argument.

 <sup>(</sup>i) Ooku-no hito-ga kikin-niyotte siboosi-ta.
many-GEN person-NOM famine-owing.to die-PST
 'Many people died from the famine.' (Literal: 'Owing to the famine, many people died.')

The *-niyotte* phrase, therefore, is interpreted to mean that some event takes place 'owing to x' or the event is 'caused by x'. <sup>13</sup> As for the fact that *-niyotte* is compatible only with the passive or the unaccusative and not with the (di)transitive or the unergative, we suggest that this is because from a pragmatic perspective, the (di)transitive/unergative is used when the verbal event is carried out with the agent's volition and is under the agent's control. If *-niyotte* is included in the transitive or the unergative, the semantics of *-niyotte* (i.e., 'the verbal event is caused by the NP that it introduces') will bring about contradiction with the implicature carried by these constructions.

Importantly, if the *-niyotte* phrase is an adjunct as suggested above, then the pattern in (55)–(56) follows from the current approach with the assumption that adjuncts are incapable of checking off the [EPP] on Pass. If the *-niyotte* phrase cannot check off the [EPP] on Pass, the presence of the *-niyotte* phrase does not have anything to do with the syntactic convergence of the derivation of a passive. This means that the "replacement" of the *-ni* phrase with the *-niyotte* phrase is not really replacement; it is actually omission of the *-ni* phrase followed by adjunction of the *-niyotte* phrase. If the presence or absence of the *-niyotte* phrase is factored out, all that remains to consider in the derivation of an intransitive-based passive is whether or not the *-ni* phrase is present to satisfy the syntactic requirement of Pass. Therefore, the same account can be given to the possibilities of omission of the *-ni* phrase and "replacement" of the *-ni* phrase with the *-niyotte* phrase. In both cases, the [EPP] on Pass cannot be checked when the passive is formed out of an intransitive verb.

Central to the analysis above is the view that the *-niyotte* phrase is not an argument phrase that plays a role in the syntactic convergence of the passive but is an adjunct phrase that merely contributes causative semantics to the passive. A question that immediately arises regarding this view is why the *-niyotte* phrase is interpreted as if it is the external argument of the stem verb when it is used in place of the *-ni* phrase. For instance, the example in (55a) with the choice of *-niyotte* is still interpreted as if the NP introduced by *-niyotte*, i.e., *neko* 'cat', were the agent of the chasing event. As an answer to this question, we suggest that the agentive reading of an element like the *-niyotte* phrase is attained through pragmatic implicature. Consider (61):

(61) Biru-ga Dokutaa heru-niyotte hakais-are-te i-ta-yo. Kare-no kikaizyuu-ni-ne. building-NOM Doctor Hell-owing.to destroy-PASS-CONN BE-PST-PRT he-GEN machine.monster-by-PRT 'Dr. Hell had the building be being destroyed. It was being done by his machine monster.'

In (61), the dominant interpretation of the first sentence is 'the building was being destroyed by Dr. Hell', where Dr. Hell is the agent of the destroying event. But the following sentence cancels the agentive

<sup>13.</sup> In many languages, a demoted argument in the passive can be introduced by a morphologically complex element like *-niyotte* (e.g., *-eyuyhay* in Korean, *-tarafından* in Turkish). In some of these languages, there is an element that corresponds to *-ni* in Japanese or *by* in English in addition to the morphologically complex element (e.g., Korean); whereas, in other languages, there is only a morphologically complex element (e.g., Turkish). In the case of the latter type of languages, it may be said that the passive always involves removal of an argument like the passive in Latvian introduced in (26), but demotion can still be expressed analytically by means of the morphologically complex element that each language employs. The phrases formed with the morphologically complex element may be called "analytic 'by'-phrase", as compared to the true 'by'-phrase like the *-ni* phrase in Japanese or the *by* phrase in English. Some literature analyzes *-kara* 'from' on a par with *-ni* and *-niyotte* in Japanese passives. In the present view, *-ni* is a simple 'by'-phrase that merely introduces an NP that fills in the variable associated with the stem verb (see Sect. 3.1); whereas, *-niyotte* and *-kara* are both analytic 'by'-phrases which contribute something to the semantics of the structure that they attach to. Basically, *-niyotte* introduces a causer as suggested in the text, while *-kara* introduces a source as its literal meaning indicates. The difference between the two analytic 'by'-phrases is demonstrated in (ia–b) (the examples are from Park and Whitman 2003, which are originally from Taramura 1982).

