ANTI-LICENSEING THEORY OF UNMARKED CASES AND GA/NO CONVERSION*

Yukino Kobayashi
Sophia University

1. Introduction

It is well known that the subjects of relative clauses and nominal complements in Japanese may be marked by either a nominative case marker, -ga, or a genitive case marker, -no, as exemplified in (1) and (2).

(1) Relative clause
   Kinoo Hanako-{ga/no} hiita kyoku.
   yesterday Hanako-{Nom/Gen} play.Pst piece
   'The piece that Hanako played yesterday.'

(2) Nominal complement
   Kinoo Taro-{ga/no} yorokonda riyuu
   yesterday Taro-{Nom/Gen} delight.Pst reason
   'The reason that Taro was delighted yesterday.'

Harada (1971) claims that there is a rule which converts a nominative case marker -ga into a genitive case marker -no. He calls this rule Ga/No conversion. This phenomenon (i.e., the nominative-genitive case conversion, NGC) has attracted much attention since his seminal work, and various analyses have been proposed in the literature. One of the prevailing analyses claims that the subject is marked genitive when it is in a certain local domain of the external nominal head N/D (Bedell 1972, Saito 1982, 1983, Fukui 1986, Fukui and Nishigauchi 1992, Miyagawa 1993, Ochi 2001, Maki and Uchibori 2008, among others). The core idea of the analysis is to reduce the genitive case marking on the subjects in relative clauses and nominal complements to that on the elements in noun phrases. Let us call this approach the nominal approach. In contrast, another influential analysis argues that the existence of the external nominal element is irrelevant to NGC (Watanabe 1994, 1996, Hiraiwa 2001). This argument claims that a certain property of C is responsible for the licensing of the genitive subject. Let us call this approach the non-nominal approach. However, as we will see in the following discussions, none of the previous approaches satisfactorily account for NGC.

This study aims to propose a novel realization theory of unmarked cases, i.e., nominative -ga and genitive -no, within the phase-based model (Chomsky 2007, 2008), and argue that the proposed theory satisfactorily captures the properties of NGC. The central part of the proposal

* I am deeply indebted to Naoki Fukui, Masakazu Kuno, Koichi Takezawa, Asako Uchibori, and Ayumi Ueyama for invaluable comments and discussions. I am also grateful to Takaomi Kato, Yasuhiko Kato, Shigeto Kawahara, Hisatsugu Kitahara, Hajime Ikawa, Toru Ishii, Yuma Iwatani, Takashi Munakata, Hiroki Narita, Masanobu Sorida, Akira Watanabe, and Mihoko Zushi for their valuable comments and encouragement. I am solely responsible for all the remaining errors and inadequacies.
is that the realization of unmarked cases is regulated by "anti-licensing" conditions, which state where they cannot appear, rather than by licensing conditions, which state where they can appear. More precisely, we will claim that unmarked cases are regulated by the following conditions.

(3)  
   a. A case feature of \( n \) cannot be realized as -\( ga \) in a [-Tense] domain.  
   b. A case feature of \( n \) cannot be realized as -\( no \) in a [+Tense] domain.

Providing data representing that NGC is allowed in selected-tense clauses, we will argue that real NGC is observed when a position in question is free from both conditions in (3). Our analysis agrees with the non-nominal approach that it is not the existence of a nominal element but a certain property of \( C \) that plays a key role in NGC. One of our advantages over the previous non-nominal approach is that our analysis uniformly captures the genitive case markings in Japanese.

The rest of this paper is organized as follows. In section 2, we summarize the properties of NGC and, providing new data, we claim that NGC is allowed in selected-tense clauses, in addition to relative clauses and NP complements. In section 3, we review the nominal and non-nominal approaches and argue that none of the approaches can satisfactorily account for the properties of NGC that we have summarized in section 2. We introduce anti-licensing conditions of unmarked cases in section 4 and demonstrate that the proposed analysis satisfactorily captures the properties of NGC. We discuss a remaining issue and conclude in section 5.

