Possessive and Adjunct Multiple Nominative Constructions in Japanese

Reiko Vermeulen

Department of Phonetics and Linguistics

University College London

Gower Street

London

WC1E 6BT

U.K.

Phone: +44 (0)20 8348 5480 E-mail: r.vermeulen@ucl.ac.uk
ABSTRACT. This paper focuses on two types of multiple nominative constructions in Japanese. In addition to the subject, the nominative particle –ga can mark a possessor of the subject or an adjunct. A prevalent view in the literature is that multiple nominative phrases occupy multiple specifier or adjoined positions in the projection of a tensed head (Heycock (1993); Ura (1996); among others). I argue, however, that such a head can license exactly one nominative phrase and that licensing of multiple nominative phrases must hence be mediated by the creation of proxy categories (cf. Nash & Rouveret (1997)). The distribution of –ga is further regulated by an interpretational rule that treats it as a focus particle in sentence-initial position. These assumptions account for a range of observations, some of which are new. They also explain two properties that are difficult to capture in the standard analysis: (i) the difference in the number of nominative phrases permitted in the two types of constructions; and (ii) the fixed order of ga-phrases.

1. Introduction
1.1. Nominative phrases in Japanese
Japanese permits more than one nominative phrase in a single clause. Examples of such constructions are shown below. (1a) is a possessive multiple nominative construction (modified from Takahashi (1994, 395)). (1b) is an adjunct multiple nominative construction (Tateishi (1991, 30)).

(1) a. Possessive Multiple Nominative Construction
Usagi-ga mimi-ga naga-i.
rabbit-Nom ear-Nom long-Pres
'It is rabbits which have long ears.'

b. Adjunct Multiple Nominative Construction
Ano ziko-ga takusan-no nihonzin-ga sinda.
that accident-Nom many-Gen Japanese-Nom died.
'It was in that accident that many Japanese died.'

In each of the above sentences, two constituents are marked by the nominative marker –ga and the second nominative phrase seems to serve as the subject of the predicate. In (1a), it is the
'ears' that are long, not the 'rabbits'. Similarly, in (1b), it is not the case that 'that accident' died, it is 'many Japanese'. Despite this superficial similarity, there are some significant differences between the two types of constructions.

Firstly, as the English translations indicate, the non-subject nominative phrase plays a different role in each sentence: a possessive modifier of the subject in (1a) and an adjunct in (1b).

Secondly, while an indefinitely large number of possessive nominative phrases is permitted, only one adjunct nominative phrase is allowed, as shown below.

(2)  

a. **Possessive Multiple Nominative Constructions**

Kitahankyuu-ga usagi-ga mimi-ga naga-i.

N. Hemisphere-Nom rabbit-Nom ear-Nom long-Pres

'It is the Northern Hemisphere where rabbits have long ears.'

b. **Adjunct Multiple Nominative Constructions**

*Umi-ga ano ziko-ga takusan-no nihonzin-ga sinda.

sea-Nom that accident-Nom many-Gen Japanese-Nom died.

'It was in the sea that many Japanese died in that accident.'

However, in both types of constructions the sentence-initial *ga*-phrase must be obligatorily focused (Kuno (1973)). In the sentences in (1), *usagi-ga* 'rabbit-Nom' and *ano ziko-ga* 'that accident-Nom' must be focused, while the second *ga*-phrases are not obligatorily interpreted as such. Similarly, in (2a), *kitahankyuu-ga* 'N. Hemisphere-Nom' must be focused, while the other two *ga*-phrases need not be. This interpretation is implied by the use of cleft constructions in the English translations.

Thus, the nominative marker *-ga* seems to have multiple functions. It marks the subject, a possessor of the subject and an adjunct, and it imposes a focused interpretation on a sentence-initial constituent when attached to it. This distribution of Japanese nominative case is problematic for a standard theory of Case, where nominative case is treated as the overt realisation of Case assigned under government or checked in a specifier-head configuration by a particular functional head (Chomsky (1995)). Firstly, non-arguments such as a possessor of a subject and an adjunct must be allowed to be governed by or enter into a specifier-head relation with a tensed I or AgrS. Such modification to Case theory seems undesirable.

Secondly, a tensed I or AgrS must be able to project multiple specifiers or allow multiple adjunction, and license nominative case more than once. Moreover, the same mechanism must correctly predict the number of nominative phrases permitted in each type of constructions.
It is unclear how such a counting system can be accommodated in syntax. Obviously, an alternative analysis is required for the distribution of Japanese nominative case, which also explains the similarities and the differences between the two types of constructions. It is important to note here, however, that in this paper, I am concerned only with the configuration in which nominative case is licensed, not the precise manner of licensing itself. I shall remain agnostic as to whether case licensing takes the form of feature-checking or assignment by a head.

In this paper, I claim that an alternative analysis can indeed be obtained if we assume that a tensed predicate licenses exactly one nominative phrase in a single licensing domain. Licensing of multiple nominative phrases is mediated by movement of the verb to a proxy category in the sense of Nash & Rouveret (1997). The obligatory focus of the sentence-initial ga-phrase is captured in terms of its licensing configuration. The paper is organised as follows. The rest of this section discusses some theoretical assumptions made in this paper. In section 2, I propose an analysis of possessive multiple nominative constructions in terms of predication, mediated by a null operator. There, I demonstrate that a ga-phrase has a subject-predicate relation with the clause to its right. Section 3 provides an account of adjunct multiple nominative constructions in terms of focus. I argue that the occurrence of the particle –ga on an adjunct is parasitic on a generalisation which is made about focused ga-phrases. A typological question of why similar constructions are not found in many other languages, including English, will not be addressed in the main part of the paper, but some speculations will be offered along with other concluding remarks in section 4.

1.2. Theoretical assumptions:

1.2.1. What licenses nominative case?

Takezawa (1987), among many others, argues that a tensed predicate licenses nominative case in Japanese. A nominative phrase, therefore, should not appear in a non-finite clause. The ungrammaticality of the following examples illustrate that this is indeed the case in the two types of multiple nominative constructions. In the possessive multiple nominative construction example in (3a), the matrix predicate omotta 'thought' takes a small-clause like complement. In the adjunct multiple nominative construction example in (3b), the causative morpheme -sase takes a non-finite complement clause.
1.2.2. How is nominative case licensed?

Many linguists (Fukui (1986); Heycock & Lee (1989); Heycock (1993); Namai (1997); Saito (1982); Takahashi (1994, 1996); Takezawa (1987); Tateishi (1991); Ura (1994, 1996); among others) have argued that multiple nominative phrases are licensed in multiple specifier positions of or adjoined positions to one particular projection. However, as noted by Neeleman & Weerman (1999), considering that no double dative or accusative constructions exist in Japanese, it seems reasonable to assume that this language obeys the ban on assignment of identical cases by a single predicate. Thus, when there are two nominative phrases, there should also be two separate licensing domains for case. I argue, following Nash & Rouveret (1997) and Neeleman & Weerman (1999), that an additional licensing domain can be obtained through creating a proxy category. A proxy category is a feature-less functional head which inherits features from a contentful head by movement of the latter to the former. The sole motivation for its creation is to provide an additional licensing domain for an unchecked feature. It is, therefore, created only in the course of a syntactic derivation.

Consequently, when there are two nominative phrases, there must also be two copies of a tensed head. Accordingly, a proxy category is created to which the verb moves. Assuming the copy theory of movement, it is likely that the verb's <+tense> feature is also copied. The moved verb then projects a VP. One of the nominative phrases moves to a position in this VP to have its case licensed. I propose the following principle for Japanese.

\(\text{(4) Nominative case is licensed if it is dominated by a node projected from a tensed head.}\)
This operation results in creating a structure shown in (5). Case on NP1 is licensed in a separate domain from that on NP2. I shall indicate proxy categories and phrases projected from them in italics throughout the paper.

(5)  
\[
\begin{align*}
&\text{VP} \\
&\text{NP1-Nom} \quad \text{VP} \\
&\quad \text{VP} \quad V \langle+ \text{tense}\rangle \\
&\quad \quad t_i \quad \text{VP} \\
&\quad \quad \quad \text{NP2-Nom} \quad t_v \langle+ \text{tense}\rangle
\end{align*}
\]

In the above structure, the subject is base-generated in an adjoined position to VP (Manzini (1993); Koopman & Sportiche (1991)). This implies that there is no one-to-one correspondence between a structural position and a grammatical function. However, I am not making any claims about a theory of phrase structure here. This assumption is made merely for the sake of concreteness. There may be other ways of achieving the same effect. What is crucial here is that multiple licensing domains may be obtained through the creation of proxy categories.

