

COMPLEX DPS AND GENITIVE SUBJECTS IN JAPANESE*

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1. Introduction

In Japanese, genitive subjects can be derived by so-called “nominative-genitive (*ga-no*) conversion” when embedded in complex DPs, i.e. relative clauses and noun complement clauses, which are formed by embedding a verbal clause under a nominal (Harada 1971). One prominent issue surrounding the nominative-genitive conversion phenomenon is where subjects are located in clause structure. A number of researchers, including Watanabe (1996), Hiraiwa (2001, 2005), and Miyagawa (2011, 2013), suggest that genitive subjects, unlike nominative subjects, remain in vP. On the other hand, researchers such as Bedell (1972), Saito (1983), Miyagawa (1993), and Sakai (1994) argue that genitive subjects are located in the nominal domain, i.e. a nominal projection related to the nominal head located above the embedded clause. There is also a view taken by Kishimoto (2017b), which claims that genitive subjects appear in the CP domain of the embedded clause.

In this paper, I present a number of new data that allow us to assess the structural position of genitive subjects, as well as nominative subjects. Specifically, this paper shows that genitive subjects are located in the embedded clause, but appear in a higher structural position than nominative subjects. To make this point, I first argue chiefly on the basis of indeterminate pronoun binding that genitive subjects are not located in vP in the embedded clause, but appear outside it by virtue of undergoing A-movement. Then, in light of adjectival and adverbial modifications, it is shown that genitive subjects are not displaced from the embedded clause, i.e. they do not reside in the nominal domain. After these discussions, by appealing to *tari*-coordination, it is argued that genitive subjects are located in a higher structural position than nominative subjects. Furthermore, the blocking effect of nominative-genitive conversion is argued to emerge if genitive subjects are not located in the domain accessible to a D head, which can value their Case feature as genitive. Overall, the new data illustrate that genitive subjects occur in the CP domain of the complement clause.

The discussion in this paper proceeds as follows. In section 2.1, I argue that both nominative and genitive subjects are moved out of vP. Section 2.2 shows that they are located in the embedded clause. In section 2.3, genitive subjects are argued to be located in CP, which

* I would like to thank the following people for comments and discussions: Masao Ochi, Yosuke Sato, Keiko Murasugi, Yasuhito Kido, Takeshi Usuki, Kazushige Moriyama. The author is solely responsible for any remaining errors and inadequacies. This work was in part supported by JSPS Grant-in-Aid for Scientific Research (C) (Grant no. JP20K00605).

is projected above TP filled by nominative subjects. Section 3 is devoted to the discussion of how nominative-genitive conversion is blocked when a complementizer appears in noun complement clauses. A conclusion is presented in section 3.

2. The Structural Position of Genitive and Nominative Subjects

In Japanese, genitive subjects can be derived via so-called nominative-genitive conversion when they are embedded in complex DPs like relative clauses and noun complement clauses, as exemplified in (1) (for an overview, see e.g. Maki and Uchibori 2008, Ochi 2016).

- (1) a. [gakusei- $\{ga/no\}$ yon-da] hon
 student- $\{Nom/Gen\}$ read-Past book
 ‘the book which the students read’ (relative clause)
- b. [gakusei- $\{ga/no\}$ ku-ru] kanousei
 student- $\{Nom/Gen\}$ come-Pres possibility
 ‘the possibility that the students will come’ (noun complement clause)

One major issue related to nominative-genitive conversion is where genitive subjects are located. There are at least three views available in the literature. Currently, the most prevalent view is that genitive subjects appear in vP without undergoing A-movement to a higher position, and this view is advanced by researchers including Watanabe (1996), Hiraiwa (2001, 2005), and Miyagawa (2011, 2013). But some researchers such as Bedell (1972), Saito (1983), Miyagawa (1993), and Sakai (1994) claim that genitive subjects appear in a nominal domain which is projected above the embedded clause.¹ Another claim, advanced by Kishimoto (2017b), is that genitive subjects appear in the CP domain, i.e. they appear in a higher position than nominative subjects, but are not displaced from the embedded clause.²

- (2) a. [DP [CP [TP SUBJ-NOM [vP **SUBJ-GEN** V-v] T] C] D]
 b. [DP [CP **SUBJ-GEN** [TP SUBJ-NOM [vP V-v] T] C] D]
 c. [DP **SUBJ-GEN** [CP [TP SUBJ-NOM [vP V-v] T] C] D]

There are some conceivable accounts for the varying position of subjects on the labeling approach advanced by Chomsky (2013, 2015). Under the labeling approach, subject raising is motivated by the algorithm of labeling. Most typically, a subject merged with vP is displaced, since the merger of XP and YP causes a problem for labeling. When XP is merged with YP

¹ While Miyagawa (1993) falls into the type of research in which genitive subjects are analyzed as appearing in the nominal domain, but he claims that genitive subjects are moved into DP at the LF level. Ochi (2001) argues that in genitive-subject constructions, feature movement to D is involved.

² Yet another type of analysis is presented by Saito (2004), where genitive subjects are analyzed as occupying the same position as nominative subjects, i.e. Spec-TP.

by set-Merge, {XP, YP}, which is an unordered set, is formed. A newly created syntactic object cannot be labeled here, since minimal search is ambiguous, locating both X and Y. In this case, the subject is dislocated from vP, leaving a trace. Since a trace does not count for the purpose of labeling, the newly created syntactic object can be labeled.

Where a subject appears in overt constituent structure is determined by the place in which ϕ -feature agreement takes place. If the displaced subject enters into ϕ -feature agreement with the T-head possessing a ϕ -feature transferred from C (Chomsky 2008), the subject will stop at Spec-TP. This is what happens with nominative subjects (Kishimoto 2017a). In the literature, genitive subjects are often claimed to appear in a position different from one in which nominative subjects is located.³ A genitive subject would appear in Spec-CP, as in (2b), if it enters ϕ -feature agreement with the C head, which should be possible if C retains the ϕ -feature assigned to it. The subject will stop at Spec-DP, as in (2c), if it undergoes ϕ -feature agreement with the D head. Theoretically, it is also possible for a genitive subject to stay in vP if it is merged with vP by pair-Merge rather than set-Merge. When pair-Merge applies, an ordered pair <XP, YP> is created. Since an ordered pair has asymmetrical properties, it does not give rise to a problem with labeling for a newly created object. Thus, a genitive subject that occurs in vP by pair-Merge can stay in vP without movement, as in (2a). (In this case, no ϕ -feature agreement is induced for the subject.)

With regard to the position of nominative subjects, a number of recent studies on Japanese syntax (e.g. Miyagawa 1989, Kishimoto 2010, 2017a) provide empirical evidence that nominative subjects appear in Spec-TP (in overt constituent structure).⁴ Thus, for expository purposes, I assume that nominative subjects are raised from a vP-internal position to Spec-TP via A-movement, as illustrated in (3).



Under the present perspective, nominative subjects are generated in Spec-vP by set-Merge, and are displaced from vP to satisfy the requirement of labeling. Then, they enter into ϕ -feature agreement with the T-head, the result of which is that they appear in Spec-TP.

In contradistinction, opinions vary as to where genitive subjects appear in clause structure, as illustrated in (2a-c). Needless to say, this raises the question of which analysis is plausible. In this paper, I suggest that genitive subjects are moved into CP by A-movement, as represented in (4).

³ Saito (2016) proposes that subjects are moved to a position that c-commands a Case-licensing head by the requirement of Case licensing.