2.  \textit{Ga}/No Conversion

2.1.  General Properties of \textit{Ga}/No Conversion

The properties of NGC that have been discussed in the literature are summarized as follows. First, as shown in (4), NGC is not allowed in a root clause and an ordinary finite complement (\textit{Generalization 1}).

(4)  
   Root clause  
   a. Sakura-\{ga/*no\} saita.  
      cherry.blossom-\{Nom/Gen\} bloom.Pst\(^1\)  
      'Cherry blossoms bloomed.'

(5)  
   Ordinary finite complement  
   Hanako-ga sakura-\{ga/*no\} saita to itta.  
   Hanako-Nom cherry.blossom-\{Nom/Gen\} bloom.Pst C say.Pst  
   'Hanako said that cherry blossoms bloomed.'

Second, as we see in (1) and (2), NGC is observed in relative clauses and nominal complements (\textit{Generalization 2}). Third, this phenomenon is optional (\textit{Generalization 3}). Fourth, there is no \textit{O-No conversion}, as exemplified in (6) (\textit{Generalization 4}).

\(^1\) A list of abbreviations used in this paper is as follows: \( \text{lst} \)=first person, \( \text{Acc} \)=accusative, \( \text{Atr} \)=attributive form, \( \text{C} \)=complementizer, \( \text{Conj} \)=conjunction, \( \text{Cont} \)=continuative form, \( \text{Cpl} \)=copula, \( \text{Caus} \)=causative, \( \text{Dat} \)=dative, \( \text{Gen} \)=genitive, \( \text{Nom} \)=nominative, \( \text{Part} \)=particle, \( \text{Pl} \)=plural, \( \text{Prs} \)=present, \( \text{Pst} \)=past, \( \text{Q} \)=\( Q \)-particle, \( \text{Sgl} \)=single, \( \text{Top} \)=topic marker.
Anti-Licensing Theory of Unmarked Cases and Ga/No Conversion (Y. Kobayashi)

(6) Baiorin-{of no} hiita onnanoko.
    violin-{Acc/Gen} play.Pst girl
    'The girl who played the violin.'

Fifth, sentential adverbs can precede the genitive subject, as shown in (7).
(Generalization 5).

(7) [DP [p kinoo Hanako-no katta] hon]
    yesterday Hanako-Gen buy-Pst book

Sixth, as Miyagawa (1993) points out, the genitive subject in a nominal complement takes both a wide scope and a narrow scope with respect to the head noun kanoosei 'possibility', while the nominative subject takes only a narrow scope, as exemplified in (6) (Generalization 6).

    [[John-or Mary]-Nom came possibility-Nom 50% over-Cpl
    'The possibility that John and Mary came is over 50%.'
    *The possibility that John came or the probability that Mary came is over50%.'
    Reason > [John-ka Mary], *[John-ka Mary] > reason
    [[John-or Mary]-Gen came possibility-Nom 50% over-Cpl
    'The possibility that John and Mary came is over 50%.'
    'The possibility that John came or the probability that Mary came is over50%.'

Seventh, the four logical possibilities of case arrays are allowed in stative sentential modifiers (Generalization 7).

(9) a. Hanako-ga Matisu-ga suki na riyuu.
    Hanako-Nom Matisse-Nom like.at.Cpl reason
    'The reason why Hanako likes Matisse.'

    b. Hanako-ga Matisu-no suki na riyuu.
    Hanako-Nom Matisse-Gen like.at.Cpl reason

    c. Hanako-no Matisu-ga suki na riyuu.
    Hanako-Gen Matisse-Nom like.at.Cpl reason

    d. Hanako-no Matisu-no suki na riyuu.
    Hanako-Gen Matisse-Gen like.at.Cpl reason

So far, we have summarized seven properties of NGC which have been pointed out in the literature. In the next subsection, we re-examine NGC data with respect to the presence of tense properties and observe other general properties of NGC.