1.2.3. The marker –ga

Recall that in both types of constructions, the sentence-initial ga-phrase must be focused (Kuno (1973)). According to the structure in (5), the obligatorily focused constituent is the one which moves for case. I would like to tentatively assume a correlation between this movement of a ga-phrase and the focus imposed on it, and propose the following descriptive generalisation.

(6) Focus Generalisation

When the particle –ga is licensed in the projection of the highest derived tensed predicate, the constituent to which it is attached is focused.

The above generalisation captures that the obligatory focus of a sentence-initial ga-phrase is a property unique to multiple nominative constructions. A sentence-initial ga-phrase need not be focused, if it were the only nominative phrase in the clause, as the particle on this phrase would be licensed in-situ by the verb which is also in its base-position. In the following sentences, John-ga 'John-Nom' is not obligatorily focused.
In sum, I assume that a tensed predicate licenses nominative case no more than once in a single domain in Japanese and that the creation of proxy categories provides multiple licensing domains. Moreover, the obligatory focus of the sentence-initial *ga*-phrase is explained in terms of the configuration in which *-ga* is licensed. It is important to note that these three assumptions remain constant and that the differences between the two types of constructions fall out from independent properties of each type.

2. Possessive Multiple Nominative Constructions

2.1. Apparent CED violation

Possessive nominative phrases may alternatively bear genitive case (Kuno (1973)):

(8) Kitahankyuu-ga/no usagi-ga/no mimi-ga naga-i.

N. Hemisphere-Nom/Gen rabbit-Nom/Gen ear-Nom long-Pres

'Rabbits in the Northern Hemisphere have long ears.'

The availability of this case alternation has lead some linguists (Tateishi (1988, 1991); Fukuda (1991); Ura (1996); among others) to analyse possessive multiple nominative constructions in terms of Genitive Raising. A possessive NP is base-generated in a specifier position of the immediately following NP projection. When it appears in the genitive, it remains unmoved, while when it bears nominative case, it moves and adjoins to IP/AgrSP, where nominative case is licensed. This is shown below.\(^5\)

(9) \[
[\text{IP/AgrSP} \left[ \text{NP}, \text{Gen}, \text{NP} \right] \text{Nom} \left[ \text{IP/AgrSP} \left[ \text{NP}, \text{Nom} \right] \text{I/AgrS} \right]]
\]

This approach captures neatly the possessive relation between two adjacent NPs. However, it must also assume that I/AgrS may license nominative case more than once. As argued above, it seems undesirable to have to claim that only nominative case disobeys the ban on identical cases.

Furthermore, there are two problems with assuming movement of a possessive nominative
phrase. Firstly, movement from a case position to another case position is usually prohibited. Here, it must be stipulated that nominative case overrides genitive case. Such a stipulation is unattractive, since nominative/genitive case alternation is permitted only in limited circumstances.\(^6\) Besides, cross-linguistically, nominative case is usually overruled by other cases (Burridge (1993)). Secondly, the movement in question violates the CED. Another stipulation is thus required to permit this kind of movement.\(^7\)

However, this apparent violation of the CED by movement of an NP is also found in topicalisation, relativisation and tough constructions. Interestingly a resumptive pronoun may appear in the place of a trace, as indicated by pronouns in brackets in the following examples.

(10) **Topicalisation** (modified from Kuno (1973, 249))

\[
\text{sono sinsi-wa } [\text{NP } \text{i} [\text{kare}-ga \ \epsilon_{i} \ kitei-ta] \ \text{yoohuku-ga}] \ \text{yogoretei-ta}. \\
\text{that gentleman-Top (he-Nom) wearing-Past suit-Nom dirty-Past}
\]

'Speaking of that gentleman, the suit (he) was wearing was dirty.'

(11) **Relativisation** (modified from Kuno (1973, 249))

\[
[\text{NP } \text{i} [\text{kare}-ga \ \epsilon_{i} \ kitei-ta] \ \text{yoohuku-ga}] \text{yogoretei-ta} \text{sono sinsi}. \\
\text{(he-Nom) wearing-Past suit-Nom dirty-Past that gentleman}
\]

'Lit: A gentleman, who the suit (he) was wearing was dirty.'

(12) **Tough construction** (modified from Takezawa (1987, 211))

\[
[\text{NP } \text{i} [\text{sore}-o \ \epsilon_{i} \ okasi-ta] \ \text{ningen-o}] \text{sagasi-yasu-i}. \\
\text{(it-Acc) commit-Past man-Acc search-easy-Pres}
\]

'This kind of crime is easy for the police to search a man who committed (it).'

Saito (1985) argues that no movement of an NP is involved in deriving topicalisation and relativisation constructions, and that the traces of the NPs are pros. Takezawa (1987) adopts this approach to tough constructions. Despite the lack of overt agreement on verbs, Japanese is a radical pro-drop language (Perlmutter (1972)). Provided that the content is recoverable from the context, an argument need not be overtly expressed, as illustrated by the examples in (13) (Saito (1985, 293)).
a. e moo dekaketa yoo-desu.
   'It seems that he/she/they went out already.'

b. e [John-ga e motte kuru to] omoimasu
   'I think that John will bring it/them.'

Since possessive multiple nominative constructions also allow an apparent violation of the CED, the traces of the moved NPs in (9) are perhaps pros. This predicts that it should be possible to spell them out, which is true. ((15) is modified from Tateishi (1991, 270))

(14) John-ga kinoo gakkoo-de (kare-no) imooto-ga
     John-Nom yesterday school-at he-Gen younger.sister-Nom
tomodati-ga happyoo-o sita.
friend-Nom presentation-Acc did.
'It is John whose (his) sister's friend gave a presentation at school yesterday'.

(15) John-ga kyonen-no natu-ni (kare-no) titioya-ga nyuuin-sita.
     John-Nom last.year-Gen summer-in he-Gen father-Nom hospitalised
'It is John whose (his) father was hospitalised summer last year.'

(16) Kitahankyuu,ga kyonen-no tyoosa-niyoruto
     N. Hemisphere-Nom last.year-Gen survey-according.to
     (soko-no) usagi-ga mimi-ga naga-i.
     there-Gen rabbit-Nom ear-Nom long-Pres
'According to last year's survey, it is the Northern Hemisphere where rabbits (there) have long ears.'

The above data suggest that in possessive multiple nominative constructions too, no movement of NP is involved and that what appears to be a trace is a pro, similarly to Saito's and Takezawa's approaches to topicalisation, relativisation, and tough constructions. Thus, more specifically, it seems that a possessive nominative NP is associated with a pro in the specifier position of the immediately following NP. This approach would enable us to achieve the same effect as the Genitive Raising approach in explaining the possessive relation between two adjacent nominative phrases, but without having to account for the apparent violation of the
CED. However, one crucial question is: how are the possessive NP-ga's licensed semantically and syntactically? This is a question to which I turn in the next subsection.

### 2.2. Licensing of possessive nominative phrases

One insight that emerges from the literature on possessive multiple nominative constructions is that a possessive nominative NP is licensed by predication (Fukuda (1991); Heycock (1993); Heycock & Lee (1989); Namai (1997)). However, the question of how this predication relation is achieved is not satisfactorily addressed. For example, Fukuda (1991) argues that it is achieved by an 'aboutness' relation, a notion adopted from Saito's (1985) and Takezawa's (1987) analyses of topicalisation, relativisation and tough constructions. Fukuda, however, does not elaborate on how the latter relation is established. Heycock (1993) and Namai (1997) claim that an 'aboutness' relation is a semantic correlate of syntactic predication and that the syntactic configuration of mutual m-command alone establishes the predication relation, without θ-role assignment. I believe, however, that a subject-predicate relation is a semantic notion which ought to be somehow represented in syntax. Thus, it seems rather strange to claim that a clause can be predicated of a subject without assigning it a θ-role.