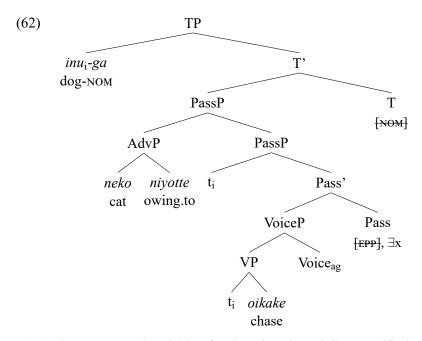
<sup>(</sup>i) a. Kare-wa tizi-kara/\*niyotte kansyazyoo-o okur-are-ta. he-TOP governor-from/\*owing.to thanks.certificate-ACC present-PASS-PST 'He was presented a certificate of appreciation by the governor.'

b. Kodomo-ga hahaoya-niyotte/\*kara kuruma-ni nose-rare-ru. child-NOM mother-owing.to/\*from car-DAT get-PASS-PRS 'The child is got in the car by the mother.'

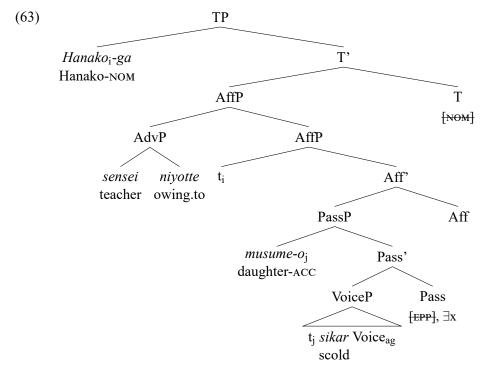
In (ia), -kara is, but -niyotte is not, permitted because the relevant NP is clearly a source, not a causer; and, in (ib) -kara is not, but -niyotte is, permitted because the relevant NP is clearly a causer, not a source. We will not discuss -kara any further in this paper.

reading of Dr. Hell, and generates the updated interpretation where Dr. Hell is the causer of the destroying event whose agent is his machine monster. This shows that the agentive reading of the *-niyotte* phrase is cancellable. If the agentive reading of the *-niyotte* phrase were encoded semantically, it should not be able to be cancelled, and accordingly, the following sentence in (61) would cause contradiction. The cancellability of the agentive reading of the *-niyotte* phrase, thus, suggests that it is due not to semantic composition but to pragmatic enrichment.

According to the discussion so far, the transitive-based direct passive with *-niyotte* is derived as illustrated below.



In (62), the unsaturated variable of VoiceP is existentially quantified over by Pass, and the theme argument of the stem verb, *inu* 'dog', moves to Spec,PassP, where it checks off the [EPP] on Pass, and then to Spec,TP, where it receives nominative case and discharges the [NOM] on T. The *-niyotte* phrase is adjoined to PassP and introduces the causing event and the causer argument, *neko* 'cat', into the structure. Consequently, the resulting structure has the interpretation 'a cat had a dog be chased', where 'a cat' is pragmatically understood to be the agent of the chasing event. Note that the derivation in (62) proceeds in exactly the same way as that of the transitive-based direct passive without the *-ni* phrase discussed in (33b), except that the *-niyotte* phrase is adjoined to PassP in the structure. The same is true for the transitive-based indirect passive with the *-niyotte* phrase proceeds in exactly the same way as that of the transitive-based indirect passive without the *-ni* phrase shown in (43b), except that the *-niyotte* phrase attaches to AffP, the topmost extended verbal projection in the structure. The derivation of the transitive-based indirect passive with *-niyotte* is illustrated below.



Recall that *-niyotte* and *-ni* can co-occur in a single passive sentence as in (59). This follows from the current analysis. The *-ni* phrase is absent in (62) simply because Pass existentially quantifies over the open variable of VoiceP. This means that if Pass does not existentially close the variable of VoiceP as such, the *-ni* phrase may as well appear at Spec,PassP along with the *-niyotte* phrase adjoined to PassP as long as the resulting interpretation is supported by a context. This is true not only for the direct passive as shown in (59) above, but also for the indirect passive as shown below.

(64) Sityoo-ga Dokutaa Heru-niyotte kikaizyuu-ni biru-o hakais-are-ta.
mayor-NOM Doctor Hell-owing.to machine.monster-by building-ACC destroy-PASS-PST

'The mayor was affected as Dr. Hell caused the building to be destroyed by a machine monster.'