⁴ In 1980s, it is argued by Fukui (1986) and Kuroda (1988) that subjects stay in a predicate-internal subject position, but the commonly-held view in the current Japanese literature is that nominative subjects are raised to Spec-TP.



This means that genitive subjects are merged with vP by set-Merge, so that they are displaced from the position where they are merged by the requirement of labeling. When they reach CP, they establish ϕ -feature agreement with the C head and stop at Spec-CP.

In the discussions that follow, I will present several pieces of data illustrating that while nominative subjects undergo A-movement to Spec-TP from Spec-vP, genitive subjects are raised to Spec-CP via A-movement. The new data will lead to the conclusion that genitive subjects are located in a higher position than nominative subjects, although both are not extracted from the clause in which they are externally merged.

2.1. A-movement out of vP

As a first step toward the demonstration that genitive subjects appear in CP, i.e. they occupy a higher structural position than nominative subjects, I will discuss the facts of indeterminate pronoun binding by *mo* and subject honorification. The data illustrate that both genitive subjects and nominative subjects cannot be located in vP. It is also argued on the basis of passive clauses that both nominative and genitive subjects undergo A-movement.

To begin, as discussed in Kishimoto (2001), indeterminate pronouns like *dare* ‘anyone’ and *nani* ‘what’ are interpreted as NPIs when they are construed with *mo*. When the Q particle *mo* is attached to the verb, a subject-object asymmetry is observed with regard to indeterminate pronoun binding, as seen by the contrast in acceptability between (5a) and (5b).

- (5) a. ***Dare-ga** sakana-o tabe-**mo** si-nakat-ta.
 anyone-Nom fish-Acc eat-Q do-Neg-Past
 ‘Anyone did not eat the fish.’
- b. Ano hito-wa **nani-o** tabe-**mo** si-nakat-ta.
 that man-Nom anything-Acc eat-Q do-Neg-Past
 ‘That man did not eat anything.’

The Q particle *mo* attached to the verb takes scope over vP. By virtue of this fact, it is possible to assess whether a subject is located in vP. In (5a), *mo* fails to bind the indeterminate pronoun *dare* ‘anyone’, which suggests that the nominative subject is located outside vP, i.e. the subject is raised from vP to its clausal subject position of Spec-TP. On the other hand, the fact that the indeterminate pronoun *nani* ‘anything’ can be bound by *mo* in (5b) illustrates that an object is located inside vP.

The same subject-object asymmetry in indeterminate pronoun binding is observed when a verbal clause is embedded under a nominal. The examples in (6) represents a case of relative clauses.

- (6) a. ***[dare-ga tabe-mo si-nakat-ta]** sakana
 anyone-Nom eat-Q do-Neg-Past fish
 ‘the fish which anyone did not eat’
- b. **[nani-o tabe-mo si-nakat-ta]** hito
 anything-Acc eat-Q do-Neg-Past man
 ‘the man who did not eat anything’

The unacceptability of (6a) illustrates that nominative subjects in embedded clauses are moved out of vP in just the same way as those nominative subjects appearing in matrix clauses.

When relative clauses or noun complement clauses are formed by embedding verbal clauses under nominals, genitive subjects can be derived via nominative-genitive conversion. The example in (7) shows that the particle *mo* attached to the verb cannot bind a genitive subject appearing in relative clauses.

- (7) ***[dare-no tabe-mo si-nakat-ta]** sakana
 anyone-Gen eat-Q do-Neg-Past fish
 ‘the fish which anyone did not eat’

The same pattern is observed in noun complement clauses. The examples in (8) illustrate that genitive subjects as well as nominative subjects lie in a structural position outside the binding domain of the particle *mo*.

- (8) a. ***[dare-{ga/no} hasiri-mo si-nakat-ta]** riyuu
 anyone- {Nom/Gen} run-Q do-Neg-Past reason
 ‘the reason why anyone did not run’
- b. [ano hito-ga **nani-o tabe-mo si-nakat-ta]** riyuu
 that man-Nom anything-Acc eat-Q do-Neg-Past reason
 ‘the reason why that man did not eat anything’

The data regarding indeterminate pronoun binding show that both nominative and genitive subjects are moved out of vP.

Note in this connection that subjects marked with oblique case remain in Spec-vP, as discussed by Kishimoto (2010, 2017a). Thus, subjects marked with *kara* ‘from’ can be bound by *mo*, as illustrated in (9).

- (9) a. **Dare-kara** sono koto-o tutae-mo si-nakat-ta.
 anyone-from that fact-Acc tell-Q do-Neg-Past
 ‘No one told that fact.’

- b. [**dare-kara** sono koto-o tutae-**mo** si-nakat-ta] riyuu
 anyone-from that fact-Acc tell-Q do-Neg-Past reason

‘the reason why no one told him that fact’

The indeterminate pronoun *dare-kara* ‘from anyone’ can be bound by *mo* regardless of whether it appears in a matrix clause or in an embedded clause. This shows that subjects marked with oblique case do not undergo A-movement.

One question that arises at this point is why *kara*-marked oblique subjects are not susceptible to subject raising (A-movement) out of vP. I suggest that the oblique subjects remain in situ without displacement due to the fact that they are accompanied by a postposition, i.e. *kara* ‘from’, rather than a structural case marker like nominative *ga* or genitive *no*.⁵

The difference in the syntactic status of subjects can be assessed according to whether they can be associated with secondary predicates. To be concrete, observe that a depictive like *sirahu-de* ‘sober’ can be predicated of both nominative and genitive subjects, as shown in (10).

- (10) [{gakusei-ga/gakusei-no} **sirahu-de** hanasi-ta] wake
 student-Nom/student-Gen sober-with talk-Past reason

‘the reason why students talked sober’

The same depictive predicate cannot be predicated of *kara*-marked subjects, as shown in (11).

- (11) *Sensei-kara **sirahu-de** sono koto-o seito-ni tutae-ta.
 teacher-from sober-with that fact-Acc pupil-Dat tell-Past

‘The teacher told the pupils that fact sober.’

It is also well-observed that PPs cannot be a target for depictive predication.

- (12) *Gakusei-kara **sirahu-de** nimotu-ga todoi-ta.
 student-from sober-with luggage-Nom arrive-Past

‘Luggage arrived from the student sober.’

The subject-oriented depictive *sirahu-de* ‘sober’ can be predicated of nominative and genitive subjects, but not *kara*-marked subjects. Since they all have the status of subjects, it is feasible to state that the difference in acceptability between (10) and (11) can be attributed to the structural distinction between DP and PP: Genitive and nominative subjects have DP structures, so that subject-oriented depictives can be predicated of them, but *kara*-marked

⁵ Kishimoto (2017b) suggests that oblique subjects remain in situ without undergoing A-movement owing to the fact that they do not have to be licensed by an external Case-licensing head.

subjects cannot be associated with depictives because they are realized as PPs.⁶

Note at this point that PPs typically serve as adjuncts that involve an adjunct operation, i.e. pair-Merge. The unacceptability of (11) on the intended interpretation illustrates that the oblique *kara*-subject forms a PP syntactically, yielding an adjunction structure like (13) (in traditional phrase structure terms).

(13) [[vP Subj-*kara* [vP]]]

If the oblique subject is merged with vP by pair-Merge, minimal search can unambiguously locate a head. Consequently, the subject can remain in the place where it is merged without displacement. In light of this consideration, it is reasonable to hypothesize that the oblique subject is not displaced from the position on the basis that it is merged to vP by pair-Merge rather than set-Merge.