Perhaps, the relation in question can best be understood as a relation of semantic predication, as in English tough constructions. In a tough sentence such as *John is easy to please*, the subject *John* is interpreted as a complement of *please*. The subject is usually analysed as being licensed by predication mediated by null operator movement (Browning (1987); Chomsky (1977, 1981)). A null operator promotes the internal θ-role of the infinitival to the clause-external NP by moving from the complement position to the specifier position of the infinitival clause, and from then perhaps to a specifier position of AP, as shown in (17).

8

(17) John is [Ø{i} [AP easy t, to please t]]

This process turns the AP *easy to please* into a predicate with the NP *John* as its subject. Consequently, *John*, despite being the subject, is interpreted as the complement of the embedded verb, because it is associated with a null operator which has moved from the complement position of the infinitival.

There are two pieces of evidence suggesting predicate-hood of the AP *easy to please*. Firstly, in a coordinate construction, both conjuncts must be of the same semantic category. The
following example shows that *easy to please* is a predicate, as it can be conjoined with another predicate.

(18) I consider John [\_\_\_\_ happy] and [\_\_\_\_ easy to please].

Secondly, predicates can usually be modified by degree adverbs such as *very* and *more* (Bresnan (1973); Jackendoff (1977); among others).

(19) a. He is *very* [famous]
   b. He is *more* [famous] than I thought.

The AP *easy to please* can also be modified by a degree adverb:

(20) a. John is *very* [easy to please]
   b. John is *more* [difficult to please] than Bill.

Since a possessive nominative NP is also associated with a position in the clause to its right, it seems reasonable to assume, along with Fukuda (1991), Heycock (1993) and Namai (1997), that it is licensed by predication. However, I claim that this predication is mediated by a null operator similarly to the case of English tough constructions. A null operator binds a pro, which has the effect that an NP-internal θ-role (POSSESSOR role) is promoted and assigned to the immediately preceding possessive nominative phrase. See the appendix for how exactly θ-roles are promoted. I propose the structure in (21) on the following page for the possessive multiple nominative construction in (2a).

Possessive nominative phrases are each base-generated in an adjoined position to a VP projected by the verb which has moved to a proxy category. Nominative case on each NP is, therefore, licensed in a separate domain. Recall that a single predicate cannot license more than one occurrence of the same case in one domain (section 1.2.3). Nominative case on NP3 is licensed, as it is dominated by a VP node projected by the verb with <+tense> feature, in accordance with the principle in (4). Similarly, nominative case on NP2 and NP1 are each dominated by a VP node projected by a proxy category which a copy of the tensed verb occupies.
In each proxy category, a possessive nominative phrase is associated with a null operator, which, in turn, binds the pro in the immediately following NP projection. This binding relation between the null operator and the pro has the effect of θ-role promotion. The promoted possessor θ-role is assigned to the possessive nominative NP, explaining the possessive relation between two adjacent nominative NPs. Thus, NP1-ga, *Kitahankyuu-ga* 'the Northern Hemisphere-Nom', is indirectly associated with the pro in SpecNP2. Similarly, NP2-ga, containing both the pro associated with NP1 and NP2, *usagi* 'rabbits', is associated with the pro in SpecNP3.

The structure in (21) retains the attractive aspect of the Genitive Raising approach, namely that it represents the option between two forms of realisation available for a possessive phrase (cf.(9)). A possessive NP may appear either in a position adjoined to a newly created VP or within an NP projection. A possessive nominative NP occupies the former as in (21), while a possessive genitive NP occupies the latter, as illustrated in (22).

(22) \[
\begin{align*}
&\text{VP2} \quad \text{NP2} \quad \text{NP1-no NP2}-\text{ga} \\
&\quad \text{VP2} \quad \emptyset \\
&\quad \text{VP3} \quad \text{NP3} \quad \text{pro} \quad \text{NP3}-\text{ga} \\
&\quad \text{VP} \quad \text{t}_v<+\text{tense}> \\
&\quad \text{VP} \quad \text{t}_v<+\text{tense}>
\end{align*}
\]

However, unlike in the Genitive Raising approach, movement of a possessive NP from a specifier position of an NP projection is not involved in deriving a possessive multiple nominative construction. Rather, as argued above, a possessive nominative phrase is indirectly associated with a pro in the specifier position of the immediately following NP. Thus, the
problems of accounting for the apparent violation of the CED and for genitive case being overridden by nominative case do not arise.

The proposed analysis accounts for the various properties of possessive multiple nominative constructions described so far. Firstly, as already noted, the operation of θ-role promotion explains the possessive relation between two adjacent NPs. A possessive NP -ga does indirectly receive a POSSESSOR θ-role from the following NP. In analyses, where all possessive nominative phrases are assumed to be base-generated in multiple specifier positions of or multiple adjoined positions to S/IP/VP (Saito (1982); Fukui (1986); Heycock (1993); Heycock & Lee (1989); Namai (1997)), the possessive relation between the NPs would have to be seen as a sheer coincidence. It is clearly more desirable to be able to capture this generalisation.

Secondly, the predication relation between a possessive -ga-phrase and the clause to its right can be established in a standard way, i.e. by θ-role assignment, without having to resort to more unusual notions such as 'aboutness' (Fukuda (1991)) and 'purely syntactic predication' (Heycock (1993); Namai (1997)).

Thirdly, creating a proxy category is potentially a recursive operation. This explains the possible occurrence of an indefinite number of possessive nominative phrases, without claiming that nominative case is an exception to the general ban on identical cases.

Finally, the structure in (21) together with the focus generalisation captures correctly the obligatory focus of the sentence-initial possessive nominative phrase. The focus generalisation is repeated here.

(23) Focus Generalisation

When the particle -ga is licensed in the projection of the highest derived tensed predicate, the constituent to which it is attached is focused.

The first possessive NP -ga, kitahankyuu-ga 'N.Hemisphere-Nom', in the tree in (21) is focused, since its -ga is licensed in the projection of the highest derived tensed predicate. This is illustrated by the following example, repeated from (2a).

(24) [Kitahankyuu]-ga usagi-ga mimi-ga naga-i.
    N. Hemisphere-Nom rabbit-Nom ear-Nom long-Pres
    [+ focus]

'It is the Northern Hemisphere where rabbits have long ears.'
However, when it bears genitive case, *kitahankyuu-no usagi-ga* 'N.Hemisphere-Gen rabbit-Nom' should be focused, since this is now the *ga*-phrase which has its *ga* licensed in the configuration described in the generalisation. (25) shows that this is indeed true. Recall that a possessive genitive phrase occupies a position within the following NP.

\[(25) \quad \text{[Kitahankyuu-no usagi]-ga mimi-ga naga-i.} \]

\[
\text{N. Hemisphere-Gen rabbit-Nom ear-Nom long-Pres} \\
\quad [+ \text{focus}] \\
\]

The focus generalisation captures furthermore that no constituent need be focused, when both possessive phrases are realised with genitive case. This is because there is now only one nominative case to be licensed and hence, the verb remains in-situ, i.e. does not occupy a derived position. This is illustrated below.

\[(26) \quad \text{[Kitahankyuu-no usagi-no mimi]-ganaga-i.} \]

\[
\text{N. Hemisphere-Gen rabbit-Gen ear-Nom long-Pres} \\
\quad [+ \pm \text{focus}] \\
\]

There is one significant consequence to this approach, however. As mentioned above, $\theta$-role promotion is a process of predicate formation. In order to pursue the idea that this is indeed how possessive nominatives are licensed, it is necessary to show that they share syntactic properties with 'normal' subjects. In the following two subsections, I shall provide some pieces of evidence suggesting that a possessive nominative phrase does have subject-like properties and that the clause to its right does behave like a predicate.