The fact that -ni and -niyotte can co-occur in the direct and indirect passives, thus, supports the claim that the "replacement" of -ni with -niyotte is actually omission of the -ni phrase followed by adjunction of the -niyotte phrase.

Turning to the case of the intransitive-based indirect passive, it is impossible for *-niyotte* to be used in place of *-ni* as shown in (56a–b). Under the current view, this is simply because in the intransitive-based indirect passive, the [EPP] on Pass cannot be checked off if the *-ni* phrase is omitted.<sup>14</sup> Note that the

It appears that there are two issues that need to be addressed here: when the *-niyotte* phrase is used without the *-ni* phrase, (A) why unergative-based indirect passives (like (56b) and (i)) sound better than unaccusative-based indirect passives (like (56a)); and (B) why some unergative-based indirect passives (like (i)) sound better than other unergative-based indirect passives (like (56b)).

In the text, we have argued that *-niyotte* introduces a causer into the structure, but the causer is often interpreted to be an agent of the event associated with the stem verb through pragmatic enrichment. Presumably, this is possible because the causer and the agent can be grouped together as the same category of "initiator" in the sense of Ramchand (2008). Now, the argument introduced by *-ni* in a passive is an agent when the passive is unergative-based. This means that the pragmatic enrichment of the *-niyotte* phrase may occur in the unergative-based passive, having the *-niyotte* phrase interpreted as if it were the *-ni* phrase. Such enrichment might bring about some amelioration effect, by which the *-niyotte* phrase is perceived to occupy the specifier

<sup>14.</sup> A reviewer points out that even though the unergative-based indirect passive with *-niyotte* in (56b) is not acceptable, it still sounds better than its unaccusative-based counterpart in (56a), which indicates that there might be a difference between the unergative and the unaccusative regarding the possibility of forming an indirect passive with *-niyotte*. The reviewer also provides an example of the unergative-based indirect passive, shown in (i), which sounds even better than the example in (56b).

 <sup>(</sup>i) Hanako-ga ruumumeito-niyotte asa-made sawag-are-ta.
 Hanako-NOM roommate-owing.to morning-till make.noise-PASS-PST
 'Hanako was affected by her roommate's making noise till the morning.'

intransitive-based indirect passive is ungrammatical when *-niyotte* is used instead of *-ni*, solely because the [EPP] on Pass cannot be checked off. It is predicted, then, that the intransitive-based indirect passive becomes grammatical if the *-niyotte* phrase is used in addition to the *-ni* phrase. The prediction is borne out as shown in (65a–b).

- (65) a. Hanako-ga gan-niyotte Taroo-ni sin-are-ta.

  Hanako-NOM cancer-owing.to Taro-by die-PASS-PST

  'Hanako was affected by being died by Taro from a cancer.'
  - b. Hanako-ga warui tomodati-no eikyoo-niyotte musuko-ni iedes-are-ta.

    Hanako-nom bad friend-GEN influence-owing.to son-by run.away-pass-pst

    'Hanako was affected by being run away by the son due to a bad friend's influence.'

The examples in (65a) and (65b) are the unaccusative-based and the unergative-based indirect passives, respectively. As expected, the examples are grammatical with the *-niyotte* phrase, because the [EPP] on Pass is successfully checked off due to the presence of the *-ni* phrase. The grammaticality of (65a–b) shows that it is not the case that *-niyotte* is inherently incompatible with the intransitive-based indirect passive. The apparent incompatibility is simply because the *-niyotte* phrase cannot be used in the absence of the *-ni* phrase for syntactic reasons.

It has been claimed above that -ni in the Japanese passive simply supplies its own argument to its sister open predicate; and according to the derivation that we have suggested (in which the head of the projection hosting the -ni phrase, i.e., Pass, selects for the highest projection associated with the stem verb, i.e., VoiceP), the -ni phrase should always be associated with the highest argument of the stem verb (i.e., the argument that would function as the subject in the corresponding active). This means that -ni must not impose any selectional restriction of its own on the NP that it introduces. In other words, if some NP is allowed to appear in the active, it must also be allowed to appear as the -ni phrase in the corresponding passive. However, this is not always the case as the well-known examples in (66)–(67) show.