By contrast, nominative and genitive subjects can host depictive predicates. Given this fact, it can be postulated that they possess DP structures. This means that when nominative and genitive subjects are merged with vP, a labeling problem arises with a syntactic object created by set-Merge. Accordingly, they are displaced from a predicate-internal position for a newly created object to be assigned an appropriate label.

Nominative and genitive subjects are displaced from vP by A-movement. This fact can be confirmed by looking at how subject-oriented reflexive *zibun* ‘self’ behaves in active and passive clauses.

⁶ Similar facts are found in floating quantifiers. *Kara*-marked subjects cannot be associated with floating quantifiers, as illustrated in (i).

- (i) *Sensei-kara **hobo zen'in** sono koto-o seito-ni tutae-ta.
 teacher-from almost all that matter-Acc pupil-Dat tell-Past
 ‘Almost all teachers told the pupils that fact.’

In contrast, floating quantifiers can be linked to genitive and nominative subjects, as exemplified in (ii), although (iia), where the subject is marked with genitive case, is a little degraded (cf. Shibatani 1977, Kuno 1978).

- (ii) a. [gakusei-ga **hobo zen'in** tomat-te i-ru] yado
 student-Nom almost all stay-Ger be-Pres lodging
 ‘the lodging at which almost all students are staying’
 b. ?[gakusei-no **hobo zen'in** tomat-te i-ru] yado
 student-Gen almost all stay-Ger be-Pres lodging
 ‘the lodging at which almost all students are staying’

If the genitive subject can host floating quantifiers, the same account that applies to secondary predicates can be extended to floating quantifiers, for Miyagawa (1989) suggests that quantifiers can be launched from DPs, but not from PPs.

- (14) a. Ken_i-ga Mari_j-o zibun_{i/*j}-no heya-de home-ta.
 Ken-Nom Mari-Acc self-Gen room-in praise-Past
 (lit.) ‘Ken praised Mari in self’s room.’
- b. Mari_i-ga Ken_j-ni zibun_{i/*j}-no heya-de home-rare-ta.
 Mari-Nom Ken-by self-Gen room-in praise-Pass-Past
 (lit.) ‘Mari was praised by Ken in self’s room.’

In (14a), the reflexive *zibun* can take *Ken* as its antecedent, but in (14b), it takes the passive subject *Mari* as its antecedent. The demoted subject of *Ken* in (14b) is an adjunct, and hence cannot antecede the reflexive *zibun*.

If A'-movement or scrambling is involved, no change of reflexive binding is observed. (15) shows that an object moved to the sentence front by scrambling or topicalization (A'-movement) is not capable of anteceding the reflexive *zibun*.

- (15) {Mari_j-o/Mari_j-wa} Ken_i-ga zibun_{i/*j}-no heya-de home-ta.
 {Mari-Acc/Mari-Top} Ken-Nom self-Gen room-in praise-Past
 (lit.) ‘Mari, Ken praised in self’s room.’

A comparison of the data in (14) and (15) shows that only A-movement can change the possibility of reflexive binding.

The passive subject starts out in object position. This fact can be readily confirmed by making use of a quantity adverb like *takusan* ‘many’, which can specify the quantity of an internal argument, but not an external argument (Kishimoto 2005).

- (16) a. Sensei-ga soko-de okasi-o takusan tabe-ta.
 teacher-Nom there-in sweets-Acc many praise-Past
 ‘The teachers ate many sweets there.’
- b. Okasi-ga soko-de takusan tabe-rare-ta.
 sweets-Nom there-in many eat-Pass-Past
 ‘Many sweets were eaten there.’

In (16a), the adverb *takusan* can specify the quantity of sweets, but not the number of the teachers, which shows that the adverb modifies the object *okasi* ‘sweets’. On the other hand, the same adverb *takusan* can specify the quantity of the passive subject *okasi* in (16b) despite the fact that it appears in the subject position. Given that *takusan* specifies the quantity of an internal argument, the data regarding the quantity adverb *takusan* suggest that the passive subject in (16b) is originated from an object position.

As discussed by Kishimoto (2017a), an argument gains subject properties and can serve

as the antecedent of reflexive *zibun* if it occurs in Spec-vP by Internal Merge or External Merge. This claim is in part motivated by the fact that the *kara*-subject, which is not displaced from its vP-internal subject position, can serve as the antecedent of *zibun*.

- (17) Seitoi-kara-wa zibun-no koto-o sensei-ni tutae-ta.
pupil-from-Top self-Gen matter-Acc teacher-Dat tell-Past

‘The pupil_i told the teacher about himself_i.’

Since the *kara*-subject is not displaced from vP to which it is externally merged, the acceptability of (17) illustrates that *zibun* is anchored to the subject (or its copy) located in vP. Then, the facts of subject-oriented reflexive suggest that the passive subject in (14b) is A-moved from the object position to Spec-TP through a vP-internal subject position, as illustrated in (18).

- (18) [TP SUBJ [_{VP} ~~SUBJ~~ [_{VP} ~~SUBJ~~ V]v]T]

The passive subjects in (14b) is originated from the object position, to which reflexive *zibun* cannot be anchored, but can antecede *zibun*. This fact shows that the passive subject undergoes A-movement.

The same holds true for the passive subject marked with genitive case. (19) shows that the genitively-marked passive subject can serve as the antecedent of the subject-oriented reflexive *zibun*.

- (19) [Marii-no zibun-no heya-de home-rare-ta] riyuu
Mari-Gen self-Gen room-in praise-Pass-Past reason

(lit.) ‘the reason why Mari was praised in self’s room’

The fact shows that the passive subject marked with genitive case undergoes A-movement from a vP-internal position and moves through Spec-vP in the same manner as the passive subject marked with nominative case.

Note that the passive subject behaves in the same way as the subject of its active counterpart with regard to indeterminate pronoun binding, in that the passive subject *dare* ‘anyone’ in (20) cannot be bound by *mo* attached to the verb.

- (20) a. ***Dare-ga** sensei-ni home-rare-**mo** si-nakat-ta.
anyone-Nom teacher-by praise-Pass-Q do-Neg-Past

‘Anyone was not praised by the teacher.’

- b. Mari-wa **dare-ni** home-rare-**mo** si-nakat-ta.
Mari-Top anyone-by praise-Pass-Q do-Neg-Past

‘Mari was not praised by anyone.’

Arguments located in vP lie within the binding domain of the particle *mo* attached to the verb, but the passive subject in the nominative case does not. Accordingly, (20a) is not acceptable. The facts of reflexivization in passive clauses show then that passive subjects gain subject properties via undergoing A-movement to Spec-TP through Spec-vP.

In a similar vein, indeterminate pronoun binding fails when the passive subject *dare* ‘anyone’ is marked with genitive case, as shown in (21).

- (21) ***[dare-no** home-rare-**mo** si-nakat-ta] riyuu
 anyone-Nom praise-Pass-Q do-Neg-Past reason
 ‘the reason why anyone was not praised’

(21) shows that the passive subject is displaced from vP. Since the reflexive *zibun* cannot take an argument in object position as its antecedent, the example in (21), coupled with (19), shows that genitive-marked passive subjects, which start out in object position, undergo A-movement to a higher structural position than vP through Spec of vP.

Another piece of evidence that genitive subjects, just like nominative subjects, are moved out of vP can be derived from subject honorification. Subject honorification targets a subject argument located in vP which is associated with the verb accompanied by a subject-honorific marker (Kishimoto 2012). To make this point, observe that in the raising construction with the aspectual verb *iru* ‘be’, the raising verb as well as the main verb can be rendered into a subject-honorific form.