2.3. Subject-like properties of the possessive NP-ga's

It has been reported by several linguists (Fukuda (1991); Heycock (1993); Takahashi (1994, 1996); Tateishi (1991); among others) that a possessive nominative NP displays various subject-like properties. Here, I provide four pieces of evidence suggesting subjecthood of a possessive NP-*ga*. It should be noted at the outset, however, that subjecthood tests in Japanese are not entirely reliable. Other constituents sometimes do show properties associated with subjects. Nevertheless, the crucial point is that subjects generally display these properties. Thus, if a possessive *ga*-phrase were to be identified as the subject of the clause to its right, it should display these properties.
Firstly, in an ECM/control construction, the leftmost possessive NP-\textit{ga}, when embedded, may alternatively appear with accusative case (Heycock (1993); Takahashi (1994)). This property is generally associated with a subject.\footnote{10}

\begin{equation}
\text{(27) wareware-wa} \quad \text{kitahankyu-ga/o usagi-ga mimi-ga} \\
\quad \text{we-Top N.Hemisphere-Nom/Acc rabbit-Nom ear-Nom} \\
\quad \text{naga-i]-to omoi-gati-daga....} \\
\quad \text{long-Pres-Comp think-have.tendency-but...} \\
\quad \text{'We have a tendency to think that it is the Northern Hemisphere where rabbits have long ears, but...'}
\end{equation}

Secondly, a possessive nominative phrase should be able to bind the subject-oriented reflexive \textit{zibun}. This prediction is borne out (Fukuda (1991); Heycock (1993); Kuno (1973); Takahashi (1996); Ura (1996); among others).\footnote{11} ((28b) is modified from Tateishi (1991, 270))

\begin{equation}
\begin{align*}
\text{(28) a. } & \text{John}-\text{ga imooto}-\text{ga tomodati}-\text{ga zibun-no}_{i/j/k} \text{ gakkoo-de} \\
& \quad \text{John-Nom younger.sister-Nom friend-Nom self-Gen school-at} \\
& \quad \text{happyoo-o sita. presentation-Acc did.} \\
& \quad \text{'John’s younger sister’s friend gave a presentation in self’s school.'} \\
\text{b. } & \text{Taroo}-\text{ga titioya}-\text{ga otooto}-\text{ga [zibun}_{i/j/k}-\text{de} \\
& \quad \text{Taroo-Nom father-Nom younger.brother-Nom self-by} \\
& \quad \text{hatumeesita kusuri-ga gen'in-de nyuuinsita (koto).} \\
& \quad \text{discovered medicine-Nom cause-by hospitalised (fact) } \\
& \quad \text{'It was Taroo whose father’s younger brother was hospitalised due to a medicine discovered by himself.'}
\end{align*}
\end{equation}

Thirdly, an antecedent of PRO in a \textit{nagara}-clause 'while'-clause must be the closest c-commanding subject (Perlmutter (1984); Daiko Takahashi (1996); Ura (2000)). The following examples show that a possessive NP-\textit{ga} can control PRO.
(29) a. John-
[(zibun-
[kodomotati-ga
minna se-ga
John-Nom self-Gen children-Nom all height-Nom
hiku-i]-to
nageitei-n agara
short-Pres-Comp lamenting-while daughter-Nom actually
kekko se-ga
quite height-Nom high-Pres
'While PRO, lamenting that (his) children are small, it is John, whose daughter is actually quite tall.'

b. usagi-
[ninzin-busoku-de komattei-nagara
rabbit-Nom carrots-shortage-by suffering-while ears-Nom long-Pres
'While PRO, suffering from a shortage of carrots, it is rabbits, who have long ears.'
(context: in a wonderland, where there is a direct relationship between an animal eating much of its typical food and its having extra growth of a part of the body.)

Finally, when a speaker has respect for the subject which refers to a person, subject honorification is triggered on the predicate which selects it (Harada (1976)). When a possessive NP-\text{\textit{ga}} is a person for whom the speaker has respect and the non-possessive NP-\text{\textit{ga}} is inanimate, subject honorification is triggered on the predicate (Takahashi (1994, 1996); among others), as illustrated by the following example (Takahashi (1994, 398)).

Yamaoka-viscount-Nom villa-Nom splendour-SH-Cop
'It is Viscount Yamaoka whose villa is splendid.'

Thus, considering that a possessive NP-\text{\textit{ga}} displays the above four properties associated with a subject, it seems reasonable to claim that it has a subject status.

2.4. Predicate-like properties of the clause to the right of a possessive NP-\text{\textit{ga}}
Evidence for predicate-hood of the clause in question comes from the two predicate-hood tests applied to tough constructions in section 2.2. Firstly, recall that in a coordinate construction, both conjuncts must be of the same semantic category. A clause already containing a nominative NP can be conjoined with another predicate which contains no nominative NP.
Predicate

(31)  usagi-ga  [husahusa-site-i]-te  [mimi-ga  naga-i]
    rabbit-Nom  furry-be-and  ear-Nom  long-Pres
'It is rabbits which are furry and have long ears.'

The second clause is interpreted as referring to the clause-external NP. The above example suggests strongly that the second conjunct is a predicate with the left-most NP-\textit{ga} as its subject.

At first sight, (31) may seem to be a case of left-dislocation, where the clause-external NP-\textit{ga} is base-generated in an adjoined position and A' binds a pro in each conjunct as in (32). Note that (31) cannot be an instance of across-the-board extraction, since movement of \textit{usagi-ga} 'rabbits-Nom' out of the second conjunct would violate the CED, as in the Genitive Raising approach.

(32)  usagi-ga  [\textit{VP} pro  husahusa-site-i]-te  [\textit{VP} [pro  mimi]-ga  naga-i]
    rabbit-Nom  furry-be-and  ear-Nom  long-Pres

However, the analysis in (32) is unlikely to be true. A quantifier such as \textit{every} cannot usually appear in a dislocated position, yet \textit{subete-no usagi-ga} 'every rabbit-Nom' may appear in this position:

(33)  subete-no  usagi-ga  [husahusa-site-i]-te  [mimi-ga  naga-i]
    all-Gen  rabbit-Nom  furry-be-and  ear-Nom  long-Pres
    'All rabbits are furry and have long ears.'

The second test involves modification of the predicate by a degree adverb. The examples in (34) show that both conjuncts are predicates, as they can be modified by \textit{totemo} 'very'.

(34)  a.  usagi-ga  totemo  [husahusa-site-iru]
    rabbit-Nom  very  furry-do-Pres
    'It is rabbits which are very furry.'

  b.  usagi-ga  totemo  [mimi-ga  naga-i]
    rabbit-Nom  very  ear-Nom  long-Pres
    'It is rabbits which have very long ears.'
These facts, along with the evidence from the subjecthood tests, demonstrate that a possessive nominative NP and the clause to its right are in a subject-predicate relation.

2.5. Further predictions

The proposed account inherits some correct predictions made by the Genitive Raising and base-generation approaches. Firstly, recall that in the structure in (21), like in the other two approaches, a possessive nominative phrase occupies an adjoined position to a maximal projection and a possessive genitive phrase is within an NP. It is, thus, predicted that an adverb should be able to follow a possessive nominative NP, but not a possessive genitive NP. An adverb may adjoin to a VP, but not to a position within an NP. As observed by Fukuda (1991), Heycock (1993) and Takahashi (1996), this prediction is borne out.

(35) kono tyoosa-ni-yoruto,     kitahankyyuu-ga (kyonen)
     this research-according.to       N. Hemisphere-Nom last.year
     usagi-no (*kyonen)  mimi-ga nagakatta.
     rabbits-Gen last.year ears-Nom long-Past

'According to this research, it was the Northern Hemisphere, where rabbits had long ears last year.'

Moreover, Fukuda (1991, 34) claims that possessive multiple nominative constructions sound more natural with a short break after an NP-ga, but not after an NP-no, as demonstrated in (36). # indicates a break.

(36) Kitahankyyuu-ga  #  usagi-no (*#) mimi-ga naga-i.
     N. Hemisphere-Nom rabbit-Gen ear-Nom long-Pres

'It is the Northern Hemisphere where rabbits have long ears.'

Secondly, the Genitive Raising approach predicts that the word order among NP-ga's cannot be changed, since the moved possessive nominative NP must be able to c-command its trace in the immediately following NP. The structure in (21) makes the same prediction, because predication requires c-command and each nominative phrase is the subject of the clause to its right. It must, therefore, precede the NP which it is the possessor of. The following example shows that this is indeed true. ((37) is slightly modified from Takahashi (1994, 399))
(37) *usagi-ga kitahankyuu-ga mimi-ga naga-i.
rabbit-Nom N. Hemisphere-Nom ear-Nom long-Pres
'(intended) rabbits in the Northern Hemisphere have long ears.'