- (66) a. Gityoo-ga kaikai-o sengensi-ta. chairperson-NOM opening-ACC announce-PST 'The chairperson announced the opening (of a meeting).'
  - b. \* Kaikai-ga gityoo-ni sengens-are-ta.
    opening-NOM chairperson-by announce-PASS-PST
    Intended: 'The opening (of a meeting) was announced by the chairperson.' (Kuroda 1992, 206; originally from Inoue 1976)
- (67) a. Hanako-ga Feruma-no teiri-o syoomeisi-ta. Hanako-nom Fermat-GEN theorem-ACC prove-PST Hanako proved Fermat's theorem.

of Pass, and accordingly, the [EPP] on Pass is perceived to be checked off. On the other hand, the argument introduced by -ni in the unaccusative-based passive is a theme, which means that the -niyotte phrase cannot be pragmatically enriched such that the argument that it introduces is interpreted as if it were the -ni phrase (a causer and a theme are too different from each other); accordingly, the amelioration effect cannot take place in the unaccusative-based passive. Hence, the difference between the unergative-based and unaccusative-based indirect passives with -niyotte. The difference between the unergative-based indirect passives in (56b) and (i) may be accounted for from a similar but not the same perspective. The stem verb in (56b) is hasir- 'run', and the stem verb in (i) is sawag- 'make noise'. The sole argument of hasir- is unambiguously an agent, in that the argument is always interpreted as an entity that does the running itself. On the other hand, the sole argument of sawag- is ambiguous such that it can be interpreted as an agent (the argument may make noise by using its own body parts) or, importantly, as a causer (the argument may drop some object on the floor causing the object to make noise). If the sole argument of a verb like sawag-can be interpreted as a causer as such, it may be the case that the -niyotte phrase in the passive with sawag- may be perceived to introduce a demoted argument of that verb, that is, perceived as if it were the -ni phrase. Accordingly, it may be perceived to be merged into the specifier of Pass and perceived to check off the [EPP] on Pass. This option is not available for the passive with a verb like hasir-, since its sole argument is unambiguously an agent, not a causer. Hence, the difference between (56b) and (i).

The view presented here is only preliminary, and we will leave a full exploration of this issue to future work.

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b. \* Feruma-no teiri-ga Hanako-ni syoomeis-are-ta.

Fermat-GEN theorem-NOM Hanako-by prove-PASS-PST
Intended: 'Fermat's theorem was proven by Hanako.' (from Kuroda 1992, 206)

In (66a), *gityoo* 'chairperson' is the highest argument selected by *sengens*- 'announce', and in (67a), *Hanako* is the highest argument selected by *syoomeis*- 'prove'; but these arguments cannot be expressed as the *-ni* phrase in the corresponding passives shown in (66b) and (67b).

Regarding the above examples, Ishizuka (2010) points out that the sentences in (66b) and (67b) become grammatical if the -ni phrase is interpreted as the 'addressee' of the announcing event and the 'goal' of the proving event, respectively. That is, both sentences are acceptable with the interpretations 'the opening (of a meeting) was announced to the chairperson' and 'Fermat's theorem was proven to Hanako'. Ishizuka then suggests that the ungrammaticality of (66b) and (67b) is due to the constraint in Japanese that the -ni phrase in the passive has to be interpreted as the dative argument and not as the external argument when the stem verb is ditransitive (Ishizuka 2010, 87). Ishizuka's proposal may be reinterpreted and further generalized as the condition formalized in (68).

(68) Whenever an NP can be interpreted as a normally projected argument, the interpretation of the NP as a demoted argument is blocked.

The condition in (68) is a type of markedness constraint in the sense that (i) a normally projected argument can be considered unmarked, whereas a demoted argument can be considered marked, since the former does not undergo additional process of 'demotion' that the latter does, and (ii) it dictates that the interpretation of an NP as an unmarked argument overrides the interpretation of the NP as a marked argument. Applying the markedness condition to the passive, it prevents the -ni phrase from being interpreted as a demoted agent in the context where the -ni phrase can be interpreted as a normally projected addressee or goal; hence, the unacceptability of (66b) and (67b) with the intended interpretations. The scope of Ishizuka's original constraint is limited to the cases in which the stem verb of a passive is ditransitive, but the condition in (68) is not limited as such. According to (68), wherever an NP can be interpreted as a normally projected argument, whether or not it is selected by the stem verb, its interpretation as a demoted argument is blocked. There are cases in Korean which suggest that the generalized condition is empirically more adequate from a crosslinguistic perspective. Consider the active-passive pair in (69a—b), which exemplifies that the passive of certain verbs in Korean is formed through suppletion of the light verb ha- 'do' with toy- 'become'.