- (22) a. Ito-sensei-ga sono gakusei-ni **o**-hanasi-**ni-nat-te** i-ru.
 Ito-teacher-Nom that student-Dat Hon-talk-Dat-become-Ger be-Pres
 ‘Professor Ito is talking to that student.’
- b. Ito-sensei-ga sono gakusei-ni hanasi-te **irassyar-u**.⁷
 Ito-teacher-Nom that student-Dat talk-Ger be.Hon-Pres
 ‘Professor Ito is talking to the student.’

The raising construction has a bi-clausal structure (Kishimoto 2017a). When the raising construction comprises a nominative subject, as in (22), the subject is moved from within the embedded clause to the matrix clause, as illustrated in (23).

- (23) [TP SUBJ [vP ~~SUBJ~~ [TP ~~SUBJ~~ [vP ~~SUBJ~~ V-v]T]V-v]T]

If subject honorification targets the subject of the verb to which a subject-honorific maker is attached, and if the subject moves through matrix vP and embedded vP, subject honorification is expected to be possible at both matrix- and embedded-clause levels in the raising

⁷ *Irassyaru* is an irregular honorific form of *iru* ‘be’.

construction in (22).

When the subject is marked with the oblique *kara*, only the matrix verb can take subject-honorific form.

- (24) a. Ito-sensei-kara sono gakusei-ni **o-hanasi-ni-nat-te** i-ru.
 Ito-teacher-from that student-Dat Hon-speak-Dat-become-Ger be-Pres
 ‘Professor Ito is talking to that student.’
- b. *Ito-sensei-kara sono gakusei-ni hanasi-te **irassyar-u**.
 Ito-teacher-from that student-Dat speak-Ger be.Hon-Pres
 ‘Professor Ito is talking to that student.’

The examples in (24) show that subject honorification is possible only at the embedded-clause level. The fact follows if the *kara*-marked subject remains in the embedded vP without movement, as illustrated in (25).

- (25) [TP [vP [TP [vP SUBJ V-v]T]V-v]T]

In the raising construction whose subject is marked with *kara*, subject honorification is possible only at the embedded-clause level because the subject occurs in Spec-vP of the embedded clause, but not the matrix clause.

Genitive subjects derived via nominative-genitive conversion pattern with nominative subjects, in that subject honorification is allowed at both matrix- and embedded-clause level, as shown in (26).

- (26) a. [Ito-sensei-*{ga/no}* **o-hanasi-ni-nat-te** i-ru] riyuu
 Ito-teacher-*{Nom/Gen}* Hon-talk-Dat-become-Ger be-Pres reason
 ‘the reason why Professor Ito is talking’
- b. [Ito-sensei-*{ga/no}* hanasi-te **irassyar-u**] riyuu
 Ito-teacher-*{Nom/Gen}* talk-Ger be.Hon-Pres reason
 ‘the reason why Professor Ito is talking’

The fact that the aspectual verb can be turned into an honorific form in (26b) illustrates that the genitive subject undergoes A-movement in the same way as the nominative subject, i.e. it moves through Spec-vP in the matrix clause via A-movement.

In summary, it has been argued in this section that genitive subjects, as well as nominative subjects, are moved out of vP, while *kara*-marked subjects stay in vP-internal position where they appear by External Merge. The data regarding indeterminate pronoun binding and subject honorification illustrate that genitive subjects do undergo A-movement out of vP, contrary to the suggestions advanced by a number of researchers, including

Watanabe (1993), Hiraiwa (2001, 2005) and Miyagawa (2011, 2013).

2.2 Movement within the Embedded Clause

In this section, I will argue that genitive subjects derived from nominative-genitive conversion are *not* moved out of the embedded clause, although some researchers such as Bedell (1972), Saito (1983), and Sakai (1994) suggest that they appear in the nominal domain. The syntactic behaviors of adverbial and adjectival modifiers in complex DPs illustrate that genitive subjects do not move into the nominal domain.

To begin with, observe that a temporal modifier like *kinoo* ‘yesterday’, modifying TP in the embedded clause of a complex DP, is allowed to precede or follow the subject regardless of its case marking (Nakai 1980, Miyagawa 1993). This is illustrated by the relative clause in (27) whose head noun is *kangae* ‘idea’.

- (27) [(*kinoo*) *gakusei*-{*ga/no*} (*kinoo*) *omoitui-ta* *kangae*]
 yesterday student-*{Nom/Gen}* yesterday come.up-Past idea
 ‘the idea that the student came up (yesterday)’

Given that modifiers are adjoined to the projections that they modify (Radford 2009; cf. Cinque 1999), the projection of the embedded clause to which the adverbial *kinoo* ‘yesterday’ can be added must be present to the left of the subject in (27). Since adverbs are not adjoined to nominal projections, the fact that the adverb *kinoo* can precede both nominative and genitive subjects suggests that the subjects occur in the embedded clause regardless of whether they are marked with genitive case or nominative case.

On the other hand, the adjectival modifier *kimyoona* ‘strange’, modifying the noun *kangae* ‘idea’ in the relative clause in (28), cannot appear on the right of nominative and genitive subjects.

- (28) [[(*kimyoona*) *gakusei*-{*ga/no*} (**kimyoona*) *omoitui-ta*] *kangae*]
 strange student-*{Nom/Gen}* strange come.up.with-Past idea
 ‘the (strange) idea that the student came up with’

The adjectival modifier *kimyoona* can only be adjoined to a nominal projection. In (28), the adjectival modifier cannot follow the subject because the nominal projection that *kimyoona* modifies does not occur inside the embedded clause.

When DPs take no complement clauses, an adjectival modifier like *kimyoona* ‘strange’ can appear either to the left or the right of a genitive argument (i.e. the possessor) that modifies the head noun, but a temporal adverb like *kinoo* ‘yesterday’ cannot be placed inside the nominal, as illustrated in (29).

- (29) a. [(kimyoona) gakkusei-no (kimyoona) kangae]
 strange student-Gen strange idea
 ‘the student’s (strange) idea’
- b. *[(kinoo) gakusei-no (kinoo) kangae]
 yesterday student-Gen yesterday idea
 ‘the student’s idea (yesterday)’

In (29), the genitive possessor is an argument to the nominal head *kangae* ‘idea’, and the genitive case marking on the possessor is not derived via nominative-genitive conversion. In (29a), the adjective *kimyoona* modifying the noun *kangae* may either precede or follow the genitive argument because, in either case, it can be construed as residing in the nominal projection. In contrast, a temporal adverb like *kinoo* cannot be placed inside the nominal construction due to the absence of a verbal projection that can license it, as shown in (29b).

The important fact is that while the temporal adverb *kinoo* cannot follow the genitive argument in (29b), it can be placed to the left of the genitive subject in (27), which is derived via nominative-genitive conversion. This fact indicates that the genitive subject is located in the embedded clause, and is not raised into the nominal domain, i.e. it enters into ϕ -feature agreement with a head within the embedded clause.

When a genitive argument is located in a nominal taking a complement clause, it behaves differently from a genitive subject derived via nominative-genitive conversion. For instance, in the noun-complement clause construction with *ketui* ‘determination’, which takes a control clause as its complement, a genitive argument interpretable as the subject of the embedded predicate appears in the nominal domain, since PRO occurs in the embedded clause, as represented in (30).

- (30) Watasi-wa [Ken-no [PRO siai-ni kat-u toiu] tuyoi ketui]-o
 I-Top Ken-Gen game-Dat win-Pres Comp strong determination-Acc
 sit-ta.
 know-Past

‘I came to know Ken’s strong determination to win the game.’