By contrast, the data such as (37) is problematic for the base-generation approach. Since possessive nominative NPs are base-generated in multiple specifier or adjoined positions and are not related to a position within the following NP, their correct ordering is not predicted. It is particularly perplexing considering the general free word order in Japanese.

The proposed analysis, thus, makes the same two correct predictions as the Genitive Raising approach. However, the former does not inherit the problems that the latter faces. Since no movement of possessive NPs is involved, there is no violation of the CED. The apparent violation of the condition is explained by the association of a possessive nominative NP with a pro in the specifier position of the immediately following NP. The association is mediated by a null operator. Moreover, it is not necessary to assume that nominative case is an exception to the ban on assignment of identical cases and that nominative case may sometimes override genitive case.

In sum, the proposed analysis accounts for the following properties of possessive multiple nominative constructions:

(38) (i) the possessive relation between two adjacent nominative NPs;
(ii) the obligatory focus of the sentence-initial possessive nominative NP;
(iii) the subject-predicate relation between a possessive nominative NP and the clause to its right;
(iv) the occurrence of an indefinite number of possessive nominative NPs;
(v) the possibility of an adverb appearing after a possessive nominative NP, but not after a possessive genitive NP;
(vi) the strict word order among possessive NPs.

The Genitive Raising approach and the base-generation approach are also able to account for some of the above properties. However, the proposed analysis does not face the problems which the two approaches do.
3. Adjunct Multiple Nominative Constructions

3.1. Previous analyses

Recall that, unlike possessive multiple nominative constructions, the maximum number of NP-
\textit{ga}'s permitted in an adjunct multiple nominative construction is two. I repeat here the example
of the latter type of constructions from (1b).

\begin{align*}
(39) \quad & \text{Ano ziko-ga} \quad \text{takusan-no} \quad \text{nihonzin-ga} \quad \text{sinda.} \\
& \text{that accident-Nom} \quad \text{many-Gen} \quad \text{Japanese-Nom} \quad \text{died.}
\end{align*}

'It was in that accident that many Japanese died.'

To my knowledge, only Tateishi (1991) and Takahashi (1994) have analysed adjunct
multiple nominative constructions as a distinct class of multiple nominative constructions.\textsuperscript{13} They both argue for two positions where a constituent may be nominative-marked in Japanese:
SpecIP and SpecAgrP positions, and SpecIP and SpecVP positions,\textsuperscript{14} respectively. The former
argues that the adjunct is base-generated in SpecIP, while the latter argues that it moves to
SpecIP. However, despite being able to account for the restriction on the number of nominative
phrases, it seems undesirable to claim that there are two positions for nominative-marking which
are occupied simultaneously only in adjunct multiple nominative constructions. This is
particularly unattractive, given that a clause may contain more than two possessive nominative
phrases. Furthermore, Tateishi (1991) and Takahashi (1994) both adopt the Genitive Raising
approach to possessive multiple nominative constructions, where a tensed head may license
nominative case more than once within its own projection. Thus, as pointed out by Takahashi
(1996), it is in fact unclear how the number of nominative phrases in adjunct multiple
nominative constructions can be restricted to two. Instead, I propose an account of adjunct
multiple nominative constructions in terms of focus. I claim that the adjunct \textit{ga}-phrase has the
form of PP-\textit{ga} and that \textit{–ga} on it functions as a focus marker in the sense that it forces the PP to
move to a position described in the focus generalisation in (6).

3.2 the adjunct \textit{ga}-phrase is PP-\textit{ga}

Similarly to a possessive phrase, the adjunct can be realised in two forms: either in the
nominative or followed by the postposition \textit{–de}, in which case, it need not be focused and may
follow the subject NP-\textit{ga} as shown in (40b) (modified from Tateishi (1991, 30)).\textsuperscript{15}
(40) a. Ano ziko-de/ga takusan-no nihonzin-ga sinda.
that accident-by/Nom many-Gen Japanese-Nom died.
'It was in that accident that many Japanese died.'
b. Takusan-no nihonzin-ga ano ziko-de/*ga sinda.
many-Gen Japanese-Nom that accident-by/Nom died.

Interestingly, –ga may follow –de, only if another element such as dake 'only' intervenes, as illustrated below. It seems that –de must be deleted, if immediately followed by –ga.\(^{16,17}\)

(41) ano ziko-de-*dake)-ga takusan-no nihonzin-ga sinda.
that accident-in-only-Nom many-Gen Japanese-Nom died
'It was only in that accident that many Japanese died.'

Given this possibility of spelling out the postposition –de before the marker –ga, it seems reasonable to assume that the adjunct ga-phrase is not really an NP followed by –ga, but rather a PP followed by –ga.

This point is further supported by an oft-employed diagnostic for determining whether a given particle is a postposition or a case marker. An NP followed by a case marker allows a floating quantifier, while an NP followed by a postposition disallows it (Miyagawa (1989)). (42) demonstrates that –de is indeed a postposition and that –ga here is not simply a nominative case marker, since no floating quantifier is permitted.

(42) *Kotosi-wa ano ziko-de/ga 2tu takusan-no nihonzin-ga sinda.
this year-Top that accident-by/Nom 2-Cl many-Gen Japanese-Nom died.
'This year, it was in those two accidents that many Japanese died.'

The data in (41) and (42) suggest strongly that the adjunct ga-phrase is a PP followed by –ga. I shall, therefore, henceforth assume that the adjunct in adjunct multiple nominative constructions is a PP.

Note that a possessive nominative phrase behaves differently from an adjunct ga-phrase. The genitive marker –no cannot be realised before the nominative marker –ga, even if elements such as dake 'only' intervened, as demonstrated in (43)
Moreover, (44) illustrates that a possessive nominative phrase is able to host a floating quantifier, indicating that it has the form of NP

\[ (44) \text{John}-\text{ga} \text{ tomodati}-\text{ga} 2\text{ri} \text{ se}-\text{ga} \text{ takai.} \]

\[ \begin{align*}
\text{John- Nom} & \quad \text{friends- Nom} \quad 2-\text{ Cl} \quad \text{height- Nom tall- Pres}
\end{align*} \]

'It is John whose two friends are tall.'

These data show that a possessive ga-phrase is an NP followed by -ga, while an adjunct ga-phrase is a PP followed by -ga. As will be discussed in the next subsection, this has significant effects on how adjunct multiple nominative constructions should be analysed.

3.3. The structure of Adjunct Multiple Nominative Constructions

We have been assuming without questioning, that -ga is a case marker. However, if an adjunct ga-phrase is a PP, it cannot be a case marker, as PPs do not require case. An interpretation of -ga on a PP as case would, thus, be prevented by economy. Consequently, -ga on a PP can only be interpreted, if licensed in the configuration described in the focus generalisation in (6). This has the effect that a PP-ga phrase must move to sentence-initial position, so that the PP is focused. I propose, therefore, that -ga functions as a focus marker, when attached to a constituent that does not require case. I shall refer to this type of -ga as –Foc, rather than -Nom, in the glosses in the examples in the rest of the paper.

Thus, –ga on an adjunct PP has a different function from –ga on a possessive NP. The latter functions primarily as a case marker, since possessive phrases are NPs, as witnessed just above. The obligatory focus of the first possessive ga-phrase is a consequence of the configuration in which case on this phrase is licensed. By contrast, -ga on an adjunct PP can only function as a focus marker, forcing the adjunct to move to a position where it is obligatorily focused. It is, however, important to note that the marker -ga is uniformly subject to the same licensing condition described in (4), as licensing is insensitive to the diversity of syntactic or interpretational function of the licensed element.

Recall that when an adjunct is not followed by –ga, it may precede or follow the subject NP-ga (cf. (40b)). I assume, for the sake of concreteness, that the two possible orders, NP-ga PP
and PP NP-\textit{ga}, are derived by scrambling. The crucial point is that no proxy category is created, since there is only one \textit{ga}-phrase. On the other hand, when the adjunct PP appears with –\textit{ga}, a proxy category must be created in order to provide two domains for licensing –\textit{ga}. Thus, I propose the following structure for adjunct multiple nominative constructions.