- (69) a. Haksayngtul-i sinchwuk tosekwan-ul iyongha-yess-ta. students-NOM newly.built library-ACC use-PST-DECL 'The students made use of the newly built library.'
  - b. Sinchwuk tosekwan-i haksayngtul-eykey iyongtoy-ess-ta. newly.built library-NOM students-by be.used-PST-DECL 'The newly built library was made use of by the students.'

In the passive in (69b), the argument that functions as the subject in its active counterpart in (69a) is demoted to be an oblique phrase with the postposition *-eykey*. Just as *-ni* in Japanese, *-eykey* is homophonous with dative case *-eykey* that marks the normally projected goal argument in the ditransitive as shown below.

(70) Cheli-ka Swuni-eykey cangmikkoch han songi-lul ponay-ess-ta.

Cheli-NOM Swuni-DAT rose one CL-ACC send-PST-DECL 'Cheli sent Swuni a rose.'

Importantly, in the context where *-eykey* can be interpreted as a normally projected goal argument, it cannot be interpreted as a demoted argument even when the stem verb is not ditransitive. This can be witnessed in the following examples.<sup>15</sup>

<sup>15.</sup> The example in (71b) is an instance of the stative passive (or "adjectival passive"), not the eventive passive that we have been considering so far; but this does not affect the point being made in the text that the interpretation of the *-eykey* phrase as a demoted argument is blocked when it can be interpreted as a normally projected argument.

- (71) a. Cheli-ka Swuni-lul panghayha-yess-ta. Cheli-NOM Swuni-ACC hinder-PST-DECL 'Cheli hindered Swuni.'
  - b. Swuni-ka Cheli-eykey panghaytoy-ess-ta.
     Swuni-NOM Cheli-DAT be.hindered-PST-DECL
     'Swuni got in the way of Cheli.' (Literal: 'Swuni was hindering to Cheli.')

Superficially, the above examples appear to constitute an active-passive pair involving the same truth-conditional semantics (Bruening and Tran 2015), but their interpretations indicate that this is not the case. In (71a), Cheli is the causer and Swuni is the experiencer of the hindering event. If the example in (71b) is the passive counterpart of (71a), the two arguments are expected to have the same participant roles. But in (71b), Swuni is the causer and Cheli is the experiencer of the hindering event, the opposite of what the example in (71a) asserts. Such an interpretation of (71b) can be accounted for by the markedness condition in (68). Since *Cheli-eykey* can be interpreted as a normally projected applied argument in the context of (71b), its interpretation as a demoted agent is blocked; consequently, the example is not interpreted as the passive counterpart of (71a). The verb involved in (71a–b) is not ditransitive which can project the *-eykey* phrase in the active, suggesting that the pair in (71a–b) can hardly be accounted for under Ishizuka's constraint alone.

Finally, the current view also explains why using *-niyotte* instead of *-ni* in (66b) and (67b) makes the sentences grammatical as in (72a) and (72b), respectively.

- (72) a. Kaikai-ga gityoo-niyotte sengens-are-ta.
  opening-NOM chairperson-owing.to announce-PASS-PST
  'The opening (of a meeting) was announced by the chairperson.' (Kuroda 1992, 206, originally from Inoue 1976)
  - b. Feruma-no teiri-ga Hanako-niyotte syoomeis-are-ta. Fermat-GEN theorem-NOM Hanako-owing.to prove-PASS-PST 'Fermat's theorem was proven by Hanako.' (from Kuroda 1992, 206)

The condition in (68) applies to the -ni phrase in the passive essentially because the postposition -ni is homophonous with dative case -ni (and the postposition -ni 'to', for that matter). In the case of -niyotte, however, it is formally distinct from -ni, and thus there is no possibility at all for it to be interpreted as a normally projected dative argument. Therefore, the -niyotte phrase is not blocked from being interpreted as the agent of the respective events. Recall that the agentive interpretation of the -niyotte phrase is pragmatic implicature. The argument NPs of -niyotte in (72a-b) may as well be interpreted as the causer in appropriate contexts: e.g., in the contexts where the chairperson simply ordered someone in charge to announce the opening, and where Hanako made Fermat's theorem be proven by someone else but she bears the primary responsibility for the event to have taken place (analogous to the case where one uses the sentence The president privatized a state-owned company when it was the government employees who actually worked on the privatization process but the president bears the primary responsibility for it to have taken place by giving out an order).

