Possessive and Adjunct Multiple Nominative Constructions in Japanese

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Reiko Vermeulen
Department of Phonetics and Linguistics
University College London
Gower Street
London
WC1E 6BT
U.K.

E-mail: r.vermeulen@ucl.ac.uk
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IN JAPANESE

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 all *ga*-phrases are nominative NPs or DPs and are licensed in multiple specifier or adjoined positions in one particular projection (Fukui 1986, Heycock (1993); Ura (1996); among others). However, this licensing mechanism alone cannot account for some striking properties of the two constructions. I argue that a possessive *ga*-phrase is an NP, while an adjunct *ga*-phrase is a PP. The particle *ga* functions as a case marker whenever it marks an NP bearing a θ-role. However, an interpretational rule also treats it as a focus marker when it attaches to the first *ga*-phrase in a sentence. 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 *ga*-phrases permitted in the two constructions; and (ii) the fixed order of *ga*-phrases in both constructions.

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. (1) is a possessive multiple nominative construction (modified from Takahashi (1994, 395)). (2) is an adjunct multiple nominative construction.¹

(1) Possessive Multiple Nominative Construction

\[
\text{usagi-ga mimi-ga naga-i.} \\
\text{rabbit-GA ear-GA long-Pres} \\
\text{It is rabbits which have long ears.}
\]
There are some obvious similarities between the two constructions. Firstly, in each of the above sentences, two constituents are marked by the nominative marker ga. Secondly, the second ga-phrase seems to serve as the subject of the lexical predicate, namely it seems to bear the external θ-role of the VP or the AP that follows it. In (1), it is the 'ears' that are long, not the 'rabbits'. Similarly, in (2), it is not the case that 'that shop' often buys books, but it is 'students'. Finally, the first ga-phrase in both sentences must be obligatorily focused. More precisely, it must receive an exhaustive listing reading (Kuno (1973)). Thus, usagi-ga 'rabbit-GA' and ano mise-ga 'that shop-GA' must be focused, while the second ga-phrases are not obligatorily interpreted as such. This interpretation is implied by the use of the cleft construction in the English translations.

The standard view in the literature is that all ga-phrases are nominative NPs or DPs and that they are uniformly licensed in multiple specifier or adjoined positions in one particular projection, such as TP, IP or VP (Fukuda (1991), Fukui (1986); Heycock & Lee (1989); Heycock (1993); Namai (1997); Saito (1982); Takahashi (1994, 1996); Takezawa (1987); Tateishi (1991); Ura (1993, 1994, 1996); among others). In other words, an explicit distinction between the two constructions is rarely made. However, there are significant differences between the two constructions. One striking difference is in the number of ga-phrases permitted in each construction (Tateishi 1991). A possessive multiple nominative construction permits an indefinitely large number of ga-phrases, as shown by the examples in (3)-(5). On the other hand, an adjunct multiple nominative construction allows a maximum of two, demonstrated by the ungrammaticality of the (a) examples in (6)-(8) (The (b) examples are grammatical counterparts...
to the (a) examples. (5) is from Kuno (1973: 71).

(3) kitahankyuu-ga anettai-ga usagi-ga mimi-ga naga-i.
N.Hemisphere-GA subtropics-GA rabbit-GA ear-GA long-Pres
'It is the Northern Hemisphere, where rabbits in the subtropics have long ears.'

(4) John-ga imooto-ga tomodati-ga happyoo-o sita.
John-GA younger.sister-GA friend-GA presentation-Acc did
'John's sister's friend gave a presentation.'

(5) bunmeikoku-ga dansei-ga heikin-zyumyoo-ga mizikai
civilised.countries-GA male-GA average-life-span-GA short-Pres
'It is the civilised countries where the average life-span of men is short.'