(45)

```
(45) VP
    PP-\textit{ga} VP
    \textit{VP} \langle +\text{tense} \rangle
    t_i \textit{VP}
    NP-\textit{ga} \textit{V} \langle +\text{tense} \rangle
```

Case on the subject is licensed in the lowest VP, while –\textit{ga} on the adjunct is licensed in a position in the newly created VP. The focus generalisation captures the obligatory focus of the adjunct: –\textit{ga} on this phrase is licensed in the projection of the highest derived tensed predicate, the configuration described in the focus generalisation in (6). Thus, –\textit{ga} on the adjunct functions as a focus marker in the sense that it forces the adjunct to move into a position described in the focus generalisation in order to be interpreted, rendering the obligatory focus on the adjunct.

It is important to note that an adjunct PP-\textit{ga} cannot be analysed as left-dislocated, where it is base-generated in a clause-external position binding a clause-internal pro. Recall that a quantifier such as \textit{every} cannot occur in a dislocated position, yet (46) shows that an adjunct PP-\textit{ga} may appear with such a quantifier.

(46) koko-no kaisha-de-wa subete-no kagi-ga [doa-ga 2tu aku.]

\textit{this-Gen company-at-Top every-Gen key-foc door-Nom 2-CL open}

'In this company, it is with every key that two doors open.'

An adjunct PP-\textit{ga} phrase is therefore not left-dislocated.

One obvious question that arises from the structure in (45) is: why is the order not reversed? In other words, why could the adjunct PP not have its –\textit{ga} licensed in the lower VP and the subject, its case in the higher VP, yielding the ungrammatical order NP-\textit{ga} PP-\textit{ga}, as shown in (47a)? In fact, this order can also be derived by moving the subject NP-\textit{ga} in (45) to a position above the adjunct PP-\textit{ga}, as in (47b).
The ungrammaticality of the order NP-\textit{ga} PP-\textit{ga} can be explained straightforwardly by the focus generalisation. Movement of NP-\textit{ga} to a position above PP-\textit{ga} makes the \textit{–ga} on the PP uninterpretable. By moving NP-\textit{ga} to a position in an even higher tensed projection, PP-\textit{ga} is no longer in the position described in the focus generalisation. Since \textit{–ga} on the PP cannot be interpreted as a case marker and fails to fulfil its function as a focus marker, the sentence is ungrammatical.

It appears that Tateishi's (1991) and Takahashi's (1996) analyses for adjunct multiple nominative constructions can also account for the ungrammaticality of the order subject-\textit{ga} adjunct-\textit{ga}. In both analyses, there are two positions where nominative Case may be assigned: SpecAgrSP and SpecIP positions and SpecVP and SpecIP positions, respectively.\footnote{Tateishi assumes that a θ-marked subject is base-generated in SpecAgrP. Thus, the adjunct \textit{ga}-phrase must occupy the other nominative position, SpecIP. Takahashi argues that, although an adjunct is base-generated within VP, nominative Case assignment within VP is available only to the subject. The adjunct, therefore, moves to SpecIP to receive nominative Case. In both accounts, the result is that the adjunct \textit{ga}-phrase precedes the subject. However, as argued in section 3.1, both Tateishi (1991) and Takahashi (1994) assume for possessive multiple nominative constructions that a tensed head may license nominative case multiple times. Thus, it is, in fact, unclear how, for example, adjunction of the subject to IP can be prevented, yielding the ungrammatical order.}

In the base-generation approach, where all \textit{ga}-phrases are base-generated in multiple specifiers of or adjoined positions to one particular projection (Fukui (1986); Heycock (1993); Heycock & Lee (1989); Namai (1997)), it is unclear how the ungrammatical order could be ruled out.

3.4 Predictions
Following Longobardi (1984), Saito (1985) and Takezawa (1987) argue that PP-pro does not exist in Japanese. They reach this conclusion from the observation that in topicalisation and tough constructions, when the topic or the subject is a PP, a violation of the CED results in ungrammaticality and that a resumptive pronoun is disallowed:\footnote{While the CED is commonly cited as a violation of the CED results in ungrammaticality and that a resumptive pronoun is disallowed.}
(48) *Topicalisation* (modified from Saito (1985, 337))

*[PP Hiroshima-kara]-wa Amerika-ni
  Hiroshima-from-top America-in
  [NP Ø₁ [IP e₁ (soko-kara) kita] hito]-ga oozei iru.
  (there-from) came person-Nom many are

'Lit.: Speaking of from Hiroshima, there are many people in America who came (from there).'

(49) *Tough Construction* (modified from Takezawa (1987, 215))

*[PP Anna taipu-no zyosei-to]-ga
  that type of woman-with-Nom
  [NP Ø₁ [S e₁ (kanozyo-to) kekkon-site-i-ru] otoko]-to hanasi-niku-i.
  (she-with) marry-Pres man-with talk-hard-Pres

'Lit.: With that type of woman is hard to talk to the man who is married (to her).'

Accordingly, a violation of the CED by moving an adjunct PP-*ga* should result in ungrammaticality and no overt pro corresponding to the adjunct should be allowed. These predictions are borne out: (50a) shows that the CED cannot be violated and (50b) illustrates that a pro cannot be overtly realised.

(50) a. *Ano ziko*-ga [VP John-ga [NP Ø₁ [VP e₁ t₁ sinda] nihonzin]-nituite hanasita.
  that accident-Foc John-Nom died Japanese-about talked

  'John was talking about a Japanese person who died in that accident.'

b. Ano ziko-ga kyonen (*sore-de)
  that accident-Foc last.year it-by
  takusan-no nihonzin-ga (*sore-de) sinda.
  many-Gen Japanese-Nom it-by died.

  'It was in that accident that many Japanese died (by it).'

The above data are difficult to capture in analyses where the adjunct *ga*-phrase is treated as an NP, as NP-pro does exist in Japanese (section 2.1).

Secondly, since, unlike possessive multiple nominative constructions, no θ-role promotion is involved, an adjunct PP-*ga* and the clause to its right should not have a subject-predicate relation. For independent reasons, however, the subjecthood tests applied to a possessive NP-*ga* in sections 2.3 and 2.4 are not applicable to an adjunct PP-*ga*. For the ECM/control type of
constructions, the embedded predicate must be either an adjective or of the form 'nominal + copula' (Kuno (1973)). It is difficult to obtain an example with such a predicate with an adjunct being the focus of the sentence. Even if such an example were obtained, the prediction would be that the case alternation between the nominative and the accusative would be unavailable, as – *ga* on the adjunct is not a case marker. The difficulty with applying the remaining subjecthood tests is that they require the *ga*-phrase in question to refer to a person. Such an example is again hard to obtain, since adjuncts do not usually refer to a person.

The two predicate-hood tests can be applied, however. Firstly, if the clause in question were a predicate, it should be able to be conjoined with another predicate. This results in ungrammaticality, as shown below, suggesting that it is not a predicate.

(51) *ano ziko-ga [sensoo-no hazimari-no gen’in]-de that accident-Nom/Foc war-Gen beginning-Gen cause-Cop.and [takusan-no nihonzin-ga sinda].
many-Gen Japanese-Nom died

'(intended) It was that accident which was the cause of the beginning of the war and [it was in that accident that] many Japanese people died.'

Secondly, although predicates can usually be modified by a degree adverb (section 2.2), as the ungrammaticality of the example in (52) indicates, the clause in question cannot be.

(52) *Ano ziko-ga hidoku [takusan-no nihonzin-ga asi-o otta].
that accident-Foc badly many-Gen Japanese-Nom leg-Acc broke
'It was in that accident where many Japanese broke their leg badly.'
(cf.: Ano ziko-ga takusan-no nihonzin-ga hidoku [asi-o otta].)

Despite the fact that the subjecthood tests cannot be applied to an adjunct PP-*ga*, the fact that the clause to its right does not behave like a predicate suffices to show that an adjunct *ga*-phrase is not a subject. In the analyses, where an adjunct *ga*-phrase and a possessive *ga*-phrase are analysed in the same manner (Fukui (1986); Heycock (1993); Heycock & Lee (1989); Namai (1997); Saito (1982)), it is difficult to explain the lack of subject-like properties of the former.