2.2. Selected-Tense Clause

The following data show that NGC is generally allowed in selected-tense clauses, in addition to relative clauses and nominal complements, where 'a selected-tense clause' means

---

2 In a relative clause, in contrast, not only the genitive subject but also the nominative subject can take ambiguous scopes. See Miyagawa (1993) for details.
a clause that does not exhibit a full present-past contrast ("Generalization 8"). In each example shown in (10)-(15), for instance, NGC is allowed in a clause in which the embedded predicate takes only its selected-tense form and does not exhibit the full present-past contrast.

(10) [Boku-{ga/no} \{omou/#omotta\}-ni kono-hon-wa muzukasii. [1st.Sgl-{Nom/Gen} \{think.Prs/think.Pst\}-Dat this-book-Top difficult.Prs 'I think this book is difficult.]

(11) [Zaihoo-{ga/no} \{mitukaru/#mitukatta\]-made, akirame-nai. [treasure-{Nom/Gen} \{found.Prs/found.Pst\}-until give.up-not.Pst 'I don't give up, until the treasure is found.]

(12) [[Hassya-no beru]-{ga/no} \{natta/#naru\}-kiri, kisya-wa ugoka-nai. [[departure-Gen bell]-{Nom/Gen} \{ring.Pst/ring.Prs\}-since train-Top move-not.Prs. 'Since the departure bell rang, the train has not moved.]

(13) Zyuumin-ga [soodoo-{ga/no} \{osamaru/#osamatta\}-yoo-ni inotta. citizen-Nom [trouble-{Nom/Gen} \{solve.Prs/solve.Pst\}-way-Dat pray.Pst 'The citizen prayed to solve the trouble.]

(14) [Hannin-{ga/no} \{tukamari/#tukamatta\]-sidai, renraku-o kure. [criminal-{Nom/Gen} \{capture.nonPst/capture.Pst\}-as.soon.as call-Acc give.Prs 'Give me a call, as soon as the criminal is captured.]

(15) [Ame-{ga/no} \{yande/#yanda\}-kara], kaimono-ni ikoo. [rain-Nom \{stop.nonPst.Part/stop.Pst.Part\}-after shopping-Dat go.Prs 'Let's go shopping, after the rain stops.]

In (10)-(15), the presence of the embedded tense property is restricted, or selected, by the element that follows the embedded predicate. In the next section, we briefly review the previous approaches and see that none of them can give a satisfactory account for the properties of NGC that we have summarized in this section.

3. Previous Approaches

3.1. Nominal Approaches


The nominal approach claims that the genitive case in NGC is assigned/checked within the projection of the external nominal head N/D. The central idea of this analysis is to reduce the genitive case marking in NGC to that in a noun phrase, such as in (16).

(16) Taroo-no Rosiago-no kenkyuuu. Taro-Gen Russian-Gen study. 'Taro's study of Russian'

---

3 Recently, Miyagawa (2012) proposed similar observations. See the discussion in 4.2. below.

4 The fact that NGC is allowed in the adverbial phrases in (10)-(12) is first pointed out by Hiraiwa (2001).
Bedell (1972) proposes (17) and claims that, assuming that there is a restructuring rule that changes the structure (18a) into (18b), the subject is marked with a genitive case when it is in the projection of the external nominal head *koro* 'time', as shown in (18b),

(17) *No* is introduced between any two nouns or noun phrases which are constituents of the same larger noun phrase. \(\text{Bedell 1972:9}\)

(18) a. \([\text{NP} \; [\text{S} \; \text{tuki-ga deru}] \; \text{koro}]\)  
    moon-Nom emerge time  
    'The time the moon rises.'

   b. \([\text{NP} \; \text{tuki-no} \; [\text{deru}] \; \text{koro}]\)  
    moon-Gen emerge time  
    \(\text{Bedell 1972:13-14}\)

However, Saito (1983) points out that, in Bedell’s analysis, nothing seems to prevent both the nominative subject and the accusative object from being restructured into the genitive subject and genitive object. Saito argues that the problem can be circumvented if we assume the different case assignment mechanisms between nominative and accusative. That is, a nominative case is a default case that is not assigned by any element, while an accusative case is an obligatory case that must be assigned by V.