In (30), the genitive-marked argument *Ken* is interpreted as the subject of the embedded predicate on the grounds that it controls PRO in the lower clause.⁸ The genitive argument is

⁸ Complementizer deletion may be invoked when the clause is adjacent to the head noun. Thus, the possibility of complementizer deletion differs according to where the embedded clause is positioned in the nominal structure.

- (i) a. [Ken-no [PRO siai-ni kat-u (toiu)] ketui]
 Ken-Gen game-Dat win-Pres Comp determination
 ‘Ken’s determination to win the game’

not derived from nominative-genitive conversion. Rather, it is a possessor argument selected by the noun. Accordingly, the case marking on *Ken* cannot be changed from genitive to nominative.

- (31) **Watasi-wa* [[*Ken-ga* *siai-ni* *katu* *toiu*] *tuyoi* *ketui*]-o
 I-Top Ken-Nom game-Dat win-Pres Comp strong determination-Acc
sit-ta.
 know-Past

‘I came to know the strong determination for Ken to win the game.’

In (31), the nominative argument *Ken* is the subject of the embedded predicate, and cannot count as a possessor to the noun *ketui*. The noun *ketui* selects an animate possessor, which must be marked with genitive case. Since no genitive argument that qualifies as the experiencer argument of *ketui* appears in (31), the noun structure is excluded as unacceptable.

The genitive argument *Ken* in (30) appears in the nominal domain. The structural position of this genitive argument can be assessed by placing a nominal modifier to the right of it.

- (32) [*Ken-no* ***tuyoi*** [*PRO* *siai-ni* *katu* *toiu*] *ketui*]
 Ken-Gen strong game-Dat win-Pres Comp determination

‘Ken’s strong determination to win at the game’

The noun complement clause construction in (32), where the adjective *tuyoi* ‘strong’ intervenes between the genitive argument *Ken* and the embedded clause, is legitimate. This shows that the genitive argument appears in the nominal domain, and that the possessor argument licensed by *ketui* is interpretively taken as the subject of the embedded predicate via controlling PRO in the embedded clause.

In contradistinction, genitive subjects derived via nominative-genitive conversion cannot be followed by nominal modifiers, as shown by the examples in (33) (cf. Sakai 1994, Ochi 2001).

- (33) a. [[*Ken-no* *mi-ta*] ***omosiroi*** *eiga*]
 Ken-Gen see-Past interesting movie

‘the interesting movie which Ken saw’

-
- b. [[*PRO* *siai-ni* *katu* *?*(toiu)*] *Ken-no* *ketui*]
 game-Dat win-Pres Comp Ken-Gen determination

‘Ken’s determination to win the game’

Some, if not all, nouns allow the complementizer *toiu* ‘that’ to be deleted from their complement clauses. Nouns are classified into several types depending on whether or not they allow the complementizer *toiu* to appear in their complement clauses (see Masuoka and Takubo 1992).

- b. *[Ken-no **omosiroi** mi-ta eiga]
 Ken-Gen interesting see-Past movie
 ‘the interesting movie which Ken saw’

In (33a), the nominal modifier *omosiroi* ‘interesting’ can appear after the relative clause, but (33b) shows that this nominal modifier cannot be placed between the genitive subject and the embedded predicate. (33b) is excluded because the nominal modifier appears in the embedded clause. Given that the nominal modifier cannot follow the genitive subject in (33b), it is reasonable to state that the genitive subject generated by nominative-genitive conversion is located in the embedded clause.

In this connection, note that if the complementizer *toiu* ‘that’ is introduced in the embedded noun complement clauses, the subject cannot be marked with genitive case, as exemplified in (34a) (Inoue 1976, Hiraiwa 2001, 2005).

- (34) a. [gakusei- {ga/*no} katu toiu] kakuritu
 student- {Nom/Gen} win-Pres Comp probability
 ‘the probability that the student will win’
- b. [gakusei- {ga/no} katu] kakuritu
 student- {Nom/Gen} win-Pres probability
 ‘the probability that the student will win’

The examples in (34) show that genitive marking is not allowed on the subject of a noun complement clause if it includes a complementizer, illustrating that the difference in the possibility of genitive subjects (derived by nominative-genitive conversion) is correlated with the presence or absence of the complementizer *toiu* ‘that’.

Note that the possessor argument in (32) appears in the genitive case despite the fact that the embedded clause is accompanied by the complementizer *toiu*. A comparison of the data in (32) and (34) shows then that genitive subjects generated via nominative-genitive conversion occupy a structural position different from one filled by possessor arguments interpretable as the subjects of the embedded predicates via control.

In essence, the facts of adjectival and adverbial modifications show that both genitive and nominative subjects are located in the embedded clauses, and that genitive subjects derived by nominative-genitive conversion are not located in the nominal domain. On the other hand, genitive possessor arguments to the nominal head, including possessor arguments interpretable as the subjects of embedded clauses via control, appear in the nominal domain. The data illustrate that genitive subjects, just like nominative subjects, are not extracted from the embedded clause where they are merged externally.

2.3. *Tari*-Coordination: The Position of Subjects within the Embedded Clause

The discussion up to this point has shown that genitive and nominative subjects remain in the complement clauses of complex DPs even though they are dislocated from vP-internal position. The data pertaining to adjectival and adverbial modifications and indeterminate pronoun binding do not show that genitive subjects appear in a structural position distinct from one filled by nominative subjects, however. In this section, I will present novel data which illustrate that genitive subjects indeed appear in a higher position than nominative subjects.

Empirical evidence in favor of the present view may be adduced from the facts of correlative coordination constructions constructed by the coordinating particle *tari*, which is used to enumerate non-exhaustive instances of events or states (Makino and Tsutsui 1986).⁹ For present purposes, I will make use of the type of construction where the *tari* particles are attached to the verb stems. Some representative examples are given in (35).

- (35) a. Karera-wa [utat-tari] [odot-tari] si-ta.
 They-Top sing-and dance-and do-Past
 ‘They sung and danced.’
- b. Ame-ga [huat-tari] [yan-dari] si-ta.
 rain-Nom fall-and stop-and do-Past
 ‘It rained on and off.’
- c. Nedan-ga [takakat-tari] [yasukat-tari] si-ta.
 Price-Nom high-and low-and do-Past
 ‘Prices were high and low.’

When a coordinate structure is formed by attaching *tari* particles to the verb stems, the verb *suru* ‘do’ follows it. (34a) is a case where the predicates are coordinated. (34b) shows that inanimate subjects are allowed, which suggests that *suru* does not impose selectional restriction on the subjects appearing in the coordinate structure. As shown in (34c), adjectival predicates can be coordinated. In this case as well, the verb *suru* appears to the right of the coordinate structure. These facts suggest that the verb *suru* in the coordinate structure construction where *tari* particles are attached to the predicate stems is not a main verb, but a supportive verb inserted to save the tense morpheme that would be stranded otherwise.

Coordinate structures can be construed at various phrasal levels. For present purposes, it is important to see that even when the coordinator *tari* attaches to verbs, TP-coordinate

⁹ This non-exhaustive implication is not indicated in the translations of the examples with *tari*-coordination, however. Note that a clause can contain only one conjunct formed by *tari*. Even in this case, the sentence carries a non-exhaustive implication.

structures can be constructed.¹⁰ This fact is confirmed by the well-formedness of the coordinate structure in (36), which contains nominative subjects.

- (36) [Ken-ga hasit-tari] [Mari-ga hasit-tari] si-ta.
 Ken-Nom run-and Mari-Nom run-and do-Past
 ‘Ken walked and Mari ran.’