Finally, the structure in (45) predicts that there cannot be more than one adjunct *ga*-phrase. Similarly to the ungrammatical order NP-*ga* PP-*ga*, placing an adjunct *ga*-phrase above another renders the focus function of *-ga* on the lower adjunct unfulfilled, as it does not occupy the
position described in the focus generalisation, where it can be interpreted as a focus marker. Recall that –ga attached to a PP cannot be interpreted as a case marker due to economy. Moreover, movement of one adjunct over another is disallowed by Relativized Minimality, as both adjuncts would target an A'-position. We have already seen that this prediction is borne out in (2b), repeated here.

(53) *Umi-ga ano ziko-ga takusan-no nihonzin-ga sinda.
    sea-Foc that accident-Foc many-Gen Japanese-Nom died

'It was in the sea that many Japanese died in that accident.'

Thus, it is an independent condition on movement and the presence of an uninterpretable –ga, as opposed to the number of positions available (Tateishi (1991); Takahashi (1994)), which prohibit the occurrence of more than one adjunct ga-phrase. Note that –ga on an adjunct and that on a possessive phrase are licensed in exactly the same configuration. What distinguishes an adjunct ga-phrase from a possessive ga-phrase is that the former is a PP, while the latter is an NP.

In sum, the proposed analysis predicts correctly the following properties of adjunct multiple nominative constructions:

(54) (i) an adjunct ga-phrase cannot host a floating quantifier;
    (ii) an adjunct ga-phrase is obligatorily focused;
    (iii) there is no possessive relation between the two ga-phrases;
    (iv) an adjunct ga-phrase must precede the subject NP-ga;
    (v) a violation of the CED by movement of an adjunct ga-phrase results in ungrammaticality;
    (vi) there is no subject-predicate relation between an adjunct ga-phrase and the clause to its right;
    (vii) there can be no more than one adjunct ga-phrase;

The analysis proposed above lends strong support for the existence of proxy categories, as the various observed differences between the two types of multiple nominative constructions is rather difficult to capture in other types of approach, such as the base-generation approach. Firstly, if all nominative phrases were base-generated in multiple specifier positions of or adjoined positions to one projection, one would have to assume that an indefinitely large number of NPs, but only one PP, may be base-generated. Such an assumption seems undesirable.
Secondly, the non-existence of a possessive relation between an adjunct ga-phrase and the subject cannot be predicted. Finally, an adjunct ga-phrase would be wrongly predicted to have subject-like properties. It is clearly more attractive to be able to capture these differences.

4. Concluding Remarks

In this paper, I have attempted to offer a uniform analysis of two types of multiple nominative constructions in Japanese. In doing so, I argued that, although the marker –ga is able to encode information as a case marker as well as a focus marker, a tensed predicate licenses it uniformly in a single domain no more than once. In the case of the multiple occurrence, proxy categories are created recursively, allowing for an indefinitely large number of possessive nominative phrases. On the other hand, only one adjunct ga-phrase is permitted, since the focus information of –ga on all except the sentence-initial adjunct could otherwise not be interpreted. –Ga on an adjunct is not a case marker, as it is a PP and hence does not require case. The obligatory focus of the sentence-initial ga-phrase is accounted for in terms of the position in which –ga on the phrase is licensed, namely in the projection of the highest derived tensed predicate. Throughout the paper, problems with various other alternative accounts are pointed out.

However, there are some issues which ought to be noted here. The first question is why ga-marking is unavailable to constituents other than the subject, a possessor of the subject, some PPs and the object of a stative predicate. My suggestion here is that the particle –ga, being a head after all, has selectional properties and it only selects the aforementioned types of constituents. However, further investigation is obviously required to substantiate such a claim.

A second issue concerns a typological issue, namely why these two types of multiple nominative constructions are not found in many languages. Another language which permits possessive and adjunct multiple nominative constructions is Korean (Schütze (2001); Takahashi (1994, 1996); Whitman (1991, 1993)). Interestingly, there is a nominative case particle in both Japanese and Korean. I speculate that there is a correlation between the presence of a case particle and the possibility of its multiple occurrence. This would explain the non-existence of multiple nominative constructions in many languages including English: nominative case is rarely expressed by a separate particle in world's languages (Blake (1994)). Having said this much, I shall leave both questions for future research.
APPENDIX:

This appendix addresses the issue of how exactly θ-roles are promoted. I adopt here a theory of θ-role promotion developed by Neeleman & Weerman (1999), where θ-roles are expressed in terms of lambda calculus. A θ-role is a combination of a lambda operator and a variable it binds. Thus, a transitive predicate is represented as $\lambda x \lambda y [\text{Pred}(y, x)]$. The internal θ-role is the combination of the lambda operator $\lambda x$ and the variable $x$, while the external θ-role is that of $\lambda y$ and $y$. θ-role assignment is then seen as the application of the above formula to the respective arguments.

Neeleman & Weerman demonstrate how θ-roles can be promoted through null operator movement. Recall that a null operator moves from the complement position of an infinitival to a specifier position of an AP dominating the infinitival clause. Thus, the internal θ-role is assigned to a gap left by the moved null operator. This gap is a variable at LF, as its interpretation depends on the operator which binds it. After the internal θ-role assignment to the variable ($z$) by the predicate $X$, the formula becomes $[X(z)]$. The moved null operator functions as a lambda operator at LF, as it lacks quantificational force. Thus, we obtain the following representation, where the null operator is represented as $\lambda z$.

Let us apply this mechanism to the proposed analysis of possessive multiple nominative constructions, namely the structure in (2).

(2) $[VP1 [NP1 usagi]-ga [VP1 Ø [VP2 [NP2 pro [NP2 mimii]-ga [VP2 tii]] naga-i]]]
\quad \text{rabbit-Nom} \quad \text{ear-Nom} \quad \text{long-Pres}$
\begin{flushright}
'It is rabbits which have long ears.'
\end{flushright}

Recall that an NP assigns a POSSESSOR θ-role to its specifier position. Thus, when a possessive phrase bears nominative case, the POSSESSOR θ-role is in fact assigned to a pro. The pro here is a variable, since its interpretation depends on the interpretation of the operator which binds it.

The lower NP2 in (2) has the semantic representation $\lambda x[x's \ ears]$. Applying this formula
to the pro, call it \((z)\), we obtain \([z's ears]\) for the higher NP2. At the second highest VP1 node, \([long (z's ears)]\) is applied to the null operator \(\lambda z\), yielding \(\lambda z[long (z's ears)]\). Finally, this formula is applied to NP1. The entire process of \(\theta\)-role promotion for NP1 is shown below.

![Diagram](image)

The same process is repeated if NP1 contained a pro, allowing for an indefinitely large number of possessive nominative phrases.

**NOTES:**

1. In fact, there are two other types of multiple nominative constructions: one involves a stative predicate (Kuno (1973); Kuroda (1987); Saito (1982); Takezawa (1987); among others), shown in (i) (Takezawa (1987, 24)), whereas the other involves a locative phrase and an existential predicate (Kuno (1973); Takahashi (1996); Tateishi (1991); Ura (2000); among others), illustrated in (ii) (Kuno (1973, 76)).

(i) John-ga nihongo-ga wakaru.
   John-Nom Japanese-Nom understand
   'John understands Japanese.'

    New York-Nom high-rise buildings-Nom many exist
    'It is New York that there are many high-rise buildings in.'

For reasons of space, I am unable to include the above two types in this paper, but the reader is referred to xxxx, where the proposed analysis is extended to the above types of constructions.

2. More precisely, it must receive an exhaustive reading.

3. I assume that a licensing domain for case is the maximal projection of a licensing head.
At first sight, it seems problematic that the subject of an intransitive stative predicate such as unergative adjectives and copula constructions must also be focused in Japanese (Kuno (1973)). However, these constructions also seem to involve movement of the predicate. (Nishiyama (1999))

Ura (1996) claims that when a possessive nominative phrase is in an alienable possessive relation with the following NP, it should be treated as what we consider as an adjunct ga-phrase in this paper (‘major subject’ in his terminology). Ura argues, following (Kuroda (1987)) that such possessive nominative phrase is base-generated in sentence-initial position and is not associated with a position within the following NP. Ura's argument is based on an observation that when a possessive relation is alienable, another adjunct ga-phrase cannot be introduced in the same clause, similarly to the case in (2b). Ura (1996, 104) uses the following example to illustrate this point.

(i) Fuyu-ga John-ga kuruma-ga seibifuryoo-da.
   winter-Nom John-Nom car-Nom ill-conditioned
   'It is in winter that John is such a person that his car is ill-conditioned.'