Building on this default case analysis, Fukui (1986) further captures the parallelism between a nominative case marking and a genitive case marking and argues that not only a nominative case but also a genitive case is a default case. He claims that both cases are purely structurally determined in the context of (19), unlike an accusative case that is assigned under government by V.

(19) In the environment: \(____X'\),  
    (i) Insert *ga* if \(X = V\)  
    (ii) Insert *no* if \(X = N\)  
    \(\text{Fukui 1986:143}\)

Thus, in Fukui’s analysis, NGC is characterized as a feature changing process between V and N, and the existence of NGC and the non-existence of O-No conversion can be formally captured in an elegant way.

So far, the nominal approach may seem plausible in that it can account for the fact that there is no O-No conversion, and it can unify genitive case markings in relative clauses, NP complements, and noun phrases. However, the analyses cannot account for the fact that the sentential adverb can precede the genitive subject, which we saw in (7).

### 3.1.2. Miyagawa 1993

Miyagawa (1993) proposes one of the solutions to this problem. Proposing an LF case checking mechanism, Miyagawa (1993) argues that the genitive subject raises to the Spec-DP at LF to check off its genitive case feature by D, while the nominative subject overtly moves to the Spec-Agrs and checks off its nominative case feature by Agrs. The analysis can account for the fact that a sentential adverb can precede the genitive subject, because the genitive subject overtly stays in the Spec-VP and covertly raise to the Spec-Agrs (see also Ochi 2001). His assumptions are summarized in (20).

(20) a. A genitive case feature of the subject can be checked off if there is a Spec-DP to which the subject can move at LF.  
   b. The genitive subject is overtly in the Spec-VP and covertly in the Spec-DP.  
   c. The nominative subject and the accusative/nominative object are overtly in the Spec-Agrs and the Spec-Agro, respectively.
d. An element that has an unchecked feature cannot move across an element that has the same-type unchecked feature.

Note that the scope facts which is shown in (8) follows from his analysis because, while the nominative subjects overtly and covertly stay in the Spec-Agrs, resulting in a narrow scope interpretation with respect to the head noun, the genitive subject moves from the Spec-VP to the Spec-DP at LF, resulting in ambiguous interpretations.

However, as pointed out by Watanabe (1994, 1996), Miyagawa's analysis requires a counter-cyclic operation. In (9a), repeated here as (21), for instance, he assumes that the subject must move from the Spec-VP to the Spec-Agrs before the object moves to the Spec-Agro, because otherwise the object moves across the subject in the Spec-VP which has an unchecked case feature.

(21) (=(9a)) Hanako-ga Matisu-ga sukina riyuu.
    Hanako-Nom Matisse-Nom like.at.Cpl reason
'The reason why Hanako likes the Matisse.'

However, the proposed derivation is a counter-cyclic operation.5

In the case of (9c), repeated here as (22), Miyagawa argues that the nominative object Matisu-ga 'Matisse-Nom' moves to the Spec-Agro without violating any locality conditions because he assumes Diesing's (1992) claims that the subject in an individual level predicate is base generated in the Spec-IP and binds PRO in the Spec-VP.

(22) (=(9c)) Hanako-no Matisu-ga sukina riyuu.
    Hanako-Gen Matisse-Nom like.at.Cpl reason

However, there are cases where NGC in stative sentential modifiers involve a stage level predicate, as exemplified in (23).

(23) Kyoo-ni kagit-te gakuseitati-{ga/no} issenmo syozikin-{ga/no}
    today-Dat confine-Part student.Pl-{Nom/Gen} none money-{Nom/Gen}
    nai koto-ga sensei-o nayamaseta.
    no fact-Nom teacher-Acc trouble.Caus.Pst
'The fact that, today of all days, the students have no money troubled the teacher.'