(6) a. *ano mise-ga ohiru zikan-ga gakusee-ga hon-o yoku kau.
that shop-GA lunch hour-GA student-GA book-Acc often buy
'It is at that shop and it is during their lunch hour that students often buy books.'
b. ano mise-ga gakusee-ga ohiru-zikan-ni hon-o yoku kau.
that shop-GA student-GA lunch-hour-in book-Acc often buy

19-century-GA this.kind.of accident-GA many-Gen people-GA died
'It is in the 19th Century and by this kind of accident that many people died.'
b. 19-seeki-ga takusan-no hito-ga kono yoona ziko-de hito-ga sinda.
19-century-GA many-Gen people-GA this.kind.of accident-by died

(8) a. *siken-mae-ga tosyokan-ga gakusee-ga benkyoo-suru
exam-before-GA library-GA student-GA study
'It is in the library and it is before their exams that students study.'
b. siken-mae-ga gakusee-ga tosyokan-de benkyoo-suru
exam-before-GA student-GA library-in study
It is extremely difficult to account for the above difference in the standard approach, since both constructions are treated as one and the same. There are numerous other properties of the two constructions, which the standard approach cannot easily explain: (i) a possessive ga-phrase is interpreted as a possessor of the following ga-phrase, but an adjunct ga-phrase is not; (ii) a possessive ga-phrase, but not an adjunct ga-phrase, displays a subject-predicate relation with the clause to its right; (iii) a possessive ga-phrase can host a floating quantifier, while an adjunct ga-phrase cannot; (iv) pro associated with a possessive ga-phrase can be overtly realised, but not if it is associated with an adjunct ga-phrase; (v) in both constructions, the order of ga-phrases is fixed. Each of these properties will be dealt with below.

In this paper, I will provide an analysis which can capture these properties. More specifically, I will argue that in the above examples, the possessive ga-phrases are NPs, while the adjunct ga-phrases are PPs. The particle ga functions as the nominative case marker whenever it is attached to an NP bearing a θ-role. However, it can also be interpreted as a focus marker, if licensed in a certain configuration. In other words, there is one morpheme ga, which carries case features, but can also be input to an interpretational rule associated with focus. The presence of ga on a phrase can thus be motivated for case purposes or for focus purposes. Finally, I argue that the obligatory focus of the first ga-phrase is captured in terms of the configuration in which the particle ga attached to this phrase is licensed.

At this point, it should be noted that the possibility of multiple occurrences of case is not limited to nominative in Japanese. The genitive marker no can also mark more than one phrase within one NP (Fukui 1986, Sakai 1994, Takezawa 1994, Ura 1993, Whitman 2001). Furthermore, Japanese is not an isolated language in allowing multiple case constructions. In Korean, besides multiple nominative and genitive phrases, multiple accusative and dative phrases are allowed in one clause (Dong-In Cho (1993), Sungeun Cho (2002), Heycock & Lee (1990), Kitahara (1993), Mailing & Kim (1992), Schütze (2001), Whitman (1991, 2000), Yang (1999), James Yoon (1990), Jeong-Me Yoon (1997), among many others). A natural question to ask is
whether all cases permitting multiple occurrences are licensed in a similar fashion to the particle *ga* in Japanese. It is likely that whatever property of Japanese and Korean that permits the licensing of multiple *ga*-phrases, also allows the licensing of other multiple phrases bearing the same case. Fukui (1986), for example, relates the possible occurrence of multiple genitive phrases and multiple nominative phrases in Japanese to the idea that this language lacks functional projections. However, in this paper, I am not concerned with the precise mechanism of case-licensing in Japanese or Korean, but with the issue of how it interacts with other properties in Japanese with respect to nominative case. I shall therefore concentrate on multiple nominative constructions.

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 the possessive multiple nominative construction in terms of predicative, 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 the adjunct multiple nominative construction in terms of focus. I argue that the occurrence of the particle *ga* on an adjunct is regulated by 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 *ga*?

Takezawa (1987), among many others, argues that a tensed predicate licenses nominative case in Japanese. A *ga*-phrase, therefore, should not appear in a non-finite clause. The following examples illustrate this point. In (9), the matrix predicate *omotta* 'thought' takes a small-clause like complement (modified from Takezawa (1987: 73)). In (10), the causative morpheme -(s)ase takes a non-finite complement clause (modified from Takezawa (1987: 76)). In both examples a
ga-phrase is disallowed in the complement clause.

(9) John-wa [[Mary-no yokogao]-o/*ga totemo utukusiku omotta.
John-Top Mary-Gen profile-Acc/GA very beautiful thought
'John thought [Mary's profile (to be) very beautiful].'

(10) John-wa [Mary-ni/*ga suisi-o tabe]-sase-ta
John-Top Mary-Dat/GA sushi-Acc eat-Caus-Past.
'John made Mary eat sushi.'

Thus, I assume, following Takezawa (1987), that a tensed predicate licenses the particle ga in Japanese and propose that the following principle holds in Japanese. For concreteness, I assume that the licensing takes place before Spell-Out.

