

REMARKS ON NOMINATIVE-GENITIVE CONVERSION IN JAPANESE*

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1. Introduction

In Japanese, subjects can be marked with genitive case via so-called ‘nominative-genitive (*ga-no*) conversion’ when they appear in relative or noun-complement clauses. The genitive-subject constructions derived by nominative-genitive conversion have attracted much attention in the literature on Japanese. Various proposals to account for their peculiar properties are available (see Harada 1971, Miyagawa 1993, 2011, 2013, Sakai 1994, Watanabe 1996, Ochi 2001, Saito 2004, Hiraiwa 2001, 2005, Maki and Uchibori 2008, and others).¹ Among the issues addressed in the literature, this paper focuses on the question of where genitive subjects are located in overt constituent structure (i.e. narrow syntax), and shows that they are located in the CP domain, and not in the nominal domain.

In Chomsky (2008), it is suggested that formal features, including Case and EPP features, should be originated from their edges (e.g. C, v, D), and that some features are transferred from C to T via Feature Inheritance (see also Richards 2007). Under the Feature Inheritance view, subjects undergo A-movement to Spec-TP from vP-internal position when T inherits the Case and EPP features from C. This analysis leads to the prediction that if T does not inherit the EPP feature, C rather than T should be able to attract subjects. The genitive subject construction is shown to provide a case in point, in that the genitive subjects undergo A-movement targeting CP rather than TP.

As for the licensing of genitive case marking converted via nominative-genitive conversion, two major views are available: One is the ‘C-licensing’ view (Hiraiwa 2001, 2005) and another is the ‘D-licensing’ view (Miyagawa 1993, 2011, 2013, Ochi 2001). The discussion in the present paper sides with the latter D-licensing view, but presents an analysis to the effect that both CP and DP are necessary for nominative-genitive conversion to take effect. More specifically, it is argued that in the genitive-subject construction, while D is responsible for genitive case licensing, CP needs to be rendered as an A-position by undergoing ‘adnominalization’, because the genitive subject (derived by nominative-genitive

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¹ See Takahashi (2010) for a difference in the possibility of the conversion obtained in predicate type. For discussion on dialectal facts, see e.g. Yoshimura (2007). For discussion of the transitive restriction, see Watanabe (1996), among others.

conversion) is moved to CP to fulfil the EPP requirement of the clause.

The present article is organized as follows. Section 2 argues that D rather than C should be responsible for case marking on the genitive subject (derived via nominative-genitive conversion). In section 3, I show, on the basis of NPI data, that genitive subjects are located in CP, which is positioned above TP, where nominative subjects are located. By making use of adjectival and adverbial modifiers, it is shown that the genitive subject derived by nominative-genitive conversion does not reside in the nominal domain, as opposed to a genitive possessor accommodated in the nominal projection. Section 4 discusses how the mixed case-marking patterns derived from multiple nominative constructions are licensed. Section 5 presents a conclusion.

2. The Licenser of Genitive Case

Let us begin by noting that in Japanese, case marking on a subject can be changed from ‘nominative’ to ‘accusative’ when it appears in a relative or a noun complement clause, embedded under a nominal, as exemplified in (1) (see e.g. Maki and Uchibori 2008, Ochi 2016 for an overview of this phenomenon).

- (1) a. [gakusei- $\{ga/no\}$ kai-ta] ronbun
 student- $\{Nom/Gen\}$ write-Past paper
 ‘the paper which the student wrote’
- b. [gakusei- $\{ga/no\}$ ku-ru] kanousei
 student- $\{Nom/Gen\}$ come-Pres possibility
 ‘the possibility that the student will come’

At first sight, it looks as if the genitive-subject construction possesses the same syntactic structure as the nominative-subject construction, the sole visible difference being the subject case marking. Despite appearances to the contrary, the subjects in the relative and noun-complement constructions in (1) occupy distinct constituent positions, depending on how they are case-marked. Before going into this discussion, I will argue that genitive case marking appearing on the genitive subjects should be licensed by a nominal located outside the embedded clauses.

In the literature on Japanese, two different views for the licensing of genitive case generated by nominative-genitive conversion have been proposed—the D-licensing and the C-licensing analyses. Under the D-licensing view (e.g. Miyagawa 1993, 2011, Ochi 2001), genitive case is licensed by D, which appears outside a relative or a noun-complement clause. On the other hand, Hiraiwa (2001, 2005) advances a C-licensing analysis that takes genitive case licensing to be tied to the adnominal form of predicates, and claims that genitive case is

licensed by C-T complex (in the clause where the predicate occurs in the adnominal form).²

I argue that the D-licensing analysis is favored over the C-licensing analysis. I propose that the D head has a formal Case feature [+Gen], and that the genitive-subject construction is formed if D instantiates Agree with the genitive subject, and the unvalued Case feature on the subject is valued as [+Gen], as in (2a).³

- (2) a. [[CP [TP [_{VP} SUBJ[GEN] V-v] T] C].....] D [GEN]
- b. [[CP [TP [_{VP} SUBJ[GEN] V-v] T] C [GEN]].....] D]

If C is responsible for genitive case licensing, the C head (or its associated T head) in the embedded clause should have the feature [+Gen], and the unvalued Case feature of the subject is assigned [+Gen] under Agree, as in (2b). As I will discuss below, there is good reason to believe that the possibility of genitive case marking on the subject is correlated with the nature of a nominal positioned outside the clause. Thus, I suggest that the examples in (1) involve the derivation in (2a) when the subjects are marked with genitive case, i.e. D instantiates Agree with the genitive subject for the purpose of genitive case licensing.

The two recent proposals on genitive case licensing make different predictions. Under the D-licensing view, the appearance of genitive case on the subject should be correlated with the type of nominal that occurs in a higher position. Under the C-licensing analysis, by contrast, when the predicate has an adnominal form, C licenses genitive case. The C-licensing analysis predicts that whenever the predicate appears in the adnominal form, its associated C should be able to license genitive case that appears on the genitive subject. In point of fact, Hiraiwa (2005) claims that there should be a tight correlation between the predicate form and the possibility of nominative-genitive conversion. On the contrary, it is argued below that there is no such strict correspondence between the two, despite Hiraiwa's claim, and show that genitive subjects can occur in a subset of clauses where the predicate appears in the adnominal form.

In present-day Japanese, verbs and adjectives have lost a morphological distinction between sentence-final and adnominal forms, so it is instructive to look at nominal adjectives, which retain the relevant morphological distinction, for the purpose of identifying the contexts where the predicates in the adnominal form appears. I assume here that verbs and adjectives take an adnominal form in the contexts where a nominal adjective appears in the adnominal form, even if this distinction is not morphologically manifested on them.

Empirical evidence showing that adnominal CP (associated with the adnominal

² Watanabe (1996) claims that genitive case realized via genitive-nominative conversion is a disguised form of nominative case, and differs from genitive marking licensed in DP.

³ If there is another genitive argument derived via nominative-genitive conversion, D will instantiate Agree with this argument, too. See section 4.

predicate) does not license genitive case can be easily adduced. To make this point, observe that in (3a), which does not involve embedding, the nominal adjective takes a sentence-final form, but that when a nominal adjective is embedded under *no da*, it takes an adnominal form, as in (3b).

- (3) a. Gakusei-ga sizuka-{*na/da}.
 student-Nom quiet-{'Pres.Adn/Pres.SF}'
 'The students are quiet.'
- b. [Gakusei-ga sizuka-{na/*da}] no da.
 student-Nom quiet-{'Pres.Adn/Pres.SF}' that Cop
 'The students are quiet.'

Nevertheless, in the construction in which the predicate is combined with *no da*, just as in the matrix clause, the subject cannot bear genitive case, as shown in (4).

- (4) a. *Gakusei-{ga/*no} ki-ta.
 student-Nom come-Past
 'The students came.'
- b. [Gakusei-{ga/*no} ki-ta] no da.
 student-Nom come-Past that Cop
 'The students came.'

The fact that nominative-genitive conversion is not allowed in (4b), just like (4a), makes it clear that the occurrence of a genitive subject is not determined solely by the context where a predicate appears in the adnominal form.

The applicability of nominative-genitive conversion to nominative subjects is more closely correlated with the nature of nominal outside the clause. To exemplify, when *koto* 'fact' (introducing a noun complement clause) appears as an object to *siru* 'know', the embedded subject can be marked with genitive via nominative-genitive conversion, but when *koto* is combined with *aru*, nominative-genitive conversion cannot be instantiated, as illustrated in (5).