As discussed by Kishimoto (2010, 2017a), nominative subjects reside in Spec-TP. Then the well-formedness of (36) indicates that TP coordinate structures can be formed under *tari*-coordination even if the particle *tari* is attached to the verb on the surface.¹¹

In the same vein, adjuncts which occur below TP can be included in the coordinate structure formed by *tari*. The examples in (37) show that temporal adverbs *kinoo* ‘yesterday’ and *kyoo* ‘today’ are allowed to occur in the coordinate structure.

- (37) Ken-wa [kinoo koko-ni araware-tari] [kyoo koko-ni araware-tari] si-ta.
 Ken-Top yesterday here-in appear-and today here-in appear-and do-Past
 ‘Ken showed up here yesterday and showed up here today.’

The temporal adverbs can be assumed to be adjoined to TP. Given this premise, it can be stated that the coordinator *tari* can conjoin TPs.

It goes without saying that lower arguments can be included in the coordinate structures. The examples in (38) show that dative and accusative arguments can appear inside the coordinate structures formed by the *tari* particles.

- (38) a. [Sensei-ga [Ken-o home-tari] [Mari-o home-tari] si-ta.
 teacher-Nom Ken-Acc praise-and Mari-Acc praise-and do-Past
 ‘The teacher praised Ken and praised Mari.’

¹⁰ This seems to be a general property of coordinating particles that can attach to verbal constituents. For discussion of other types of coordinating particles, see Kishimoto (2013).

¹¹ The *tari* particle cannot be added to the right of tense even if a TP-coordinate structure is formed, as shown in (i).

- (i) *[Ken-ga hasit-ta-tari] [Mari-ga hasit-ta-tari] (da).
 Ken-Nom run-Past-and Mari-Nom run-Past-and Cop
 ‘Ken walked and Mari ran.’

The restriction on the placement of *tari* can be satisfied if the tense is moved out of the coordinate structure by Across-the-Board (ATB) movement, as depicted in (ii).

- (ii) [[V-t_i] [V-t_i] T_i]

If the tense is extracted from the coordinate structure by ATB movement, it is separated from the verbs, and hence needs to be morphologically supported by the verb *suru*.

- b. [Bob-ga Ken-ni hon-o age-tari] [Jane-ga Mari-ni hon-o age-tari]
 Bob-Nom Ken-Dat book-Acc give-and Jane-Nom Mari-Dat book-Acc give-and
 si-ta.
 do-Past

‘Bob gave Ken books and Jane gave Mari books.’

Similarly, the adverbs *yukkuri* ‘slowly’ and *hayaku* ‘quickly’, which are predicate modifiers, are allowed in the coordinate structures.

- (39) Ken-ga [yukkuri hanasi-tari] [hayaku hanasi-tari] si-ta.
 Ken-Nom slowly talk-and quickly talk-and do-Past

‘Ken talked slowly and talked quickly.’

Since *yukkuri* ‘slowly’ and *hayaku* ‘quickly’ are manner adverbs, which occur in a lower position than temporal adverbs, it is naturally expected that they will be allowed in the *tari*-coordinate structures. The facts of the coordinate structure show that arguments and adjuncts appearing in a structural position lower than TP can be included in the coordinate structure construction.

There is also evidence that constituent structures projected higher than TPs cannot be coordinated by the *tari* particles. This is exemplified by the fact that topics cannot be included in *tari*-coordinate structures, as shown in (40).

- (40) *[Ken-wa hasit-tari] [Mari-wa hasit-tari] si-ta.
 Ken-Top run-and Mari-Top run-and do-Past

‘Ken walked and Mari ran.’

It is often argued that topics appear in CP (see e.g. Kishimoto 2009). Then, the unacceptability of (40) suggests that the coordinate structure with *tari* cannot be formed at the CP-level.

The facts of modal adverbs, which appear in CP in a way similar to topics, lend further support to the present view. As shown in (41), modal verbs cannot appear inside the coordinate structure.

- (41) *[Ken-ga tabun arui-tari] [Mari-ga tabun hasit-tari] si-ta.
 Ken-Nom probably walk-and Mari-Nom probably run-and do-Past

‘Ken probably walked and Mari probably ran.’

Since modal adverbs appear in a higher projection than TP, and since projections higher than TPs cannot be conjoined by the *tari* particles, (41) is not acceptable.

While topics are not allowed inside the coordinate structure, the sentences are rendered acceptable if they are extracted from the coordinate structure by Across-the-Board (ATB)

movement, as illustrated in (42).

- (42) a. *[Ken-wa hasit-tari] [Ken-wa arui-tari] si-ta.
 Ken-Top run-and Ken-Top walk-and do-Past
 ‘Ken walked and Ken ran.’
- b. Ken-wa [hasit-tari] [arui-tari] si-ta.
 Ken-Top run-and walk-and do-Past
 ‘Ken walked and ran.’

(42a) is not acceptable since each conjunct contains a topicalized subject. In (42b), the topicalized subject is extracted from both conjuncts by ATB movement, and hence it is understood to be the subject of both *hasiru* ‘run’ and *aruku* ‘walk’. The sentence in (42b) is acceptable since the coordinate structure does not include elements appearing in CP projections.

Coordinate structures form syntactic islands. Thus, no movement other than ATB movement can be invoked for extraction from the coordinate structures. This is exemplified by (43), where the locative argument appears at the sentence front as a result of extraction from the right conjunct.

- (43) *Rooka-de; [Ken-ga gurando-de hasit-tari] [Ken-ga t_i hasit-tari] si-ta.
 corridor-on Ken-Nom ground-on run-and Ken-Nom run-and do-Past
 ‘On the corridor, Ken walked on the ground and Ken ran.’

(43) is not grammatical because the locative argument has been moved out of the coordinate structure island by non-ATB movement.

Let us now proceed to look at how genitive subjects behave in the *tari*-coordinate structure construction. As noted earlier, nominative-genitive conversion is applicable to subjects when they appear in complex DPs. Crucially, a contrast in acceptability is observed according to whether the subject is marked with nominative case or genitive case.

- (44) a. [[Ken-ga hasit-tari] [Mari-ga hasit-tari] si-ta] riyuu
 Ken-Nom run-and Mari-Nom run-and do-Past reason
 ‘the reason why Ken ran and Mari s ran’
- b. *[[Ken-no hasit-tari] [Mari-no hasit-tari] si-ta] riyuu
 Ken-Gen run-and Mari-Gen run-and do-Past reason
 ‘the reason why Ken ran and Mari ran’

The nominative subject occurs in Spec-TP as a result of A-movement out of vP, and thus (44a), which has the coordinate structure with nominative subjects, is acceptable. On the other

hand, the unacceptability of (44b) shows that the genitive subjects cannot be included in the coordinate structure.¹²

Genitive subjects, unlike nominative subjects, are not allowed to appear in the coordinate structure formed by *tari*, as in (44b), but the sentence becomes acceptable if they are extracted from the coordinate structure by ATB movement, as shown in (45).

- (45) a. [Ken-ga [tat-tari] [suwat-tari] si-ta] riyuu
 Ken-Nom stand.up-and sit.down-and do-Past reason
 ‘the reason why Ken stand up and sit down’
- b. [Ken-no [tat-tari] [suwat-tari] si-ta] riyuu
 Ken-Gen stand.up-and sit.down-and do-Past reason
 ‘the reason why Ken stand up and sit down’

Genitive subjects behave in the same way as topics and modal adverbs. Given that the *tari* particles can coordinate TPs, but not higher projections, it must be the case that genitive subjects are located in a higher projection than TP. Since both nominative and genitive subjects are not displaced from the noun modifying clauses, as discussed in section 3.2, it can be concluded that genitive subjects appear in CP, i.e. in a structural position higher than one occupied by nominative subjects, or that genitive subjects displaced from vP enter into ϕ -feature agreement with the C head of the embedded clause and hence stop at the level of the CP.¹³

To summarize, nominative subjects are allowed to occur in the coordinate structure

¹² The unacceptability of (44b) remains the same even if topics are extracted from the coordinate structure via ATB-movement, as shown in (ib).