(11) Ga is licensed if dominated by a node projected from a tensed head.

It is important to note, however, that in this paper, I am concerned only with the configuration in which the particle ga is licensed, not the precise manner of the licensing itself. I shall remain agnostic as to whether case licensing takes the form of feature-checking or assignment by a head.

1.2.2. The licensing configuration of ga

As already mentioned above, many linguists have argued that multiple nominative phrases are licensed in multiple specifier or adjoined positions in one particular projection. Although there are various alternatives, I will assume in this paper, following the standard approach, that a single tensed head can license more than one ga-phrase in multiple specifier positions in its own projection. Thus, when there are two ga-phrases, we have a structure like the following. The
particle on each \textit{ga}-phrase is licensed uniformly in one projection by a tensed head in accordance with the principle in (11).

\begin{equation}
\begin{array}{c}
TP \\
\text{XP-}ga \quad \text{TP} \\
\text{XP-}ga \quad \text{TP} \\
\text{VP} \quad \text{T} \\
\end{array}
\end{equation}

In the above structure, the subject is base-generated in the specifier position of the functional projection TP, contra VP-internal subject hypothesis (Fukui (1986), Koopman & Sportiche (1991), Kuroda (1988), Manzini (1983), Nakayama & Koizumi (1991), Tateishi (1991), Williams (1994)). 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 a tensed head licenses multiple \textit{ga}-phrases uniformly in its own projection.

1.2.3. The particle \textit{ga}

Recall that in both types of constructions, the first \textit{ga}-phrase in a sentence must be focused (Kuno (1973)). According to the structure in (12), the obligatorily focused constituent is the higher one of the two \textit{ga}-phrases. Assuming a correlation between the syntactic structure and the linear order of a sentence to some extent, I would like to tentatively assume a correlation between this position of the \textit{ga}-phrase and the focus imposed on it, and propose the following descriptive generalisation.
Focus Generalisation

Ga is interpreted as a focus marker, if the constituent to which it is attached c-commands at least another ga-phrase and no ga-phrase c-commands it.

The above generalisation essentially states that the presence of ga as a focus marker is motivated, if it attaches to the highest ga-phrase in a sentence. Without further discussion, I will take this generalisation to function as an interpretational rule and as such it will regulate the distribution of ga as a focus marker. Thus, ga can function as a case marker as well as a focus marker. Its presence on a phrase as a case marker is motivated, if the phrase is an NP bearing a θ-role. On the other hand, its presence on a phrase as a focus marker is motivated, if the phrase appears in the configuration described by the generalisation in (13). In the latter instance, the host phrase need not be an NP bearing a θ-role.

It is important to note that the generalisation is meant to capture the obligatory focus of a ga-phrase in multiple nominative constructions and not other types of obligatorily focused ga-phrases or focus in general in Japanese. It is possible to focus constituents by other means, such as stress and scrambling and these constituents can occur in multiple nominative constructions too.

In sum, I assume that a tensed head can license more than one ga-phrase in its own projection and that the obligatory focus of the first ga-phrase is captured in terms of the configuration in which ga is licensed. These assumptions remain constant and that the differences between the two types of multiple nominative constructions fall out from independent properties of each type. In what follows, I will first provide an analysis of the possessive multiple nominative construction (section 2) and then turn to the adjunct multiple nominative construction (section 3), where the contrast between the two constructions will also become clear.
2. Possessive Multiple Nominative Construction

2.1. Apparent CED violation

A possessor of the subject need not always appear in the nominative. It may alternatively bear genitive case (Kuno (1973)):

(14) usagi-ga/no mimi-ga naga-i.  
    rabbit-GA/Gen ear-GA long-Pres

The availability of this case alternation has lead some linguists (Tateishi (1988, 1991); Fukuda (1991); Ura (1996); among others) to analyse the constructions in terms of Possessor Raising (also known as Subjectivization (Kuno (1973)) and Genitive Raising (Tateishi (1991)), among others). The 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.

(15) [IP/AgrSP NP t_i-NOM [IP/AgrSP [NP t_i NP]-NOM...I/AgrS]]

Although the approach captures neatly the possessive relation between the two adjacent ga-phrases, there are two problems with assuming this kind of movement of the 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. Secondly, the movement in question violates the CED. It is not a general property of Japanese that the CED does not hold. For example, when a PP moves out of a relative clause, the sentence is ungrammatical. (see section 3.4). A stipulation is thus required to permit this kind of movement, if moving an NP.
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.