- (5) a. Watasi-wa [gakusei-{ga/no} ki-ta] koto-o sit-ta.
 I-Top student-{'Nom/Gen}' come-Past fact-Acc know-Past
 'I came to know the fact that the students came.'

- b. [Gakusei- $\{ga/*no\}$ ki-ta] koto-ga ar-u.
 student- $\{Nom/Gen\}$ come-Past fact-Nom be-Pres

‘There are times when the students came.’

In (5a), *koto* acts as a full noun. By contrast, *koto* in (5b) does not have the status of a full noun, because *koto-ga aru* is a modal-like expression. In the latter case, nominative-genitive conversion is not allowed.

The nominal *koto* may take a clausal complement regardless of whether it is used as a full noun or part of a modal-like expression. (In effect, *koto* takes a clausal complement obligatory when it acts as part of a modal-like expression.) When a nominal adjective appears as the predicate of the embedded clauses, it takes the adnominal, but not the sentence-final, form, as shown in (6).

- (6) a. Watasi-wa [gakusei-ga sizuka- $\{na/*da\}$] koto-o sit-ta.
 I-Top student-Nom quiet- $\{Pres.Adn/Pres.SF\}$ fact-Acc know-Past

‘I came to know the fact that the students were quiet.’

- b. [Gakusei-ga sizuka- $\{na/*da\}$] koto-ga ar-u.
 student-Nom quiet- $\{Pres.Adn/Pres.SF\}$ fact-Nom be-Pres

‘There are times when the students are quiet.’

A comparison of (5b) and (6b) shows that nominative-genitive conversion is sometimes prevented from applying to a nominative subject even when it appears in the clause whose predicate appears in the adnominal form.

Hiraiwa (2005) is aware of the fact that nominative-genitive conversion cannot be instantiated in some clauses whose predicate appears in the adnominal form, so he stipulates another condition to the effect that for nominative-genitive conversion to take place, C-T is selected by an element with an unvalued Case feature, i.e. the complex is Case-licensed by a higher probe. Note, however, that in (5b) *koto* is marked with nominative case, which suggests that this nominal bears an unvalued Case feature (when it is merged initially). Under Hiraiwa’s analysis, then, nominative-genitive conversion should be possible in (5b), but the fact is not in keeping with his analysis.

Essentially, the data regarding *koto* ‘fact’ in (5) and (6) lend empirical support to the D-licensing analysis. From the examples in (5) and (6), it can be easily seen that there is not a tight correlation between the predicate form and the licensing of genitive case, and that the possibility of genitive case on the subject is more closely correlated with the properties of a noun outside, i.e. genitive case can appear on the subject if an external nominal acts as a full noun.

With a view to providing further confirmation for the present view, let us look at another

nominal *wake* ‘reason’. This nominal can be used as a full-fledged noun or as an interrogative marker (in an interrogative sentence asking for reasons), as in (7).

- (7) a. Watasi-wa [gakusei-ga ki-ta] wake-o sit-ta.
I-Top student-Nom come-Past reason-Acc know-Past
‘I came to know the reason why the student came.’
- b. Sore-de [gakusei-ga ki-ta] wake?
that-for student-Nom come-Past fact
‘Is that the reason why students came?’

In (7a), *wake* is a full noun selecting a complement clause, but in (7b), the same noun assumes the function of an interrogative marker.⁴ The two instances of *wake* in (7) display a discrepancy in applicability of nominative-genitive conversion, as illustrated in (8).

- (8) a. Watasi-wa [gakusei- $\{ga/no\}$ ki-ta] wake-o sit-ta.
I-Top student- $\{Nom/Gen\}$ come-Past reason-Acc know-Past
‘I came to know the reason why the students came.’
- b. Sore-de [gakusei- $\{ga/*no\}$ ki-ta] wake?
that-for student- $\{Nom/Gen\}$ come-Past fact
‘Is that the reason why the students came?’

When a nominal predicate appears in the complement clause, it takes the adnominal form, as shown in (9).

- (9) a. Watasi-wa [gakusei-ga sizuka- $\{na/*da\}$] wake-o sit-ta.
I-Top student-Nom quiet- $\{Pres.Adn/Pres.SF\}$ reason-Acc know-Past
‘I came to know the reason why the students were quiet.’
- b. Sore-de [gakusei-ga sizuka- $\{na/*da\}$] wake?
that-for student-Nom quiet- $\{Pres.Adn/Pres.SF\}$ fact
‘Is that the reason why the students are quiet?’

The data regarding *wake* show that nominative-genitive conversion is possible when *wake* counts as a full noun, but not when *wake* is used as an interrogative marker. Again, the fact suggests that the possibility of nominative-genitive conversion have a tight correlation with

⁴ The interrogative marker *wake* may be regarded as a truncated form of *wake desu ka?* [reason Cop Q] derived by dropping *desu ka*, just like the question indicator *no*, which may be conceived of as a reduced form of *no desu ka?* [Nmnl Cop Q]. Note that just like *wake*, *no* can be used as an interrogative marker, but *no* has a variety of other non-nominal uses.

the properties of a nominal outside, rather than the predicate form in the embedded clause.

If, as suggested above, nominative-genitive conversion is allowed only in clauses whose predicate takes an adnominal form, one puzzling fact pertaining to noun-complement constructions can be readily resolved. Specifically, it is often observed (see e.g. Inoue 1976, Hiraiwa 2005) that nominative-genitive conversion is prevented if a complementizer is present in embedded clauses. The following examples illustrate the extent of the phenomenon.

- (10) a. [gakusei-*{ga/no}* ki-ta] kanousei
 student-*{Nom/Gen}* come-Past possibility
 ‘the possibility that the student came’
- b. [gakusei-*{ga/*no}* ki-ta *toiu*] kanousei
 student-*{Nom/Gen}* come-Past that possibility
 ‘the possibility that the student came’

In Japanese, complementizers do not occur in relative clauses, but nouns like *syooko* ‘evidence’, *uwasa* ‘rumor’, and *kanousei* ‘possibility’ can take a complement clause introduced by the complementizer *toiu* ‘that’. Some nouns like *kanousei* ‘possibility’ allow the complementizer to be elided (optionally) (see e.g. Masuoka and Takubo 1992). Importantly, as shown in (10), only when the complementizer is elided is it possible to mark the subject with genitive case (via nominative-genitive conversion).

Nominative-genitive conversion is not applicable to the clause where a complementizer is present, because it does not furnish the context where the predicate appears in the adnominal form. To understand this point, observe that a nominal adjective in the noun-complement clause embedded under *kanousei* ‘possibility’ appears in different forms, depending on whether or not the clause comprises the complementizer *toiu* ‘that’.

- (11) a. [gakusei-ga sizuka-*{na/*da}*] kanousei
 student-Nom quiet-*{Pres.Adn/Pres.SF}* possibility
 ‘the possibility that the students are quiet’
- b. [gakusei-ga sizuka-*{*na/da}* *toiu*] kanousei
 student-Nom quiet-*{Pres.Adn/Pres.SF}* that possibility
 ‘the possibility that the students are quiet’

In (11a), the nominal predicate must appear in the adnominal form, and in (11b), which comprises the complementizer *toiu*, it must take the sentence-final form.

When a complementizer is introduced, the predicate appears in the sentence-final rather

than the adnominal form. On the other hand, nominative-genitive conversion is allowed in the context where the predicate takes the adnominal form. Given this, it follows straightforwardly that no nominative-genitive conversion is instantiated when the clause comprises a complementizer.

A question to be raised at this point is why the contexts where nominative-genitive construction applies are limited to a subset of clauses whose predicates take the adnominal form. Apparently, this is related to the fact that in classical Japanese, the adnominal form of a predicate had a nominal-equivalent use, as well as a noun modifying use, but that due to a historical change, the adnominal form is no longer used as a nominal-equivalent expression in contemporary Japanese (see e.g. Konoshima 1962, Nomura 1993). Thus, it is not possible to combine predicates directly with case markers in ordinary expressions.