- (i) a. *[Ken-wa hasit-tari] [Mari-wa hasit-tari] si-ta] riyuu
 Ken-Top run-and Mari-Top run-and do-Past reason
 ‘the reason why Ken ran and Mari s ran’
- b. *[Ken-wa [tat-tari] [suwat-tari] si-ta] riyuu
 Ken-Top stand.up-and sit-and do-Past reason
 ‘the reason why Ken stand up and sit down’

Topics and modal adverbs can appear only in ‘root’ contexts, and thus are not allowed to appear in the embedded clause selected by the noun head *riyuu* ‘reason’. Since a CP projection is present in the noun complement clause, the fact shows that the C head in the embedded clause cannot bear grammatical features that license the occurrence of these elements, so that they cannot be placed inside the noun complement structure.

¹³ Murasugi (1991, 2000) claims that CP projections are not included in relative clauses, and just have TP structures. Nevertheless, since relative clauses allow genitive subjects to appear in them, the data illustrates that they are comprised of CP.

formed by the coordinating *tari* particles, but genitive subjects cannot be included in the coordinate structure. Since TPs, but not higher structures, can be conjoined by the *tari* particles, the facts of *tari*-coordination indicate that genitive subjects appear in a higher structural position than nominative subjects. Further, given that subjects are not extracted from the clause in which they are externally merged regardless of whether they are marked with nominative or genitive case, it can be stated that genitive subjects appear in CP.

3. The Complementizer Effect

The discussions in the foregoing section show that genitive subjects are moved into CP by A-movement, while nominative subjects are moved into TP. Another question that arises at this moment is how genitive Case on genitive subjects is sanctioned. Two different analyses on genitive Case licensing have been proposed in the literature, which are called the ‘C-licensing’ analysis and the ‘D-licensing’ analysis. In this section, I will discuss how nominative-genitive conversion is blocked if a complementizer is present in a noun complement clause. On the basis of the complementizer effect, it is suggested that a nominal D head in the nominal domain is held responsible for the Case licensing of genitive subjects, and that genitive subjects need to be located in a position to which a D head for their Case feature to be valued as genitive.

The D-licensing analysis countenanced by a number of researchers (e.g. Miyagawa 1993, 2011, 2013; Ochi 2001) is fairly straightforward. Under the D-licensing view, a D head values the Case feature of the subject in CP as genitive. On the other hand, the C-licensing analysis, advanced by (Hiraiwa 2001, 2005), takes genitive Case licensing to be possible in the context where the predicate appears in the adnominal form, claiming that genitive Case is licensed by a C-T complex in the clause where the predicate occurs in the adnominal form (i.e. *rentaikei*). Hiraiwa (2005) also claims that adnominal C-T can license a genitive subject only when the D selecting it is Case-licensed by a higher probe.¹⁴

Under Hiraiwa’s C-licensing analysis, genitive subjects are allowed when the embedded predicate appears in the adnominal form and the D head is Case-marked. Nevertheless, there are cases where adnominal C-T meeting Hiraiwa’s condition on genitive Case licensing cannot license genitive Case, which suggests that D rather than C is held responsible for licensing genitive Case on genitive subjects (Kishimoto 2017a). To make this point, consider the pair of the examples in (46).¹⁵

¹⁴ Hiraiwa adds the condition on the D head due to the fact that some conjunction markers such as *no-de* and *no-ni* cannot license genitive case marking on subjects.

¹⁵ In present-day Japanese, verbs and adjectives have lost a ‘morphological’ distinction between sentence-final form (SF) and adnominal (or noun modifying) form (ADN) (Shida 1976), so I will look at nominal adjectives, which still retain the relevant morphological distinction, for the purpose of illustrating the morphological form of the predicate.

- (46) a. Ken-wa [kono gakusei-**{ga/no}** mukuti-na] **koto-o** sira-nakat-ta.
 Ken-Top this student-**{Nom/Gen}** quiet-Pres fact-Acc know-Neg-Past
 ‘Ken did not know the fact that this student was quiet.’
- b. [Kono gakusei-**{ga/*no}** mukuti-na] **koto-ga** ar-u.
 this student-**{Nom/Gen}** quiet-Pres fact-Nom be-Pres
 ‘There are times when this student is quiet.’

When *koto* ‘fact’ appears as an object of *siru* ‘know’, as in (46a), the embedded subject can bear genitive case. When *koto* is combined with *aru*, as in (46b), genitive case marking is not allowed for the subject. Note that in (46b), the embedded predicate appears in the adnominal form, and *koto* can be marked with either nominative or genitive case, as in (47).

- (47) [gakusei-ga izen ki-ta] koto-**{ga/no}** ar-u basyo
 student-Nom before come-Past fact-**{Nom/Gen}** be-Pres place
 ‘the place where the students have been before’

(47) shows that the D associated with the nominal *koto* has an unvalued Case feature which is valued by a higher probe. Under Hiraiwa’s analysis, the case-marking alternation between nominative and genitive case is expected to be possible in (47b). Nevertheless, the fact is not in keeping with the expectation.¹⁶

The crucial difference that distinguishes between (46a) and (46b) is that *koto* in (46a) acts as a full noun, carrying the substantial meaning of ‘fact’, while *koto* in (46b) forms part of a modal-like expression. It can be postulated here that the modal noun *koto* included in *koto-ga aru* has lost the status of a full noun, perhaps by virtue of a grammaticalization process, which is under way, even if *koto* can still be case-marked. Given that the (im)possibility of genitive marking on the embedded subject correlates with the properties of *koto*, it is reasonable to conclude that genitive marking on genitive subjects is not determined by C. In light of the data in (46) and (47), I postulate that D is the Case licenser of a genitive subject derived via nominative-genitive conversion.¹⁷

¹⁶ The same point can be made by making use of other expressions such as *wake-ga nai* ‘there is no reason’, *tumori-ga nai* ‘have no intention’, and the like.

¹⁷ Hiraiwa (2005) suggests that the C-licensing analysis has the advantage of accounting for the fact that a genitive subject is sanctioned without an external nominal. For reasons of space, I will not have an extensive discussion on this point, but there are alternative accounts for the set of data which Hiraiwa (2005) provides, abstracting away from judgment issues on his examples (see e.g. Oshima (2010) and Nambu (2011)). The data come in two types. In one type of construction, a postposition that can function as a noun is included, as in (i).

- (i) [Ame-**{ga/no}** yam-u made]-ga nagakat-ta.
 rain-**{Nom/Gen}** stop-Pres until-Nom long-Past
 (Lit.) ‘Until the rain stops was long.’

If D is the Case licenser of genitive subjects, the fact that nominative-genitive conversion is blocked when the complementizer *toiu* ‘that’ is present can be accounted for straightforwardly. A key to understanding this point lies in the fact that the nominal complementizer *toiu* has a complex form in which a clausal complementizer *to* ‘that’ is combined with the verb *iu* ‘say’, as can be seen from (48).