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

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

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

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

\[
[\text{NP} ] \ [\text{NP} ] \ [	ext{S} ] \ [	ext{NP} ] (\text{kare}-\text{ga}) \ \epsilon_i \ \text{kitei-ta} \ \text{yoohuku-ga} \\
(\text{he-GA) wearing-Past suit-GA}
\]

\text{yogoretei-ta] sono sinsi].}

'dirty-Past] that gentleman

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

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

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

'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 what seem to be the traces of the NPs are in fact 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 its content is recoverable from the context, an argument need not be overtly expressed, as illustrated by the examples in (19) (Saito (1985, 293)).

(19) a. e moo dekaketa yoo-desu.

already went out seem

'It seems that he/she/they went out already.'

b. ø [John-ga ø motte kuru to] omoimasu

John-GA bring Comp think

'I think that John will bring it/them.'

Since the possessive multiple nominative construction also allows an apparent violation of the CED, it may be the case that what has been represented as a trace in (15) is in fact a pro. This predicts that it should be possible to spell it out, which is true. ((21) is modified from Tateishi (1991, 270))

(20) John-ga kinoo gakkoo-de (kare,-no) imooto-ga tomodati-ga

John-GA yesterday school-at he-Gen younger.sister-GA friend-GA

happyoo-o sita.

presentation-Acc did.

'It is John whose (his) friend gave a presentation at school yesterday'.

(21) John-ga kyonen-no natu-ni (kare,-no) titioya-ga nyuuin-sita.

John-GA last.year-Gen summer-in he-Gen father-GA hospitalised

'It is John whose (his) father was hospitalised summer last year.'

(22) kitahankyuu,-ga kyonen-no tyoosa-niyoruto

N. Hemisphere-GA last.year-Gen survey-according.to
(soko-no) usagi-ga mimi-ga nagai.

there-Gen rabbit-GA ear-GA long-Pres

'According to last year's survey, it is the Northern Hemisphere where rabbits (there) are furry.'

The above data suggest that in the possessive multiple nominative construction too, no movement of NP is involved and that what appears to be a trace is a prn, 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 prn in the specifier position of the immediately following NP. This approach would enable us to achieve the same effect as the Possessor 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 is the possessive ga-phrase 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 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 notion which ought to be somehow represented in syntax.
(Browning 1987, Chomsky 1986, Napoli 1989, Williams 1980, 1994). Thus, it seems rather strange to claim that a clause can be predicated of a subject without assigning it a \( \theta \)-role.

Perhaps, the relation in question can best be analysed on a par with the relation that holds between the subject and the derived predicate in English *tough* constructions. In a sentence with a tough construction 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 \( \theta \)-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 (23).

\[
(23) \quad \text{John is } [O, [\text{AP easy to please}]]
\]

This process turns the AP *easy to please* into a predicate with the NP *John* as its subject. Consequently, *John*, despite being the subject of the sentence, 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. In other words, they must have the same semantic function, for example as predicates or arguments or modifiers. (See Sag, Gazdar, Wasow and Weisler (1985) for a comprehensive study of coordination). The following example shows that *easy to please* is a predicate, as it can be conjoined with another predicate.

\[
(24) \quad \text{I consider John } [\text{AP happy}] \text{ and } [\text{AP easy to please}].
\]
Secondly, gradable predicates can usually be modified by degree adverbs such as *very* and *more* (Bresnan (1973); Jackendoff (1977); among others).\textsuperscript{10}

(25) 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:

(26) 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. More precisely, I claim that this predication is mediated by a null operator as in the case of the English *easy to please* construction and propose the following structure for the possessive multiple nominative construction in (1).\textsuperscript{11}

(27)

\[
\begin{array}{c}
\text{TP} \\
\text{NP1-ga} \\
\text{usagi} 'rabbit'
\end{array} \rightarrow \text{Predicate} \\
\begin{array}{c}
\text{TP} \\
\text{O}_1 \\
\text{TP}
\end{array} \\
\begin{array}{c}
\text{NP2-ga} \\
\text{pro}_1 \\
\text{NP} \\
\text{mimi} 'ear'
\end{array} \triangle \text{AP} \text{ } \text{T} \\
\begin{array}{c}
\text{...A} \\
\text{npa-}
\end{array} \text{ 'pres'} \text{ 'long'}
\]