In Miyagawa's analysis, the case array in (22) is not allowed in (23), because the nominative object syozikin-ga 'money-Nom' would overtly move across the genitive subject gakuseitati-no 'students-Gen' which is in the Spec-VP and has an unchecked case feature, resulting in the minimality violation in (20d). Yet, the four case patterns are possible in (23).

Finally, note that the analysis cannot account for the fact that NGC is observed in selected-tense clauses. In the next section, we briefly review the non-nominal approaches.

3.2. Non-Nominal Approach

3.2.1. Wh-Agreement/ Subjunctive Approach

Departing from the conventional nominal approach, Watanabe (1994, 1996) proposes a novel analysis and claims that the presence of the external nominal head N/D is irrelevant to

---

5 See Watanabe (1994, 1996) for the discussion of the accusative object in NGC.
NGC. Giving an example (24), for instance, he claims that the genitive subject is allowed in a comparative clause, where no external nominal head N/D exists.\footnote{Maki and Uchibori (2008) argue against Watanabe's analysis on this point. See Maki and Uchibori (2008) for more details. See also Uchibori (2000) for the related discussions.}

\begin{quote}
John-wa [Mary-no yonda yori] takusan-no hon-o yonda.
John-Top Mary-Gen read than many-Gen book-Acc read.
'John read more books than Mary did.'
\end{quote}

\noindent (Watanabe 1996a:394)

Watanabe argues that NGC is allowed in the contexts of wh-agreement and subjunctive clauses. A summary of his assumptions are shown in (25).

\begin{quote}
\begin{enumerate}
\item The nominative case feature of the subject is checked off in the T-Agr-C system.
\item Wh-agreement is due to feature checking in the T-Agr-C system.
\item As a manifestation of wh-agreement, the subject can stay within VP.
\item Subjunctive clauses behave the same way as (25c).
\item The nominative subject is overtly in the Spec-Agrs and checks off its case feature.
\item The genitive subject is overtly in the Spec-VP and covertly moves to the Spec-Agrs and checks its case feature.
\end{enumerate}
\end{quote}

In his analysis, the non-existence of the O-No conversion and the sentential adverbial issue can be naturally captured.\footnote{Because of the space limitation, we cannot discuss how the non-nominal approach accounts for each property of NGC which we have seen in section 2. See Watanabe (1994, 1996) and Hiraiwa (2001) for details.}

The weak point of the wh-agreement/subjunctive analysis is that it requires two systems for a genitive case checking: N/D for a genitive case in a noun phrase and a T-Agr-C system for a genitive subject in NGC. An empirical problem of the analysis is that NGC is observed in a context where there is neither wh-agreement nor a subjunctive clause, which will be discussed in the next subsection. Although the analysis has problems, it should be noted that this intriguing analysis offers a new insight and sheds light on the study of NGC.

\subsection{The Attributive-Form Agreement Approach}

Based on Watanabe's insight, Hiraiwa (2001) claims that NGC is allowed in a context where a predicate takes its special inflectional form, rentai-kei 'attributive form'. Giving examples, such as in (26), he argues that NGC is allowed in a context where there is neither external nominal head N/D or wh-agreement/subjunctive clause.

\begin{quote}
last.month once call-{(Nom/Gen) be.Pst.Atr since John-from any call-Nom not.Pst
'There has been no call from John since he called me up once last month.'
\end{quote}

\noindent (Hiraiwa 2001:79)