- (48) a. Ken-wa [Mari-ga ki-ta to] it-ta.
 Ken-Top Mari-Nom come-Past that say-Past
 ‘Ken said that Mari came.’
- b. Watasi-wa [Mari-ga soko-ni i-ta toiu] syooko-o mituke-ta.
 I-Top Mari-Nom there-in be-Past that evidence-Acc find-Past
 ‘I found the evidence that Mari was there.’

Toiu is often treated as a complementizer, but has a complex structure syntactically, since the proform *soo* ‘so’ can replace the constituent comprised of the embedded clause plus *to* ‘that’, as shown in (49).

- (49) Ano hito-mo [*soo* iu] syooko-o mituke-ta.
 that person-also so that evidence-Acc find-Past
 ‘That person also found that evidence.’

When (49) is uttered after (48b), *soo* is taken as referring to *Mari-ga soko-ni i-ta to* ‘that Mari was there’. The element *iu* included in the nominal complementizer complex *toiu* is originated from the verb *iu* ‘say’. This complementizer complex can also take the past form *toitta* ‘that+said’.¹⁸ Given these facts, it is reasonable to postulate that *to* and *iu* occur in distinct syntactic positions, as in [[_{CP} [_{TP} ...] *to*] *iu*].¹⁹

In another type of construction, the nominalizing particle *no* is allowed to occur optionally, as in (ii) (see Maki and Uchibori (2008)).

- (ii) [Gakusei-*{ga/no}* ne-ru (no) yori] hayaku ...
 student-*{Nom/Gen}* sleep-Pres Nomnl than soon
 ‘Sooner than the students sleep....’

At first sight, it might look as if Hiraiwa’s examples do not have obvious nominals licensing genitive Case. Nevertheless, these examples include (*or* can include) elements that have the potential to license genitive Case of the subject, so it is too hasty to conclude that C is the licenser of genitive Case.

¹⁸ This kind of phenomenon is observed cross-linguistically (see Heine and Kuteva 2002).

¹⁹ It is possible to replace the embedded clause with a *wh*-phrase *nan(i)* ‘what’, while leaving the complementizer undeleted.

Furthermore, there is empirical evidence that the complex *toiu* introduces a CP structure. This is confirmed by the fact that a topic can appear in the embedded noun complement clause when *toiu* appears between the embedded predicate and the noun head, but not when it does not intervene between them.

- (50) a. Watasi-wa [**Mari-wa** soko-ni i-ta toiu] syooko-o mituke-ta.
 I-Top Mari-Top there-in be-Past that evidence-Acc find-Past
 ‘I found the evidence that Mari was there.’
- b. *Watasi-wa [**Mari-wa** soko-ni i-ta] syooko-o mituke-ta.
 I-Top Mari-Top there-in be-Past evidence-Acc find-Past
 ‘I found the evidence that Mari was there.’

When a topic is interpreted contrastively, it can occur in the embedded clause accompanied by the complementizer complex *toiu*.²⁰ When the complementizer complex is absent, no topic is allowed to appear in the embedded clause. Since the CP selected by the noun head *syooko* ‘evidence’ does not allow a topic to occur, the fact shows that when *toiu* appears in the noun complement clause, another CP structure that can accommodate a contrastive topic is projected, as in [CP [TP [CP [TP] *to*] *iu*]].

In light of the facts noted above, it is plausible to postulate that *iu* selects a complement clause with a CP structure, under which a TP structure expressing the propositional content is embedded. This means that when *toiu* is present in the noun complement clause, two layers of CPs exist, as in (51a), but that when it is missing, only a single layer of CP is projected, as in (51b).

- (51) a. [DP [CP SUBJ-GEN [TP T]] D]
 b. [DP [CP [CP SUBJ-GEN [TP T] *toiu*]] D]

-
- (i) Kare-wa nan toiu syutyoo-o si-ta no?
 he-Top what Comp claim-Acc do-Past Q
 ‘What claim did he make?’

This fact also suggests that *to* fills the head of CP, which is a projection placed on top of TP in the embedded clause.

²⁰ Note that embedded CPs headed by *to* ‘that’ can accommodate topics and modal adverbs, since they can provide the root contexts. In addition, the verbal part can further be expanded by adding an expression like *yoona* ‘like’, as seen in (i).

- (i) Watasi-wa [Mari-ga soko-ni i-ta toiu yoona] syutyoo-o kii-ta.
 I-Top Mari-Nom here-in be-Past that like claim-Acc hear-Past
 ‘I heard the claim, something like Mari was there.’

This fact also suggests that there exists a projection between *toiu* and the noun, and that it can accommodate an element like *yoona*.

Given the structures in (51), the fact that genitive subjects can appear only in the noun complement clauses without *toiu* follows straightforwardly.

To be concrete, when *toiu* is not introduced in the noun complement clause, the subject of the embedded predicate appears at Spec-CP, which is selected by the noun head, as in (50a). In this configuration, the subject is accessible to the D head, and the Case feature of the subject can be valued as genitive. Accordingly, a genitive subject is allowed to appear in this context. By contrast, when *toiu* is introduced into the embedded clause, the subject of the embedded predicate is moved into the edge of the most embedded clause selected by *toiu*, as (50b) illustrates, given that a genitive subject enters ϕ -feature agreement with a local C head. In this configuration, the subject appearing in the most embedded CP is too far away from the D head, with an intermediate CP being a phase (Chomsky 2000, 2001, 2004, 2008).²¹ The Case feature on the subject can in no way be valued as genitive in the construal in (50b), the result of which is that no genitive subject is allowed to occur in the embedded clause.

In the present analysis, a D head acts as the Case licenser of genitive subjects derived by nominative-genitive conversion. The apparently puzzling behavior of genitive subjects in the clauses with the complementizer *toiu* can be accounted for at no extra cost once it is recognized that *toiu* has a CP structure and introduces a subordinate clause with another CP structure. The option of marking the subject of the subordinate predicate with genitive case is not available in the embedded clause with *toiu* because the subject is located in a position too far away from a D head that can sanction genitive Case.

The complementizer effect brings to light the fact that Case licensing across a phrase is not possible, although it is sometimes viewed that Case checking by long distance Agree is possible (Chomsky 2000, 2001). The data illustrate that a genitive subject needs to be raised to the edge of CP selected by the noun, which is accessible to its Case-licensing D head for their Case feature to be valued as genitive. Under the labeling approach, this means that genitive subjects enter into ϕ -feature agreement with the C head of the clause in which they are merged externally, by virtue of C's retaining the ϕ -feature assigned to it (without feature inheritance).

4. Conclusion

In this paper, I have presented several kinds of arguments in favor of the view that genitive subjects derived via nominative-genitive conversion are located in Spec-CP—a position higher than that filled by nominative subjects. The facts of indeterminate pronoun binding and subject honorification show that genitive subjects, like nominative subjects, are moved out of vP by virtue of A-movement. On the basis of adjectival and adverbial

²¹ The phasehood of vPs is determined whether they introduce an external argument or not, so that unergative vP is construed as a phase, but unaccusative and passive vPs are not. (Chomsky 2000, 2015). I assume that vP associated with *iu* is not a phase because it does not introduce an external argument.

modifications, it can be stated that both nominative and genitive subjects remain in the clause where they are externally merged, i.e. they are not extracted from the embedded clause. The facts of *tari*-coordination have shown that genitive subjects are located in a higher structural position than nominative subjects. Furthermore, the blocking effect of nominative-genitive conversion in a clause with the complex complementizer *toiu* shows that genitive subjects need to reside in the domain accessible to a D head, which can value the Case feature on genitive subjects. All in all, the data show that genitive subjects undergo A-movement to the CP in the embedded clause in which they are externally merged (while nominative subjects undergo A-movement to TP).

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