The possessive nominative phrase *usagi-ga* 'rabbit-GA' is base-generated in a specifier position in
TP. The particle *ga* on each *ga*-phrase is licensed, as it is dominated by a node projected by a tensed head, in accordance with the principle in (11). Furthermore, a null operator binds a *pro* in the immediately following NP projection, which has the effect that an NP-internal θ-role (POSSSESSOR role) is promoted. The promoted possessor θ-role is assigned to the possessive nominative NP, explaining the possessive relation between the two adjacent nominative NPs. (See the appendix for how exactly θ-roles are promoted.) The null operator must be associated with the possessive *ga*-phrase, otherwise the *pro* associated with it cannot be interpreted. The null operator must also bind the *pro* in the immediately following NP. This is because *pro* is a variable and it must be bound by an operator. A derivation that fails to establish these relations between a possessive *ga*-phrase, a null operator and a *pro* would violate the principle of Full Interpretation and would be ungrammatical.

The structure in (27) retains the attractive aspect of the Possessor Raising approach, namely that it represents the option between two forms of realisation available for a possessive phrase (cf.(14)). While a possessive nominative NP occupies the a specifier position in TP as in (27), a possessive genitive NP appears within an NP projection, as illustrated in (28).

(28) \[TP[\ NP-\ no\ NP\]-\ ga\ T]\]

However, unlike the Possessor Raising approach, the above approach does not assume movement of a possessive NP from a specifier position of an NP projection. Rather, a possessive *ga*-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 properties of the possessive multiple nominative construction described so far. Firstly, the operation of θ-role promotion explains the possessive
relation between the two \textit{ga}-phrases. The possessive \textit{ga}-phrase does indirectly receive a \textbf{POSSESSOR} \textit{\theta}-role from the following NP. In analyses, where all possessive nominative phrases are assumed to be base-generated in multiple specifier or adjoined positions in S/IP/VP without being associated with a position internal to the following \textit{ga}-phrase (Saito (1982); Fukui (1986); Heycock (1993); Heycock & Lee (1989); Namai (1997)), the possessive relation between the \textit{ga}-phrases seem to be a sheer coincidence. It is clearly more desirable to be able to capture this generalisation.

Secondly, since there is no limit on the number of specifier positions permitted in one projection and \textit{\theta}-role promotion is potentially a recursive operation, there can be an indefinitely large number of possessive nominative phrases (cf. (3)-(5)). Note that even when there is more than one possessive \textit{ga}-phrase, each null operator associated with a possessive \textit{ga}-phrase must bind a \textit{pro} in the immediately following NP, otherwise the derivation will contain an unbound variable or a null operator that does not bind a variable, resulting in ungrammaticality.

Thirdly, the structure in (27) together with the focus generalisation captures correctly the obligatory focus of the first possessive \textit{ga}-phrase. The focus generalisation is repeated here.

\begin{enumerate}
\item[(29)] \textbf{Focus Generalisation}

\textit{G\textit{a} is interpreted as a focus marker, if the constituent to which it is attached c-commands at least another \textit{ga}-phrase and no \textit{ga}-phrase c-commands it.}
\end{enumerate}

\textit{G\textit{a} attached to the possessive \textit{ga}-phrase \textit{usagi-ga} 'rabbit-GA' functions as a case marker, as the possessive \textit{ga}-phrase is an NP bearing a \textit{\theta}-role. Its presence is therefore motivated. However, it is also interpreted as a focus marker in (27), because the possessive \textit{ga}-phrase appears as the highest \textit{ga}-phrase in the sentence. The generalisation captures correctly that subsequent \textit{ga}-phrases need not be focused, since they do not appear in the position described by the generalisation.}
Finally, the subject-predicate relation between a possessive ga-phrase and the clause to its right can be represented in terms of θ-role assignment, as in many other instances of a subject-predicate relation (Browning 1987, Chomsky 1981, Napoli 1991, Stowell 1983, Williams 1994) without having to resort to notions such as 'aboutness' (Fukuda (1991)) and 'purely syntactic predication' (Heycock (1993); Namai (1997)).

There is one significant consequence to this approach, however. In order to pursue the idea that a possessive ga-phrase is indeed licensed by predication, it is necessary to show that it shares syntactic properties with 'normal' subjects. In the following two subsections, I shall provide some pieces of evidence suggesting that a possessive ga-phrase does indeed have subject-like properties and that the clause to its right does behave like a predicate.