- (12) a. Watasi-wa [hasir-u *({no/koto})]-ga suki-da.
 I-Top run-Pres {Nmnl/fact}-Nom fond-Pres
 ‘I like running.’
- b. Watasi-wa [yooki-{{na/* da} no]-ga suki-da.
 I-Nom cheerful-{{Pres.Adn/Pres.SF} Nmnl-Nom fond-Pres
 ‘I like being cheerful.’

The example in (12a) shows that if a verb is to be combined with a case marker, a nominalizing particle *no* (or a substantial noun) needs to be inserted between them. When no nominal element appears between them, unacceptability results. (12b) shows that when a nominal adjective appears in the clause nominalized by *no*, it takes an adnominal form. (12a) suggests that the adnominal form of predicates cannot be used as a nominal-equivalent expression, i.e. predicates cannot be nominalized by virtue of possessing adnominal inflection.

It is interesting to note that in present-day Japanese, the nominalized use of adnominal forms is found only in archaic expressions (which often constitute completely frozen expressions), as exemplified in (13).

- (13) a. Sono hanasi-wa [kik-u]-ni tae-na-i.
 that story-Top hear-Pres-Dat bear-Neg-Pres
 ‘That story is unbearable to hear.’
- b. [Maker-u]-ga kati.
 lose-Pres-Nom win
 ‘To lose is to win.’

- c. [Yowak-i]-o tasuke, [tuyok-i]-o kuzik-u.
 weak-Pres.Adn-Acc help strong-Pres.Adn-Acc defeat-Pres

(lit.) ‘Help the weak, and defeat the strong.’

In (13a-b), the case markers directly attach to the predicates, and (13c) shows that the nominal adjectives appear in the adnominal form. The facts suggest that the remnant use of adnominal predicates as nominal-equivalent expressions in classical Japanese can be found in archaic expressions, which reflect the older grammar of the language.

In contemporary Japanese, the adnominal predicates need to be combined with a nominalizing particle so as to qualify as nominal-equivalent expressions, due to a historical change (see Aoki 2004, Shida 1970, 1976, among others). The nominal adjective preceding the nominalizing particle takes the adnominal form in (12b), just like the adjectives appearing in the archaic expression in (13c). Nevertheless, the clauses containing the adnominal form of predicates no longer serve as full-fledged nominals (in ordinary speech). Thus, the adnominal clauses can function as nominals only with the help of the nominalizing particle. If so, it is feasible to say that C is not capable of licensing genitive case.

Hiraiwa (2005) attempts to motivate his C-licensing analysis by showing that nominative-genitive conversion is possible even in the absence of a putative nominal that licenses genitive case.⁵ Kikuta (2002) argues for a similar view. In some cases, it looks as if genitive subjects were sanctioned without an obvious case-licensing external nominal. As far as I can see, there are two types of examples that look like instantiating nominative-genitive conversion without an external noun.

- (14) a. [Ame-*{ga/no}* yam-u made] watasi-wa mat-te i-ta.
 rain-*{Nom/Gen}* stop-Pres until I-Top wait-Ger be-Past

‘I waited until it stopped raining.’

- b. [Gakusei-*{ga/no}* syaber-u yori] watasi-wa hayaku syaber-u.
 student-*{Nom/Gen}* talk-Pres than I-Top quick talk-Pres

‘I talk faster than the student does.’

The advocates of the C-licensing analysis take examples like (14) to indicate that nominative-genitive conversion is implemented without an external noun. Nevertheless, it is too hasty to conclude, on the basis of the data in (14), that an external noun is not required for nominative-genitive conversion to take place.

⁵ There seem to be a wide range of speaker variations with the set of the data discussed by Hiraiwa (2001, 2005); there are speakers who find many of his examples unacceptable or marginable at the best (see e.g. Ooshima (2010) for the judgment issues, and Nanbu (2007) for a quantitative analysis of nominative-genitive conversion based on National Diet documents).

In the first place, in (14a), it may be that the postposition *made* ‘until’ serves as a licenser of genitive case, since this particle, which has been derived from a noun by virtue of grammaticalization, can still be used as a noun, as in (15).

- (15) [ame-ga yam-u made]-ga syoobu-da.
rain-Nom stop-Pres until-Nom challenge-Cop

(Lit.) ‘Until the rain stops is a challenge.’

If *made* is a pure postposition, it will not be expected to appear in nominal position, marked with nominative case. On the other hand, if *made* can be a noun, it is not possible to draw the conclusion that in (14a), genitive case appears without a nominal licenser.

A second case concerns *yor*i ‘than’ in (14b). Note that *yor*i does not serve as a noun by itself, and hence can in no way appear in nominal position, as shown in (16a). Nevertheless, *yor*i allows the nominalizing particle *no* to precede it, as illustrated in (16b).

- (16) a. *[Gakusei-ga syaber-u yori]-ga i-i.
student-Nom talk-Pres than-Nom good-Past

(Lit.) ‘Than students talk is good.’

- b. [Gakusei-{ga/no} syaber-u **no** yori] watasi-wa hayaku syaber-u.
student-{Nom/Gen} talk-Pres Nmn1 than I-Top quickly talk-Pres

‘I talk faster than the student does.’

Given that a nominalizing particle is allowed to occur with *yor*i, the genitive case in (16b) is likely to be licensed by an unpronounced nominalizing particle. In fact, Maki and Uchibori (2008) argue that the absence of a morphologically realized nominal does not entail that the nominal licenser of genitive case is entirely absent, and propose an analysis taking a null pronoun to license genitive case.

In short, the examples in (14) do not necessarily argue for the C-licensing view that nominative-genitive conversion is possible without a nominal. On the other hand, the data (3) through (9) suggest that the possibility of nominative-genitive conversion be correlated with the properties of a nominal outside. In light of these facts, it is plausible to state that the adnominal C selecting an predicate in the adnominal form does not license genitive case, and thus, an external noun element is necessary for its licensing. If this is the case, it is naturally expected that nominative-genitive conversion is most typically instantiated on subjects residing in relative and noun-complement clauses, which have a full-fledged nominal outside them.

3. The Position of Genitive Subjects

In this section, drawing on data regarding negative polarity items (NPIs), it is shown that subjects carrying genitive case, derived by nominative-genitive conversion, should be located in a structural position higher than nominative subjects. I suggest that when the subject is marked with genitive, it is located in CP—a projection positioned above TP, which is filled by the nominative subject.⁶ In light of the fact that genitive subjects possess the same A-properties as nominative subjects, I suggest that subjects undergo A-movement to adnominal CP when they are marked with genitive case.

That genitive subjects are located in CP can be ascertained by considering the behavior of arguments accompanying prenominal NPI modifiers like *amari* {*ooku-no/takusan-no/oozei-no*} ‘very many’, which are derived by combining *amari* with adjectival expressions specifying large quantities.⁷ Since the NPI used for modifying arguments is licensed under the scope of negation (in overt syntax), the structural position of subjects can be easily assessed. For the present purposes, the use of a prenominal NPI modifier is instrumental, because it allows the case marking of the modified argument to be overtly manifested.

A prenominal modifier like *amari ooku-no* is an NPI, which is licensed by a clausal negator under c-command, and as such, its occurrence is restricted to negative contexts. (Consequently, arguments accompanying this expression also serve as NPI expressions as a whole.) The NPI modifier *amari ooku-no* in (17) is licensed regardless of whether it modifies the subject or the object.

- (17) a. Kyoo-wa amari ooku-no hito-ga Ken-o sikara-nakat-ta.
 today-Top very many-Gen person-Nom Ken-Acc scold-Neg-Past
 ‘Not very many people scolded Ken today.’
- b. Kyoo-wa Mari-ga amari ooku-no hito-o sikara-nakat-ta.
 today-Top Mari-Nom very many-Gen person-Acc scold-Neg-Past
 ‘Mari did not scold very many people today.’

It goes without saying that if the clause does not contain a clausal negator *nai* ‘not’, the NPI

⁶ The nominal *kanousei* does not select an animate possessor in the intended sense of ‘possibility’, as in **gakusei-no kanousei* ‘the student’s possibility’. There are also nouns, like *kiboo* ‘hope’, that can select animate a possessor, as in *gakusei-no kiboo* ‘the student’s hope’. See Sakai (1994) and Ochi (2001) for discussion on this point.