Based on Chomsky's (2000) agreement theory, Hiraiwa argues that a DP gets the nominative case when it agrees with a Φ-feature of T, and it gets the accusative case when it agrees with a Φ-feature of v. Assuming that Japanese has a null affixal C\textsubscript{affix}, which requires the Agree relation with T-(v)-V and forms a C-T-V amalgamate, he claims that this C-T-V amalgamate corresponds to the special verbal inflectional form, rentai-kei 'attributive form'. Furthermore, he assumes that the Φ-feature of T may be 'copied/transferred' onto C\textsubscript{affix}. He
argues that if a DP Agrees with this \( \Phi \)-feature of T which is copied onto \( C_{\text{affix}} \), its gets a genitive case. Hiraiwa's assumptions are summarized as follows:

(27) a. The \( C_{\text{affix}} \)-T-V amalgamate corresponds to the verbal inflectional form \( \text{rentai-kei} \) 'attributive form', and the \( \Phi \) feature of T can be copied onto \( C_{\text{affix}} \) by this amalgamate formation (i.e., the Agree relation among \( C_{\text{affix}}, T, \) and V).

b. The \( \Phi \) feature of T licenses the nominative case and the \( \Phi \) feature which is copied onto \( C_{\text{affix}} \) licenses the genitive case.

c. Both a nominative subject and a genitive subject stay in the Spec-vP.

However, the analysis has an empirical problem. In the analysis, the attributive-form agreement of the predicate is necessary for NGC. Yet, we point out that NGC is allowed in a context where there is no attributive-form agreement, as shown in (14) and repeated here as (28).

(28) Hannin-{ga/no} tukamari-sidai, renraku-o kure.
    criminal-{Nom/Gen} capture.Cont-as.soon.as call-Acc give.Prs
    'Give me a call, as soon as the criminal is captured.'

In (28), NGC is allowed in the clause in which the suffix -sidai ‘as soon as’ follows the verb tukamari- ‘capture’ taking its continuative form of the predicate tukamari-, instead of its attributive form tukamari-. In the attributive-form approach, NGC cannot be predicted in (28).

So far, we have reviewed two major approaches to NGC. Note that none of the approaches captures Generalization 8, i.e., NGC is observed in selected-tense clauses. Note also that every approach has tried to capture the distribution of NGC by assuming a certain licensing/realization mechanism of a genitive case. In the next section, we propose a novel theory of unmarked cases, -\( \text{ga} \) and -\( \text{no} \), and argue that the proposed theory satisfactorily captures the properties of NGC.

4. Anti-licensing Theory of Unmarked Cases

4.1. Proposal

In contrast to the previous 'licensing' approaches, we argue that Japanese unmarked cases are regulated by 'anti-licensing' conditions, which state where they cannot appear, rather than by licensing conditions, which state where they can appear.8 Building on Fukui's (1986) insight and the formalization of case assignments, as shown in (19), I propose (29).

(29) a. A case feature of \( n \) cannot be realized as -\( \text{ga} \) in a [-Tense] domain.

b. A case feature of \( n \) cannot be realized as -\( \text{no} \) in a [+Tense] domain.

[-Tense] is carried by T and [-Tense] is carried by \( n \). We assume that Japanese cases are morphological cases and must be realized before they are sent to the SM interface (Bobalijk 2006). Within the phase-based model (Chomsky 2007, 2008), we claim that cases are realized when syntactic objects are Transferred to the SM interface, phase by phase, where CP, vP and nP are phases (Fukui and Zushi 2008).

Here, we adopt Marantz's (1991) case realization system which claims that case realization obeys disjunctive hierarchy, as shown in (30). We argue that unmarked cases, -\( \text{ga} \) and -\( \text{no} \), are

---

8 One may wonder why they are regulated by 'anti' licensing conditions, instead of licensing conditions. I would suggest that the answer might be derived from a diachronic fact. See 4.3 below.
realized after a lexically governed case, -ni, and a dependent case, -o, are realized (see also Aoyagi 1998 and Bobalijk 2006).