Although the above example is ungrammatical for Ura, my informants consider it grammatical. Furthermore, if a possessive nominative phrase which has an alienable possessive relation to the following nominative phrase were to be treated as an adjunct ga-phrase, it should also be impossible to have more than one such possessive nominative phrase. However, in the following example (modified from Takahashi (1994, 403)), where there are three possessive nominative phrases, there seems to be at least two alienable possessive relations among the four nominative phrases.

(ii) Kitahankyuu-ga bunmeekoku-ga dansee-ga zyumyoo-ga mizikai
    N.Hemisphere-Nom civilised country-Nom male-Nom life expectancy-Nom short
    'It is the Northern Hemisphere that the life expectancy of men in the civilised countries is short.'

I shall, therefore, make no distinction between an inalienable possessive relation and an alienable one.

This option is widely known in the literature as ga/no conversion, most notably observed in relative clauses (Saito (1983); Tsujimura (1996); Watanabe (1996)).

Fukuda (1991), for example, claims that the subject NP does not constitute a barrier in Japanese.

Although a null operator is traditionally assumed to move only to the specifier position of the infinitival clause, I assume with Browning (1987), Mulder & den Dikken (1992) and Neeleman &
Weerman (1999) that it moves further to SpecAP. This should make no difference to the point being made here.

9 *Naga-i* 'long-pres' is in fact an adjective. Thus, VPs should be replaced by APs in (21). However, for the sake of uniformity, I shall leave them as VPs. This should not make any difference to the analysis presented here. The important point is that *nagai* is a tensed head and nominative case is therefore licensed by a node projected by it.

10 Saito (1983, 1985) argues that when the first possessive phrase bears accusative case, it occupies a position in the matrix clause and controls a pro in the embedded subject position.

11 This test is often considered the least reliable due to a number of counter-examples. Various semantic accounts have been provided for the *zibun*-binding phenomena in terms of empathy, logophoricity and pivot (Iida (1995) and references cited there).

12 Interestingly, an intervening NP-*ga* referring to a person for whom the speaker does not have respect blocks subject honorification. Thus, unless the speaker has respect for Viscount Yamaoka's son, (i) is ungrammatical.

(i) *Yamaoka-sisyaku-ga musuko-ga o-warai-ni-nat-ta.*

Yamaoka-viscount-Nom son-Nom laugh-SH-Past

'It is Viscount Yamaoka whose son laughed.'

13 Kuroda (1987) argues that non-subject *ga*-phrases ('major subjects' in his terminology) are either moved to or base-generated in sentence-initial position. However, he does not formally distinguish between possessive *ga*-phrases and adjunct *ga*-phrases and does not state when a *ga*-phrase may be base-generated in sentence-initial position. Thus, I do not think that Kuroda (1987) has a separate account for adjunct multiple nominative constructions.

14 Takahashi (1994) argues that the maximum number of *ga*-phrases permitted is three and that positions where an element may be assigned nominative case are two SpecVPs and one SpecIP. However, in her example, shown below, a possessive relation holds between adjacent NPs. This is demonstrated by the possibility of replacing the nominative markers with genitive markers, except on the last NP.

(i) nenmatu-ga/no hugu-ga/no syokutuyuudoku-ga yoku okor-u.

year-end-Nom/Gen blowfish-Nom/Gen food poisoning-Nom often occur-Pres

'It is at the end of the year that food poisoning occurs most frequently with blowfish.'

Thus, the non-subject NP-*ga's* seem to be possives rather than adjuncts. I assume with Tateishi (1991), therefore, that the maximum number of *ga*-phrases permitted in this type of multiple nominative constructions is two.

15 Tateishi (1991) cites the following example similar to (40b) as grammatical. The quantifier
takusan has floated out of the NP nihonzin-ga. However, nihonzin-ga seems to be left-dislocated here, as takusan cannot appear with it.

(i) (*takusan-no) nihonzin-ga ano ziko-ga (takusan)sinda.
many-Gen Japanese-Nom that accident-Nom many died.

Takahashi (1994) also argues that an adjunct ga-phrase may precede the subject with the following example, where the subject precedes the adjunct ga-phrase.

(ii) syokutyuudoku-ga hugu-ga yoku okoru.
food poisoning-Nom blowfish-Nom often occur-Pres
'It is food poisoning that occurs most frequently with blowfish.'

I have already argued in footnote 14 that the above example is an instance of possessive multiple nominative constructions. Although the example in (ii) is grammatical for Takahashi, it sounds extremely awkward to my informants. It appears that, similarly to the case in the example in (i), the first ga-phrase, syokutyuudoku-ga 'food poisoning-Nom', is left-dislocated. This point is illustrated below by the impossibility of quantifying syokutyuudoku-ga and the possibility of overtly realising a pro associated with it in a position below hugu-ga.

(iii) (*subete-no syu-no) syokutyuudoku-ga kono tyoosa-niyoruto
   every-Gen kind-Gen food poisoning-Nom this survey-according.to
   hugu-ga (sore-ga) yoku okoru.
   blowfish-Nom it-Nom often occur-Pres
   'According to this survey, it is every kind of food poisoning that occurs most frequently with blowfish.'

16 Hiroto Hoshi (personal communication) pointed out to me that –de can be realised before –ga without –dake (also cf. Kuroda (1987)). However, all my informants feel that the acceptability improves significantly with –dake. I shall, therefore, cite all the examples with –dake. This should not make any difference to the analysis presented in this paper. See Schütze (2001) for a similar phenomenon in Korean.

17 Some kind of particle deletion rule is obviously required to account for the deletion of the postposition. It seems, however, that such a rule is generally required in Japanese. A particle, when adjacent to another, is often deleted. The following sentence with a topicalised object illustrates one such instance. The accusative marker -o cannot be realised immediately before the topic marker -wa.

(i) sono hon-(*o)-wa John-ga katta.
that book-Acc-Top John-Nom bought
'As for the book, John bought it.'
Providing a correct formulation of a particle deletion rule is, however, beyond the scope of this paper. I shall, therefore, leave the matter unaddressed for now.

18 see footnote 14.

19 What is being overtly realised is actually a pro associated with the NP within the PP. It seems rather unclear what exactly PP-pro is.

20 One may find an example of a possessive multiple nominative constructions like the following to be a piece of evidence for the existence of PP-pro in Japanese.

(i) New York-kara-no/ga miti-ga warui.

   New York-from-Gen/Nom road-Nom bad-Pres

   'It is from New York that the roads are bad.'

Although the possessive PP New York-kara 'from New York' can be followed by –ga, a PP-pro cannot be overtly realised.

(ii) N.Y.-kara-ga kono tyoosa-niyoruto (*soko-kara-no) miti-ga warui.

   N.Y-from-Nom this survey-according.to from-there-Gen road-Nom bad-Pres

   'It is from New York, according to this survey, that roads (from there) are bad.'

I argue that the PP, when followed by –ga, is an adjunct. In fact, it does behave like an adjunct. When it appears without –ga or –no, it may follow the subject NP, as in adjunct multiple nominative constructions (cf. (40)), while such an option is unavailable to other possessive phrases (cf. (37)).

(iii) miti-ga New York-kara warui.

   road-Nom New York-from bad-Pres

   'The roads are bad from New York.'

It seems, thus, that possessive ga-phrases can only be NPs and not PPs. When a PP bears genitive case, it is in SpecNP, on a par with other possessive NPs, while when it appears with –ga, it is an adjunct. This argument would be even more convincing, if another adjunct ga-phrase were disallowed in (i). However, it is difficult to construct an example where the extra adjunct does not have a possessive relation with the PP New York-kara 'New York-from'.

REFERENCES:


Bresnan, Joan (1973) Syntax of Comparative Clause Construction in English, Linguistic Inquiry 4, 275-343.


Burridge, Kate (1993) Syntactic Change in Germanic: Aspects of Language Change in Germanic: with
Particular Reference to Middle Dutch, John Benjamins, Amsterdam/Philadelphia.
Fukuda, Minoru (1991) A Movement Approach to Multiple Subject Constructions in Japanese,
[reproduced by Garland 1979]
Manzini, Rita (1983) Restructuring and Reanalysis, PhD dissertation, MIT.
University.