⁷ Expressions with prenominal NPI modifiers with such as *rokuna hito* ‘not very good people’, *taisita hito* ‘not significant people’ and the like, have derogatory meanings and show deep unaccusativity properties (see Hirakawa 2003). When *amari* is combined with quantity expressions like *ooku-no*, no derogatory meaning is yielded, and importantly, the combined expressions are free from the deep unaccusativity constraint. Thus the overt constituent position of arguments can be assessed in an optimal way by making use of the NPI *amari*.

expressions are not licensed, as shown in (18).

- (18) a. *Kyoo-wa amari ooku-no hito-ga Ken-o sikat-ta.
 today-Top very many-Gen person-Nom Ken-Acc scold-Past
 ‘Very many people scolded Ken today.’
- b. *Kyoo-wa Mari-ga amari ooku-no hito-o sikat-ta.
 today-Top Mari-Nom very many man-Acc scold-Past
 ‘Mari scolded very many people today.’

The acceptability of the two sentences in (17) shows that no subject-object asymmetry is observed in regard to the licensing of NPIs in simple clauses.

In Japanese, nominative subjects are moved from vP-internal position to Spec-TP via A-movement due to the EPP requirement of T (see e.g. Kishimoto 2010). If the nominative subject is located in Spec-TP, the clausal negator must take scope over TP.⁸ Kishimoto (2017) suggests that the existence of subject raising to TP can be assessed by way of the aspectual construction in (19).

- (19) a. ?*Kyoo amari ooku-no hito-ga Ken-o sikara-nai-de i-ta
 today very many-Gen person-Nom Ken-Acc scold-Neg-Ger be-Past
 (riyuu)
 reason
 ‘(the reason that) not very many people were scolding Ken today’
- b. Kyoo Mari-ga amari ooku-no hito-o sikara-nai-de i-ta
 today Mari-Nom very many-Gen person-Acc scold-Neg-Ger be-Pres
 (riyuu)
 reason
 ‘(the reason that) Mari did not scold very many people today’
- c. ?*Kyoo amari ooku-no hito-ga Mari-ni sikar-are-nai-de i-ta
 today very many-Gen person-Nom Mari-by scold-Neg-Ger be-Pres
 (riyuu)
 reason
 ‘(the reason that) very many people were not scolded by Mari today’

The aspectual *-te iru* construction in (19) can be assumed to possess a bi-clausal structure where a TP-complement clause is embedded under the aspectual verb *iru* ‘be’.

⁸ Kishimoto (2007, 2008) suggests that negative *nai* takes scope over TP due to the presence of Neg-head raising.

(20) [_{TP} SUBJ-NOM [_{TP} SUBJ-NOM [_{VP} SUBJ-NOM OBJ-ACC V-v] Neg-*te*] *i-ru*] (reason)

In (19), since the negative *nai* appears inside the *te*-complement, *nai* takes scope only over the embedded TP. If the matrix T has an EPP requirement, the subject is raised to the matrix Spec-TP, as represented in (20). (Note that the embedded TP clause headed by *-te* has infinitival properties, so that it does not serve as host for an overt subject moved by A-movement.)

As shown in (19a-b), the NPI object, but not the NPI subject, is licensed under the scope of negation. The unacceptability of (19a), where the negative *nai* takes scope only over the embedded clause, follows, given that the nominative subject is moved to the matrix TP. The failure of the NPI in (19c) shows that the passive subject promoted from an object falls outside the scope of negation. Since the NPI object is licensed in (19b), the fact suggests that whether or not the NPI is licensed is determined according to where the argument with the NPI appears in overt constituent structure. Importantly, the facts remain the same regardless of whether the aspectual construction is embedded under the nominal *riyuu* ‘reason’, suggesting that nominative subjects undergo raising in the embedded contexts as well.

Incidentally, an subject-object asymmetry in NPI licensing does not obtain when the aspectual verb is negated, as illustrated in (21).

(21) a. Kyoo amari ooku-no hito-ga Ken-o sikat-te i-nakat-ta
 today very many-Gen person-Nom Ken-Acc scold-Ger be-Neg-Past
 (riyuu)
 reason

‘(the reason that) not very many people were scolding Ken today’

b. Kyoo Mari-ga amari ooku-no hito-o sikat-te i-na-i
 today Mari-Nom very many-Gen person-Acc scold-Ger be-Neg-Pres
 (riyuu)
 reason

‘(the reason that) Mari was not scolding very many people today’

In both examples in (21), the NPI is licensed under the scope of negation even if the subject is raised to the matrix TP. This shows that the scope of the clausal negator *nai*, occurring to the right of the aspectual verb extends over TP.

(22) [_{TP} SUBJ-NOM [_{TP} SUBJ-NOM [_{VP} SUBJ-NOM OBJ-ACC V-v]-*te*] *i*-Neg-*i*] (reason)

The fact that the NPIs are legitimate in (21) is naturally expected, given that the aspectual verb resides in the matrix clause.

Let us now turn to the question of how NPI subjects with *amari ooku-no* behave in the

context of nominative-genitive conversion. The NPI subject marked with nominative case is licensed, as shown in (23a). By contrast, the NPI subject is not licensed when it is genitively marked, as shown in (23b).

- (23) a. [amari ooku-no haiyuu-ga de-nakat-ta] bangumi
 very many-Gen actor-Nom appear-Neg-Past program
 ‘the program on which not very many actors appeared’
- b. * [amari ooku-no haiyuu-no de-nakat-ta] bangumi
 very many-Gen actor-Gen appear-Neg-Past program
 ‘the program on which not very many actors appeared’

The failure of negative *nai* to license the NPI in (23b), coupled with the acceptability of (23a), illustrates that when the subject is marked with genitive case, it occupies a higher constituent position than when it is marked with nominative case.

The genitive subject derived via nominative-genitive conversion is not extracted from the complement clause, even though it is located in a structurally higher position than the nominative subject. This fact can be ascertained by considering how an adverbial modifier *kinoo* ‘yesterday’ and an adjectival modifier *kityoo-na* ‘valuable’ behave in noun-complement/relative clauses.

For one thing, the temporal modifier *kinoo* ‘yesterday’, which should be modifying TP in the embedded clause, is allowed to precede or follow the subject regardless of its case marking, as shown in (24) (see Miyagawa 1993 and Nakai 1980).

- (24) [(kinoo) sensei-{ga/no} (kinoo) nobe-ta iken]
 yesterday teacher-{Nom/Gen} yesterday state-Past opinion
 ‘the opinion that the teacher gave (yesterday)’

Given that modifiers are adjoined to the projections that they modify, the projection of the embedded clause which the adverbial *kinoo* modifies must be present to the left of the subject in (24). This suggests that the subject is included in the embedded clause.

For another, the adjectival modifier *kityoo-na* ‘valuable’ modifying the noun *iken* ‘opinion’ in the relative clause can appear on to the left, but not the right, of the subject regardless of its case marking, as shown in (25).

- (25) [(kityoo-na) sensei-{ga/no} (*kityoo-na) nobe-ta iken]
 valuable teacher-{Nom/Gen} valuable state-Past opinion
 ‘the (valuable) opinion that the teacher gave’

The adjectival modifier *kityoo-na* should modify a nominal projection. In (25), the adjectival

modifier cannot follow the subject, because the nominal projection that *kityoo-na* modifies does not occur inside the embedded clause.

In simple DPs (with no complement clauses), an adjectival modifier like *kityoo-na* ‘valuable’ can appear either to the left or right of a genitive phrase (i.e. the possessor) that modifies the head noun, but it is not possible to place a temporal adverb like *kinoo* inside the same nominal, as illustrated in (26).

- (26) a. [(*kityoo-na*) sensei-no (*kityoo-na*) iken]
 valuable teacher-Gen valuable opinion

‘the teacher’s (valuable) opinion’

- b. [(**kinoo*) sensei-no (**kinoo*) iken]
 yesterday teacher-Gen yesterday opinion

‘the teacher’s (valuable) opinion’

In (26), the genitive possessor is an argument to the nominal head *iken* ‘opinion’, and the genitive case on the possessor is not derived via nominative-genitive conversion. The adjective *kityoo-na* may either precede or follow the genitive argument, as shown in (26a), because, in either case, it can be construed as residing in the nominal projection. In contrast, the occurrence of the adverb is not permitted, as in (26b), because the nominal construction does not comprise a clausal projection (TP) that the adjectival modifier *kityoo-na* modifies.