(30) case realization disjunctive hierarchy
   lexically governed case
    "dependent" case (accusative and ergative)
    unmarked case (environmental sensitive) (Marantz 1991:247)

Thus, if a case feature is not realized as a lexically governed case or a dependent case, it should be realized as an unmarked case, -ga or -no, depending on whether it is in a [+Tense] or a [-Tense] domain, as shown in (29). The heart of the analysis is that when the case feature is in a context where either condition in (29) meets, either -ga or -no can freely appear, i.e., real NGC occurs.

The proposed case marking system captures the properties of NGC as follows. In a noun phrase (31), for instance, the case features of n₁ and n₂ are realized as genitive -no, but not nominative -ga, because it is in the n₃ [-Tense] domain, as shown in (32).

(31) Taro-{Gen/*Nom} Russian-{Gen/*Nom} study
    'Taro's study of Russia'

(32) [n₃] [ [n₁ Taro n₁] [[n₂ Russian n₂] study]] n₃
    {u case} {u case} [-Tense]

In the cases of a root clause and an ordinary finite complement, where NGC is not allowed (G1), the subject that is in the Spec-vP is marked with -ga, but not -no, because the Spec-vP is in a domain of T [+Tense] at the CP phase level. From (29), a genitive case cannot be realized in a [+Tense] domain. As a result, only a nominative case appears. Then, how can we explain the realization of -ga instead of -no on the subject if the subject is externally merged at the Spec-TP and bind pro in the Spec-vP, as shown in (33)?

(33)

Assuming that a [+Tense] feature of T is copied onto C at the CP phase level, as shown in (34), we argue that the Spec-TP is in a [+Tense] domain at the CP phase level, and as a result, the subject is marked with -ga, but not -no, as illustrated in (34).

(34)

Next, let us examine the cases in relative clauses and NP complements, where NGC is allowed (G2). In our analysis, the subject that is externally merged at the Spec-CP or the Spec-NP (and binds pro in the embedded Spec-vP) is marked genitive -no because both positions are in the n [-Tense] domain at the nP phase level, as illustrated in (35). If the subject is in the Spec-vP, it is marked -ga because it is in a [+Tense] domain at the CP phase level.
Then, what about the subject that is externally merged at the Spec-TP? Following the assumption that the properties of C in relative clauses and NP complements are somewhat defective (Kinsui 1995, Hiraiwa 2001), I argue that the feature copying of T to C is inert. As a result, the Spec-TP is outside of the T [+Tense] domain, and it is not inside of the n [-Tense] domain at the CP phase level, either, as shown in (36). As a result, the Spec-TP is free from both conditions in (29). Therefore, either nominative -ga or genitive -no can freely appear in the Spec-TP (the optionality of NGC (G3)).

Note that the analysis captures why there is no O-No conversion (G4). In our analysis, a sentential adverb can precede the genitive subject (G5) because the genitive subject can appear in the Spec-TP, as shown in (36).

Our analysis also captures the scope facts (G6). As the genitive subject may appear either in the Spec-CP(and Spec-TP) or in the Spec-NP, the scope facts naturally follow; the genitive subject can optionally take a wide scope and a narrow scope with respect to the head noun. In contrast, the nominative subject appears in a [+Tense] domain at the CP phase level, which is lower than the head noun, and thereby it always takes a narrow scope.9

In the same vein, the four possible case arrays in stative sentential modifiers (G7) can also be captured, as demonstrated in (37).

As the Spec-TP is free from both conditions in (29), either nominative -ga or genitive -no can freely appear in the Spec-TP. Thus, if the subject in the outer Spec-TP is marked nominative

---

9 In the case of a relative clause, I follow Miyagawa's null operator analysis.
and the one in the inner Spec-TP is marked genitive, for instance, (21b), repeated here as (38), naturally follows.

(38)(= (21b)) Hanako-ga Matsu-no sukina riyuu
Hanako-Nom Matisse-Gen like.Cop reason

Finally, let us see NGC in a selected-tense clause (G8). On the basis of the fact that C can generally merge with either T [+past] or T [+present], I argue that a complementizer that merges only with a selected-tense T is a defective C. Take (12a), repeated here as (39), for instance. Since the feature copying of [+Tense] does not occur, the Spec-TP is outside of the T [+Tense] domain, as illustrated in (40). Note that this position is not inside of an n [-Tense] domain, either, because there is no n [-Tense].