The examples discussed in (66)–(67) and (72) are sometimes used as evidence for the claim that the direct passive should be distinguished into the "-ni passive" and the "-niyotte passive". According to Kuroda (1979, 1992), for instance, the subject of the "-ni passive" is the affectee of the verbal event (as it is in the indirect passive), whereas the subject of the "-niyotte passive" is not; accordingly, the former

The analytic passive of the kind shown in (i) is not available for the verb *iyongha*- 'use' in (69a–b), suggesting that the "pat-passive" might be a strategy for deriving a passive when the markedness constraint in (68) prevents the "toy-passive" from having a passive interpretation.

<sup>16.</sup> Note in passing that the passive of (71a) can still be formed analytically by using a verb for 'receive' as shown below.

<sup>(</sup>i) Swuni-ka Cheli-eykey panghay-lul pat-ass-ta.
Swuni-NOM Cheli-by hindrance-ACC receive-PST-DECL
'Swuni was hindered by Cheli.'

has to be an animate entity which can have a psychological experience, but the latter does not have to be one. In Kuroda's view, *kaikai* 'opening' and *teiri* 'theorem' cannot be used as the subject in the "-*ni* passive" in (66b) and (67b), but they can in the "-*niyotte* passive" in (72a–b), because *kaikai* and *teiri* are abstract NPs that cannot have a psychological experience. It is argued in a similar vein that a nominal like *booru* 'ball' cannot be the subject in the "-*ni* passive" as in (73a), but it can in the "-*niyotte* passive" as in (73b), because it is an inanimate entity that cannot have a psychological experience.

- (73) a. \* Siori booru-ga Oo-ni takadakato utiage-rare-ta.
  white ball-NOM Oo-by high hit.up-PASS-PST
  Intended: 'A white ball was hit high in the air by Oo.' (Kuroda 1992, 187)
  - b. Siori booru-ga Oo-niyotte takadakato utiage-rare-ta. white ball-NOM Oo-owing.to high hit.up-PASS-PST 'A white ball was hit high in the air by Oo.' (Kuroda 1992, 187)

But the subject of the "-*ni* passive" does not always have to be psychologically affected, and thus might as well be an abstract NP or an inanimate NP as in (74a) and (74b), indicating that Kuroda's dichotomy of the -*ni* and -*niyotte* passives is not tenable (Shibatani 1994; Oshima 2006; Bosse, Bruening, and Yamada 2012).

- (74) a. Kaikai-ga gityoo-ni syoonins-are-ta.
  opening-NOM chairperson-by approve-PASS-PST
  'The opening (of a meeting) was approved by the chairperson.'
  - b. Tokyootawaa-ga Gozira-ni hakais-are-ta.
     Tokyo.tower-NOM Godzilla-by destroy-PASS-PST
     'The Tokyo tower was destroyed by Godzilla.' (Bosse, Bruening, and Yamada 2012, 1208)

Under the current approach, the -ni phrase can be used in the examples with an abstract or inanimate subject in (74a-b), because it cannot be interpreted as a normally projected argument in the given context, and thus the interpretation of a demoted agent argument is not blocked in accordance with the markedness condition in (68). As for the ungrammaticality of (73a), it is also attributable to the markedness condition in that the sentence is grammatical with the interpretation 'a white ball was hit high in the air towards Oo' (Ishizuka 2010).

### 5 Conclusion

This paper investigated the RARE-constructions in Japanese and argued that they are all truly passives in the sense that they either demote or remove an argument in the syntax that would function as the subject in the corresponding active. We suggested that the morpheme -(r) are is the realization of the passive element, Pass, whose primary function is to suppress an argument of its sister predicate. Whether the suppressed argument is projected as an oblique phrase ("demoted") or stays unprojected throughout ("(syntactically) removed") was claimed to be determined according to language-specific features of Pass as well as the properties of the other elements involved in the derivation. It has been shown that the proposed approach can successfully account for the patterns of the direct and indirect RARE-constructions in Japanese that are problematic for a unified view, including the incompatibility of intransitive verbs in the direct passive, the impossibility of argument removal and the impossibility of replacing -ni with -nivotte in the intransitive-based indirect passive. The current study thus shows that the indirect RAREconstruction, as well as the direct RARE-construction, can be given a uniform 'passive account' from a syntactic perspective in which the element responsible for passivization may suppress either an internal or an external argument. In this regard, the study supports the view that the defining characteristic of the passive should be demotion or removal of any argument (Bruening 2013; Kiparsky 2013; Murphy 2014; Williams 2015) rather than of an external argument.

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