The adverb *kinoo* ‘yesterday’ appears in the clausal projection of the embedded clause in (24). Importantly, this adverb can be placed to the left of the genitive subject. Given that the adverb can precede the genitive subject in (24), it is plausible to state that the genitive subject generated by nominative-genitive conversion is located in the embedded clause, but not in the nominal domain, despite its nominal case marking.

Furthermore, the genitive subject counts as the antecedent of subject-oriented reflexive *zibun* in the same way as nominative subject. In (27a), the accusative argument does not serve as the antecedent of *zibun*, but once it is promoted to a subject via passivization, it can antecede the reflexive, as shown in (27b).

- (27) a. [sensei-ga seito-o zibun-no heya-de sikat-ta] riyuu
 teacher-Nom pupil-Acc self-Gen room-in scold-Past reason

‘the reason why the teacher scolded the pupil in self’s room’

- b. [seito-_i-{ga/no} sensei-ni zibun_i-no heya-de sikar-are-ta] riyuu
 pupil-_i-{Nom/Gen} teacher-by self-Gen room-in scold-Pass-Past reason

‘the reason why the pupil was scolded by the teacher in self’s room’

When an argument undergoes A'-movement (such as topicalization) or scrambling, by contrast, no change of grammatical relations is instantiated. Thus, this type of movement does not induce a change in the possibility of reflexivization.

- (28) {Seito_j-o/Seito_j-wa} sensei_i-ga zibun_{i/*j}-no heya-de sikat-ta.
 {pupil-Acc/pupil-Top} teacher-Nom self-Gen room-in scold-Past

‘The teacher scolded the pupil in self’s room’

In (28), only the nominative argument can be the antecedent of *zibun*, which shows that the fronted accusative argument is not promoted to a subject by topicalization (A'-movement) or scrambling.

Importantly, the passive subject in (27b) may be the antecedent of the reflexive *zibun* regardless of whether it is marked with genitive case or nominative case. This is indicative of the fact that in (27b) the erstwhile object is promoted to a subject by undergoing A-movement under passivization. In light of this fact, it is reasonable to conclude that when the subject is marked with genitive case, it appears in CP by undergoing A-movement from vP-internal position.

The data discussed above illustrate that subjects occupy distinct positions according to whether they are marked with genitive or nominative case. Both genitive and nominative subjects reside in the embedded clause, but the genitive subject occupies a higher position than the nominative subject, as a result of A-movement from within vP, as in (29).

- (29) [[_{CP} SUBJ-GEN [_{TP} SUBJ-NOM [_{vP} SUBJ-GEN/NOM]] C] D]

As noted earlier, whether or not the NPI *amari ooku-no* is legitimate is determined according to where its modifying argument is located in overt constituent structure. Given this, it can reasonably be concluded that the genitive subject, which is first merged in vP internal position, undergoes subject raising (i.e. A-movement) to CP.⁹ If the genitive subject is A-moved to CP, it is also plausible to state that the EPP requirement is imposed on the clause with the genitive-subject construction (derived via nominative-genitive conversion), in the same way as the original clause, which includes the nominative subject.

Chomsky (2008) suggests that formal features are originated from C, and that Case and EPP features are inherited from C to T (see also Richards 2007). Thus, when an EPP requirement is imposed in a clause, its subject undergoes raising to TP. Under this view, if T does not inherit the EPP feature, C rather than T should be able to attract a subject, i.e. it undergoes A-movement to CP. This is exactly what happens in the genitive-subject

⁹ It is often claimed that no operator movement is involved in relative clause formation (e.g. Perlmutter 1972, Kuno 1973, and Murasugi 1991, 2000). If, as suggested, adnominal CP, which can be formed by relativization, may be an A-position, it is reasonable to assume that relativization does not involve movement of an operator into CP.

construction. As discussed above, in the genitive-subject construction, the genitive subject is A-moved to CP, because no Feature Inheritance of an EPP feature takes place from C to T, i.e. C possesses the EPP feature.

Moreover, as noted in the previous section, in contemporary Japanese, even if a predicate takes an adnominal form, its clausal constituent cannot be used as a nominal-equivalent expression. This fact suggests that genitive case needs to be licensed via an external nominal element. Nevertheless, it is plausible to assume that CP gains DP-like properties, because movement of a genitive subject targets CP. Note that CP is normally counts as A'-position, but the clause whose predicate appears in the adnominal form can accommodate a genitive subject moved by A-movement. Given that DP, but not CP, can serve as a land site of A-movement, e.g. Spec-DP can accommodate a possessor argument, it is reasonable to state that by virtue of the predicate taking an adnominal form, CP gains DP-like properties and thus is allowed to serve as a landing site of A-movement.¹⁰ Note, however, that the C head cannot license genitive case. In light of this fact, it is feasible to say that the adnominal CP involves a degenerate kind of nominalization (referred to as 'adnominalization' hereafter).

To lend concreteness to the present proposal, let us now turn to the discussion of how the genitive-subject and the nominative-subject constructions in (30) are derived.

- (30) a. [gakusei-ga hasit-ta] kanousei
 student-Nom run-Pres possibility
 'the possibility that the student ran'
- b. [gakusei-no hasit-ta] kanousei
 student-Gen run-Pres possibility
 'the possibility that the student ran'

In the nominative-subject construction in (30a), C has the verbal Case feature [+Nom] to induce Agree with the subject. Adnominal CP can be an A'-position or an A-position with DP-like properties. I propose that since [+Nom] is neither an operator feature nor a nominal Case feature, this Case feature is not compatible with C, and hence is inherited by T. Note that C has an EPP feature as well. If the EPP feature is transferred to T, along with [+Nom], the following derivation is invoked.

- (31) [[_{CP} [_{TP} SUBJ[_{±NOM}] [_{VP} SUBJ[_{±NOM}]] T[_{±NOM}] [EPP]] C] D]
-

¹⁰ Although it is assumed in this paper that Japanese relativization does not involve operator movement, it is cross-linguistically true that operator movement is invoked in relative clause formation. If so, it is reasonable to assume that adnominal CP can be an A'-position which can host an element moved by A'-movement. See Abney (1987) for discussion on the parallelism between clausal and nominal structures.

In (31), T enters into an Agree relation with the subject in vP. Since T has [+Nom], the Case feature on the subject is valued as nominative. Further, T, which is comprised of an EPP feature, attracts the subject to TP. Then all the formal features are eliminated, and the derivation of the nominative-subject construction in (30a) converges.

If CP obtains DP-like properties by virtue of adnominalization, and CP may count as a nominal A-position. Thus, C is allowed to hold [EPP], since CP can host an argument moved by A-movement. On the other hand, [+Nom] must be transferred to T by Feature Inheritance, since CP has DP-like properties. This being the case, the configuration with C possessing [EPP] and T possessing [+Nom] should be logically possible. Nevertheless, the derivation does not converge in this case, as illustrated in (32).

- (32) a. [[CP [TP [vP SUBJ[+NOM]] T[+NOM]] C[EPP]] D]
 b. *[[CP [TP [vP SUBJ[+NOM]] T[+NOM]] C[EPP]] D]
-

In (32a), T can participate in Agree with the subject. If Agree is implemented, the Case features on T and the subject are deleted upon Case valuation. Once this operation takes place, the subject is rendered inactive, the result of which C cannot have access to the subject (Chomsky 2000, 2004). This means that the subject cannot be attracted by C, as depicted in (32b), with the result that the derivation crashes.

When the subject appears in the genitive case, as in (30b), adnominal C has [EPP], but not [+Nom], while D has [+Gen]. Adnominal CP, as well as TP, can be an A-position, so either C or T is in principle allowed to bear [EPP]. Nevertheless, since C does not have any verbal Case feature to be inherited by T, nothing forces Feature Inheritance. I claim that in such cases, [EPP] is not transferred to T, and C must retain [EPP], so the following derivation is obtained.

- (33) a. [[CP SUBJ[*u*CASE] [TP [vP _____] T] C[EPP]] D[+GEN]]
 b. [[CP SUBJ[+GEN] [TP [vP _____] T] C[EPP]] D[+GEN]]
-

In (33a), the subject is raised to CP via A-movement since C has [EPP]. After this A-movement, D instantiates Agree with the subject. In (33b), Agree is applicable to the subject, because it has an unvalued Case feature. If D values the Case feature on the subject as genitive, the subject appears in the genitive case. The derivation converges, once all the formal features are eliminated.