(39) [[Hassya-no beru]-{ga/no} {natta/*naru}]-kiri, departure-Gen bell-{Nom/Gen} {ring.Pst/* ring.Prs}-since

(40)
```
def CP
  def C (kiri)
```
```
TP
  vP
  T [+Tense]
  (selected T)
```

As a result, either nominative -ga or genitive -no can appear in the Spec-TP because it is free from the conditions in (29).

So far, we have seen that our analysis gives a satisfactory account of the properties of NGC. It should be noted that our analysis can also predict that NGC is allowed in sentences that have no external nominal element, no wh-agreement/subjunctive, or no attributive-form agreement. In the next subsection, we point out the advantage of our analysis over the previous non-nominal analyses.

### 4.2. Uniformed Genitive Case Making System

We have seen that it is not the existence of a nominal element but a special property of C that plays a key role in NGC. One of the advantages of our analysis over the previous non-nominal analyses is that our proposals in (29) uniformly captures a genitive case marking in relative clauses, NP complements, and noun phrases. In contrast, the previous non-nominal approaches require two separate licensing mechanisms for genitive: one, which is in a noun phrase, is licensed by D, and the other, which is in the case of NGC, is licensed by C-T-v.

As we mentioned in fn.3, Miyagawa (2012) recently proposed a new analysis which claims that a ‘dependent tense’ (a selected-tense in our term) is responsible for a licensing of genitive case in NGC, as shown in (41).

(41) Genitive of dependent tense
The combination of weak v + dependent tense licenses genitive case in Japanese.
(Miyagawa 2012:159)

Miyagawa argues that a combination of dependent tense and a weak v, or an unaccusative/passive predicate, licenses genitive in NGC. However, I would like to point out that a sentence such as (42) that does not involve an unaccusative verb, for instance, allows NGC.
After Hanako danced, no one danced.

In Miyagawa's analysis, NGC is not allowed in (42). In addition to this empirical problem, his analysis requires two mechanisms for licensing the genitive case, in the same way as the previous non-nominal approach; one is by D and the other is by the combination in (41). Thus, we would like to suggest that our analysis is much more desirable than that of Miyagawa's.

4.3. Why Are They Regulated by 'Anti-' licensing Conditions?

Finally, we would like to discuss why Japanese unmarked cases are regulated by 'anti-' licensing conditions, which might seem somewhat counterintuitive. We suggest that the answer can be derived from a diachronic fact. In old Japanese, the nominative -ga and genitive -no were allowed in both noun phrases and attributive-form clauses, and a certain licensing element (such as a honorific element, for instance) had determined their distributions. To state it another way, -ga and -no were allowed in both a [-Tense] domain and a [+Tense] domain, i.e., a noun phrase or an attributive-form clause, respectively.

However, it has been said that this licensing element disappeared around the 16th century. Since then, an alternative element has to become the 'licenser'. We suggest that Tense has become responsible for licensing those cases and determining their distributions. As those cases had already been allowed in both a [-Tense] domain and a [+Tense] domain, the most natural way to determine their distribution was to regulate them in an 'anti' licensing ways; i.e., to state which domain either nominative -ga or genitive -no cannot appear.

5. Concluding Remarks and Remaining Issue

In this paper, we have proposed anti-realization conditions of unmarked cases within the phase theory and demonstrated that the proposed theory satisfactorily captures the properties of NGC. One of the remaining issues is the so-called transitivity restriction. Harada (1971) points out that there are some dialects that do not allow NGC if the accusative object appears in the embedded clause, as shown in (43b).

The reason why Hanako read a book yesterday.'

We do not have an account for this and leave the issue for future research.

References