In the present perspective, Feature Inheritance does not take place in the genitive-subject construction in (30b): C does not carry a verbal Case [+Nom], so that it retains the EPP feature. Accordingly, the genitive subject is moved to Spec-CP due to the EPP requirement imposed on the clause. This A-movement is made available when CP can host the genitive

subject moved by A-movement. In order for the genitive subject to appear in CP as a consequence of subject raising, i.e. A-movement, it is necessary for the embedded clause to be rendered as an A-position, which means that CP needs to gain some nominal properties by undergoing adnominalization.

In regard to the question of where genitive subjects derived via nominative-genitive conversion are located, Sakai (1994) argues that they are moved into the nominal domain. On the other hand, Miyagawa (1993) argues that genitive subjects residing in the complement clause are raised to Spec-DP at LF (cf. Ochi (2001) for the discussion of the possibility that the features of the nominative subject move, in line with Chomsky's feature movement (Move-F) hypothesis). Miyagawa (2011, 2013) suggests that genitive subjects are located in vP, which is a position lower than the one occupied by the nominative subject. The NPI data discussed in this section suggest that by virtue of the EPP requirement of the clause, the genitive subject undergo overt syntactic A-movement to CP—a higher position than the one occupied by the nominative subject.

To summarize, formal features such as EPP and Case features are originated in C, but in the nominative-subject construction, an EPP feature, along with the Case feature [+Nom], is transferred from C by Feature Inheritance. Accordingly, the nominative subject undergoes A-movement to Spec-TP by virtue of the EPP requirement of T. On the other hand, when the subject marked with genitive case, adnominal C retains [EPP] due to the lack of [+Nom], which necessitates Feature Inheritance. Thus, in the genitive-subject construction, where nominative case on the subject is turned into genitive case via nominative-genitive conversion, C holds the EPP feature, and thus, the genitive subject undergoes A-movement to CP, which is projected above TP.

4. Multiple and Mixed Nominative/Genitive Construction

In this section, I will discuss how the mixed case-marking patterns are derived when a multiple nominative clause is embedded as a relative or a noun-complement clause. It is argued that when a Case-licensing head establishes a Multiple Agree relation with two arguments, the Case feature on one of the arguments may be left unvalued, and this gives rise to the mixed case-marking patterns of multiple nominative constructions via nominative-genitive conversion.

First of all, note that in transitive potential predicate constructions taking nominative objects, nominative-genitive conversion may apply even to non-subjects, as discussed by Miyagawa (1993). For instance, in (34), both subject and object are allowed to bear genitive case by nominative-genitive conversion.

- (34) [Mari-*{ga/no}* (umaku) Ken-*{ga/no}* sikar-e-nakat-ta] riyuu
 Mari-*{Nom/Gen}* well Ken-*{Nom/Gen}* scold-Poten-Neg-Past reason

‘the reason why Mari was not able to scold Ken (well)’

Since nominative case can optionally be replaced by genitive case via nominative-genitive conversion, the four distinct case-marking patterns of ‘nominative-nominative’, ‘nominative-genitive’, ‘genitive-nominative’ and ‘genitive-genitive’ are possible in (34).

One question that immediately arises is where the genitive arguments are located in overt constituent structure. It can be shown that the genitive and the nominative subjects are located in CP and TP, respectively, regardless of the case marking of the object. On the other hand, the object remains in place without raising, whether it is marked with genitive or nominative case.

First of all, as noted earlier, an adverbial modifier like *kinoo* ‘yesterday’ is allowed to occur in the complement clause, but not in higher nominal domain. Thus, the example in (35) shows that the genitive arguments are not extracted from the embedded clause.

- (35) [(*kinoo*) Mari-no Ken-no sikar-e-nakat-ta] riyuu
 yesterday Mari-Gen Ken-Gen scold-Poten-Neg-Past reason
 ‘the reason why Mari was not able to scold Ken yesterday’

Since the adverbial modifier *kinoo* ‘yesterday’ can be placed to the left of the genitive subject, as in (35), it should be apparent that both genitive arguments reside in the noun-complement clause.

It is possible to determine where arguments are located in the complement clause by considering how arguments with the prenominal NPI *amari ooku-no* behave in negated clauses. To make this point, observe that in the transitive construction with a potential predicate, where the subject is marked with genitive case, a subject-object asymmetry is observed in the licensing of the NPI, as illustrated in (36).

- (36) a. * [*amari ooku-no hito-no* Ken-*{no/ga}* sikar-e-nakat-ta]
 very many-Gen person-Gen Ken-*{Gen/Nom}* scold-Poten-Neg-Past
 riyuu
 reason
 ‘the reason why very many people were not able to scold Ken’
- b. [Mari-no *amari ooku-no hito-*{no/ga}** sikar-e-nakat-ta]
 Mari-Gen very many-Gen person-*{Gen/Nom}* scold-Poten-Neg-Past
 riyuu
 reason
 ‘the reason why Mari was not able to scold very many people’

In contradistinction, when the subject is marked with nominative case, no subject-object asymmetry arises.

(37) a. [amari ooku-no hito-ga Ken-{no/ga} sikar-e-nakat-ta]
 very many-Gen person-Nom Ken-{Gen/Nom} scold-Poten-Neg-Past
 riyuu
 reason

‘the reason why not very many people were able to scold Ken’

b. [Mari-ga amari ooku-no hito-{no/ga} sikar-e-nakat-ta]
 Mari-Nom very many-Gen person-{Gen/Nom} scold-Poten-Neg-Past
 riyuu
 reason

‘the reason why Mary was not able to scold very many people’

While no subject-object asymmetry in NPI licensing arises in (37), the *nai-de iru* construction in (38) gives rise to a subject-object asymmetry.

(38) a. ?*[amari ooku-no hito-ga Ken-{no/ga} sikar-e-nai-de
 very many-Gen actor-Nom Ken-{Gen/Nom} scold-Poten-Neg-Ger
 i-ru] riyuu
 be-Pres reason

‘the reason why very many people were not able to scold Ken’

b. [Mari-ga amari ooku-no hito-{no/ga} sikar-e-nai-de
 Mari-Nom very many-Gen people-{Gen/Nom} scold-Poten-Neg-Ger
 i-ru] riyuu
 be-Pres reason

‘the reason why that Mari was not able to scold very many people’

The NPI subject bearing genitive case is not licensed in (36a). Since the negator takes scope over TP in this case, the fact shows that the genitive subject appears in CP. On the other hand, if the NPI subject is marked with nominative case, it is licensed in (37a) but is excluded in (38a). Given that the clausal negator *nai* extends its scope over the complement clause of the aspectual verb in (38), the fact shows the nominative subject is located in TP. Further, the well-formedness of (38b) shows that the object remains in place without undergoing movement, whether it is marked with nominative or genitive case.

In light of the data (36) through (38), it can be stated that a genitive subject is raised to Spec-CP, and a nominative subject, to Spec-TP, regardless of whether the object is marked with nominative or genitive case. Then, the configuration in (39) can be posited for (34) when a genitive subject is included in the clause.

(39) [[_{CP} SUBJ-GEN [_{TP} [_{VP} ~~SUBJ-GEN~~ OBJ-GEN/NOM]] C] D]

Note that the subject is merged in a position higher than the object for theta role assignment, i.e. the subject receives an experiencer role in vP and the object a theme role in VP. Accordingly, adnominal C bearing [EPP] attracts the genitive subject, which is the closer argument of the two. On the other hand, when the subject is marked with nominative case, the configuration in (40) can be posited for (34).

(40) [[_{CP} [_{TP} SUBJ-NOM [_{VP} ~~SUBJ-NOM~~ OBJ-GEN/NOM]] C] D]

When the subject appears in the nominative, T gains an EPP feature, alongside the Case feature [+Nom] from C by virtue of Feature Inheritance, in which case the nominative subject is raised to TP.

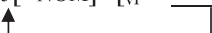
The fact that the subject and the object can optionally be marked by the genitive *no* in (34) raises the question of how their case marking is licensed. Obviously, in cases like (34), the two kinds of case marking obtains, on the grounds that both D and C participate in case licensing. I therefore suggest that adnominal C can include [+Nom] (optionally) even if it counts as an A-position by virtue of the verb's taking the adnominal form. Note that when a Case-licensing head establishes a Multiple Agree relation with two arguments, the Case features of the two arguments are regarded as valued simultaneously (see Hiraiwa 2000, 2005), but I propose that the Case feature on one of the arguments may be left unvalued. This optional Case valuation will give rise to the four case marking patterns.

As noted earlier, the genitive subject is raised to a position higher than the nominative subject, which suggests that Feature Inheritance does not take place when the subject is marked with genitive case, but it does when the subject receives nominative case, irrespective of the case marking of the object. As I will illustrate below, the facts regarding the position of the subject can be accounted for on the assumption that an EPP feature is transferred from C to T (optionally) by Feature Inheritance when C contains the verbal case feature [+Nom], which must be transmitted from C to T, but that the EPP feature remains in C when no Feature Inheritance is enforced in the absence of the Case feature [+Nom] on C.

To be concrete, let us illustrate how the structures of (34) with four case-marking patterns are derived under the present proposals. First of all, when (34) has a nominative-nominative case-marking pattern, C has [+Nom] and [EPP]. In this case, since no genitive case appears, D does not have a Case feature, but T has [+Nom], which is transferred from C. As for the locus of [EPP], there are two possibilities: one is to retain [EPP] on C or another is to transfer [EPP] to T by Feature Inheritance. If both [+Nom] and [EPP] are inherited by T, the following structures are derived.

(41) a. [[_{CP} [_{TP} _____ [_{VP} SUBJ[+NOM] OBJ[+NOM]]] T [+NOM][EPP] C] D]

b. [[_{CP} [_{TP} SUBJ[+NOM] [_{VP} _____]] T [+NOM][EPP] C] D]



In (41a), T establishes a Multiple Agree relation with the two nominative arguments. Their

(unvalued) Case features are valued as nominative by T possessing [+Nom]. In (41b), both nominative subject and nominative object are located below vP, but the nominative subject, which is closer to T, is moved to TP. Then, all formal features are deleted, and the derivation converges.

When C has [+Nom], there is another option of C retaining [EPP], in which case the derivation (42) obtains.

- (42) a. [[CP _____ [TP [vP SUBJ[+NOM] OBJ[+NOM]] T [+NOM] C[EPP]] D]
 b. *[[CP SUBJ[+NOM] [TP [vP _____ OBJ[+NOM]] T [+NOM] C[EPP]] D]

In (42a), T values the Case features of both subject and object as nominative via Multiple Agree. Note that in (42b), C has [EPP], but cannot have access to the nominative subject, because the subject is rendered ‘inactive’ after its Case feature is valued. Consequently, C cannot attract the nominative subject, and hence the derivation crashes. This means that when (34) has a nominative-nominative case-marking pattern, the structure where the nominative subject fills CP cannot be derived.

When a genitive-genitive case-marking pattern is obtained for (34), C is not furnished with [+Nom], but it only has [EPP]. In this case, D has [+Gen]. Since C does not have a Case feature to be inherited by T, [EPP] remains on C. I submit that in this case, the option of T possessing [EPP] is not available because C has no verbal Case feature to enforce Feature Inheritance. If C has [EPP] and D, [+Gen], the derivation proceeds as follows.

- (43) a. [[CP SUBJ[uCASE] [TP [vP _____ OBJ[uCASE]] T] C[EPP]] D[+GEN]]

 b. [[CP SUBJ[+GEN] [TP [vP _____ OBJ[+GEN]] T] C[EPP]] D[+GEN]]

In (43a), T is inactive, bearing neither a Case feature nor an EPP feature, so that C attracts the genitive subject, since it is the closer argument of the two. After this operation, C (equipped with [EPP]) establishes an Agree relation with the two genitive arguments, and their Case features are valued as genitive. Then, all the formal features are deleted and the derivation converges.

In cases where mixed case-marking patterns, such as ‘nominative-genitive’ and ‘genitive-nominative’, are involved, D and C bear [+Gen] and [+Nom], respectively. Here, the EPP feature on C may be transferred to T together with [+Nom]. If T includes [EPP] and [+Nom], the structure where the nominative subject occupies Spec-TP is derived, as illustrated in (44).

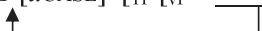
- (44) a. [[CP [TP SUB [+NOM] [vP _____ OBJ[uCASE]] T[+NOM][EPP]] C] D[+GEN]]

- b. [[_{CP} [_{TP} SUB [+_{NOM}] [_{VP} _____] OBJ[+_{GEN}]] T [+_{NOM}][EPP] C] D[+_{GEN}]]

In (44a), T can have a Multiple Agree relation with both subject and object, but it actually instantiates Agree with only the subject. In (44a), T values the Case feature on the subject as nominative, and, at the same time, attracts the subject to TP. After (44b) is derived, D instantiates Agree with the object, and its Case feature is valued as genitive.¹¹ (Note that the nominative subject is invisible for the purpose of Case valuation at this stage, since it is rendered inactive in (44a).) Then all the formal features are eliminated, and the derivation converges.

Given that the adnominal CP is an A-position, C may retain [EPP] as an alternative option. If this option is chosen, C has [EPP] and T [+_{Nom}], respectively. Accordingly, the following derivation is invoked.

- (45) a. [[_{CP} [_{TP} _____] [_{VP} SUB [_uCASE] OBJ[+_{NOM}]] T [+_{NOM}] C[EPP]] D[+_{GEN}]]

- b. [[_{CP} SUB [_uCASE] [_{TP} [_{VP} _____] OBJ[+_{NOM}]] T [+_{NOM}] C[EPP]] D[+_{GEN}]]
- 

- c. [[_{CP} SUB [+_{GEN}] [_{TP} [_{VP} _____] OBJ[+_{NOM}]] T [+_{NOM}] C[EPP]] D[+_{GEN}]]

First, T establishes a Multiple Agree relation with the subject and the object. In (45a), the object is chosen as an actual target to which Agree applies, and the Case feature on the object is valued as nominative. Then, adnominal C, which has [EPP], attracts the subject; this operation is possible, since the subject has an unvalued Case feature. (When T values the Case feature of the subject, C cannot attract the subject; when this happens, the derivation necessarily fails, as in (42).) After the subject is moved into the adnominal CP, D establishes Agree with the subject and hence the Case feature of the subject is valued as genitive. Once all the operations are implemented, formal features are deleted, and the derivation converges.

The derivations in (41), (42), (44) and (45) produce all the syntactic configurations available for (34). Note that the syntactic operations create the two kinds of structures; one where the subject occupies CP and another where the subject is located in TP. Importantly, the subject marked in the genitive case moves to CP regardless of whether the object is marked with nominative or genitive case. When the subject appears in the nominative case, it moves to TP irrespective of whether the object is marked with nominative or genitive case.

Hiraiwa (2005) analyzes a transitive potential construction like (34) as involving random assignment of genitive and nominative case under Multiple Agree, but this analysis falls short of providing an account for the fact that subjects occupy distinct constituent positions

¹¹ Chomsky (1995, 2000) suggests that Agree can have long distance effects (for Case and agreement). The nominative-genitive case-marking pattern obtained in (34) presents a case of long distance Agree (for Case). This construction falls into a type of nominative-subject construction, with nominative-genitive conversion applying to the object.

depending on whether they are marked with nominative or genitive case. In this respect, the proposed analysis is favored over Hiraiwa's analysis.

All in all, the discussion illustrates that both CP and DP are necessary to implement nominative-genitive conversion. On the one hand, the adnominal CP has an EPP feature to attract the subject, since the original clause has an EPP requirement (prior to adnominalization). Thus, genitive subjects derived by nominative-genitive conversion undergo A-movement to CP. This A-movement is made available, because CP gains partial nominal properties by adnominalization. Nominative subjects are moved to TP, because T inherits [+Nom] from C. On the other hand, adnominal CP (derived by adnominalization) does not have the ability to license genitive case (in contemporary Japanese), and accordingly, the D head located outside the clause, which bears a genitive Case feature, is necessary for genitive case licensing.

5. Concluding Remarks

In this paper, it has been argued that genitive subjects derived via nominative-genitive conversion are located in Spec-CP—a position higher than that filled by nominative subjects. Given that C is the locus from which formal features including EPP and Case feature are originated, it can be reasonably assumed that when C retains [EPP], subjects can be attracted to CP. In Japanese, this happens when subjects are marked with genitive case via nominative-genitive conversion, i.e. when subjects are marked with genitive case, they undergo A-movement to Spec-CP to fulfil the EPP requirement of the clause. It has been suggested that CP gains DP-like properties by virtue of inflectional adnominalization, and thus, adnominal CP can be construed as an A-position that can accommodate genitive subjects moved by A-movement. Nevertheless, adnominal CP does not have the ability to license genitive case (in contemporary Japanese), and accordingly, the D head located outside the clause, which can license genitive case, is necessary to implement nominative-genitive conversion.

References

- Abney, S. (1987) *The English Noun Phrase in Its Sentential Aspect*, Ph.D. dissertation, MIT.
- Aoki, H. (2004) "Hukubun-ni-okeru Meisisetu-no Rekisi [History of the Noun Clauses in Complex Sentences]," *Nihongo-no Kenkyu* 1, 47-60.
- Chomsky, N. (1995) *The Minimalist Program*, MIT Press, Cambridge, Mass.
- Chomsky, N. (2000) "Minimalist Inquiries: The Framework." In R. Martin, D. Michaels and J. Uriagereka eds., *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, MIT Press, Cambridge, Mass., 89-155.
- Chomsky, N. (2004) "Beyond Explanatory Adequacy." In A. Belletti ed., *Structures and Beyond: The Cartography of Syntactic Structures*, Volume 3, Oxford University Press, Oxford, 104-131.
- Chomsky, N. (2008) "On Phases." In R. Freidin, C. Otero and M. L. Zubizarreta eds., *Foundational Issues in Linguistic Theory*, MIT Press, Cambridge, Mass., 133-166.

- Harada, S. I. (1971) "Ga-No Conversion and Idiolectal Variation in Japanese," *Gengo Kenkyu* 60, 25-38.
- Hiraiwa, K. (2001) "On Nominative-Genitive Conversion," *MIT Working Papers in Linguistics* 39, 65-123.
- Hiraiwa, K. (2005) *Dimensions of Symmetry in Syntax: Agreement and Clausal Architecture*, Ph.D. dissertation, MIT.
- Hirakawa, M. (2003) *Unaccusativity in Second Language Japanese and English*, Hituzi Syobo, Tokyo.
- Inoue, K. (1976) *Henkei Bunpoo to Nihongo [Transformational Grammar and Japanese]*, Taishukan, Tokyo.
- Kikuta, C. (2002) "Ga-No Kootai-Gensshoo-no Hi-Haseiteki Bunseki: Zyutugo-Rentaikai-no Meisisei [Ga-No Conversion in the New Light: A Non-Derivational, Mixed Category Analysis]," *Doshisha Daigaku Eigo Eibungaku Kenkyuu*, 93-136.
- Kishimoto, H. (2007) "Negative Scope and Head Raising in Japanese," *Lingua* 117, 247-288.
- Kishimoto, H. (2008) "On the Variability of Negative Scope in Japanese," *Journal of Linguistics* 44, 379-435.
- Kishimoto, H. (2010) "Subjects and Constituent Structure in Japanese," *Linguistics* 48, 629-670.
- Kishimoto, H. (2017) "Negative Polarity, A-movement, and Clause Structure in Japanese," *Journal of East Asian Linguistics* 26, to appear.
- Konoshima, M. (1962) "Tyuukogo-ni-okeru Yoogen-Rentaikai-no Yoohoo [The Usage of Adnominal Predicates in Old-Middle Japanese]," *Kokugogaku* 48, 102-107.
- Maki, H. and A. Uchibori (2008) "Ga/No Conversion." In S. Miyagawa and M. Saito eds., *The Oxford Handbook of Japanese Linguistics*, Oxford University Press, Oxford, 192-216.
- Masuoka, T. and Y. Takubo (1992) *Kiso Nihongo [Basic Japanese]*, Kurosio Publishers, Tokyo.
- Miyagawa, S. (1993) "LF Case-Checking and Minimal Link Condition," *MIT Working Papers in Linguistics* 19, 213-254.
- Miyagawa, S. (2011) "Genitive Subjects in Altaic and Specification of Phase," *Lingua* 121, 1265-1282.
- Miyagawa, S. (2013) "Strong Uniformity and Ga/No Conversion," *English Linguistics* 30, 1-24
- Murasugi, K. (1991) *Noun Phrases in Japanese and English: A Study in Syntax, Learnability and Acquisition*, Ph.D. dissertation, University of Connecticut, Storrs.
- Murasugi, K. (2000) "Japanese Complex Noun Phrases and the Antisymmetry Theory." In R. Martin, D. Michaels, and J. Uriagereka eds., *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, MIT Press, Cambridge, Mass., 209-234.
- Nakai, S. 1980. "A Reconsideration of Ga-No Conversion in Japanese," *Papers in Linguistics* 13, 279-320.
- Nambu, S. (2007) "Teiryoo-Bunseki-ni-motozuku Ga-No Kootai Saikoo [Reconsideration of Ga/No Conversion Based on a Quantitative Analysis]," *Gengo Kenkyu* 151-149.
- Nambu, S. (2011) "Japanese Genitive Subject: A Comparison with Uyghur," *Online Proceedings of GLOW in Asia Workshop for Young Scholars 2011*, 217-231.
- Nomura, T. (1993) "Zyoodai-no No to Na ni-tuite [On No and Ga in Old Japanese]," *Kokugo Kokubun* 62(2), 1-17; 62(3), 30-49.
- Ochi, M. (2001) "Move F and Ga/No Conversion in Japanese," *Journal of East Asian Linguistics* 10, 247-286.
- Ochi, M. (2016) "Meishi-Syuusyoku-ni-okeru Kaku-no Kootai-Gensyoo [Case Alternation Phenomena in Noun-Modifying Constructions." In K. Murasugi, M. Saito, Y. Miyamoto, and

- K. Takita eds., *Nihongo Bunpoo Handobukku [The Japanese Grammar Handbook]*, Kaitakusha, Tokyo, 146-188.
- Ooshima, M. (2010) *Nihongo Rentaisyuusyoku Setu Koozoo-no Kenkyuu [A study of the Structures of Adnominal Clauses in Japanese]*, Hituzi Syobo, Tokyo.
- Perlmutter, D. (1972) "Evidence for Shadow Pronoun Deletion in French," *The Chicago Which Hunt*, 73-105.
- Richards, M. (2007) "On Feature Inheritance: An Argument from the Phase Impenetrability Condition," *Linguistic Inquiry* 38, 563-572.
- Saito, M. (2004) "Genitive Subjects in Japanese: Implications for the Theory of Null Objects." In P. Bhaskararao and K. Subbarao (eds.) *Non-Nominative Subjects*, Volume 2, John Benjamins, Amsterdam, 103-118.
- Sakai, H. (1994) "Complex NP Constraint and Case-Conversions in Japanese." In M. Nakamura ed., *Current Topics in English and Japanese*, Hituzi Syobo, Tokyo, 179-203.
- Shida, T. (1970) "Dantei-no Zyodoosi-no Katuyoo-keisyoo-ni-tuite: Rentaikei-Zyuntaihoo-no Syoometu-o Haikei-tosite [The Inflectional Inheritance of Assertive Auxiliaries: The Disappearance of Adnominal Nominalization as Its Background]," *Kokugogaku* 82, 29-41.
- Shida, T. (1976) "Zyuntai-zyosi No-no Katuyoo-Keisyoo-ni-tsuite: Rentaikei-Zyuntaihoo-no Syoometu-to-no Kanren [The Inflectional Inheritance of Nominalizing No: In Relation to the Disappearance of Adnominal Nominalization]," *Rissyoo Zyosidai Kokubun* 5, 16-25.
- Takahashi, H. (2010) "Adverbial Clauses and Nominative/Genitive Conversion in Japanese," *MIT Working Papers in Linguistics* 61, 357-371.
- Watanabe, A. (1996) "Nominative-Genitive Conversion and Agreement in Japanese: A Cross-Linguistic Perspective," *Journal of East Asian Linguistics* 5, 373-410.
- Yoshimura, N. (2007) "Ga/No Kootai o Hoogen Kenkyuu ni Miru [Ga-No Conversion: Dialectal Perspectives]." In Nobuko Hasegawa (ed.) *Nihongo no Syubun Gensyoo: Toogokoozoo to Modariti [Japanese Main Clause Phenomena: Syntactic Structures and Modality]*, Hituzi Syobo, Tokyo, 189-223.