2.3. Subject-like properties of a possessive ga-phrase

Many researchers (Fukuda (1991); Heycock (1993); Takahashi (1994, 1996); Tateishi (1991); among others) have reported that a possessive nominative phrase displays various subject-like properties. Here, I provide four pieces of evidence suggesting subjecthood of a possessive ga-phrase. 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 as well.

Firstly, in an ECM/control construction, the possessive NP_{ga}, when embedded, may alternatively appear with accusative case (Heycock (1993); Takahashi (1994)). This property is generally associated with a subject.\textsuperscript{12}
'We have a tendency to think that rabbits have long ears, but...'

Secondly, a possessive ga-phrase should be able to bind the subject-oriented reflexive zibun.

This prediction is borne out (Fukuda (1991); Heycock (1993); Kuno (1973); Takahashi (1996); Ura (1996); among others).13 ((31) is modified from Tateishi (1991, 270))

(31) a. 'John's sister's friend gave a presentation in self's school.'

b. 'It was Taroo, whose father was hospitalised due to medicine discovered by himself.'

Thirdly, an antecedent of PRO in a 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 nominative phrase can control PRO.

While PRO, lamenting that (his) children are small, it is John, whose daughter is actually tall.'


'rabbit-GA carrots-shortage-by suffering-while ears-GA 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 ga-phrase is a person for whom the speaker has respect and the non-possessive ga-phrase is inanimate, subject honorification is triggered on the predicate (Takahashi (1994, 1996); among others), as illustrated by the following example (Takahashi (1994, 398)).

Yamaoka-sisyaku-ga bessoo-ga go-rippa-da.

Yamaoka-viscount-GA villa-GA splendour-SH-Cop

'It is Viscount Yamaoka whose villa is splendid.'

Thus, considering that a possessive ga-phrase 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 ga-phrase

Evidence for predicate-hood of the clause in question comes from the two predicate-hood tests applied to the English tough construction 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 by the coordinator *katu* 'and', which is used exclusively for predicate coordination (Fukui & Sakai (2003)).

```
(34) [TP usagi-ga]<br>  [TP tiisaku ] katu [TP O[TP[NP pro mimi]-ga naga-i]]
```

rabit-GA small.be-Conj and ear-GA long-Pres

'It is rabbits which are small 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 *ga*-phrase as its subject.

At first sight, (34) may seem to be a case of left-dislocation, where the clause-external *ga*-phrase is base-generated in an adjoined position and A'-binds a *pro* in each conjunct as in (36). (Note that (35) cannot be an instance of across-the-board extraction, since movement of *usagi-ga* 'rabbits-GA' out of the second conjunct would violate the CED, as in the Possessor Raising approach.)

```
(35) usagi-ga [TP pro husahusa-site-i]-te katu [TP[NP pro mimi]-ga naga-i]
```

rabit-GA furry-be-prog-Conj and ear-GA long-Pres

However, the analysis in (35) is unlikely to be true. A dislocated element must be specific and referential. A quantifier such as *every* therefore cannot usually appear in a dislocated position, yet *subete-no usagi-ga* 'every rabbit-GA' may appear in this position:
'All rabbits are furry and have long ears.'

The second test involves modification of the predicate by a degree adverb. The examples in (37) show that both conjuncts are predicates, as they can be modified by *totemo* 'very'.

(37) a. usagi-ga totemo [husahusa-site-iru]

    rabbit-GA very furry-do-Pres

    'It is rabbits which are very furry.'

b. usagi-ga totemo [mimi-ga naga-i]

    rabbit-GA very ear-GA 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. Beside the subject-predicate relation, the proposed analysis makes some further predictions, which I will discuss in the next sub-section.

2.5. Predictions

There are four further predictions which the proposed analysis makes. Firstly, the structure in (27) predicts that not only a possessor of the subject, but any NP-internal argument of the subject should be able to appear as a *ga*-phrase preceding the subject. An argument of the subject should be able to receive a θ-role from the subject in an NP-external position by means of θ-role promotion. The following examples illustrate that this prediction is borne out. (38) and (39) are modified from Saito & Murasugi (1990).
(38) Roma-no/ga hakai-ga hisan datta.
Rome-Gen/GA destruction-GA horrible was
'Rome's destruction was horrible.'

(39) John-no/ga hihan-ga takusan atta.
John-Gen/GA criticism-GA many were
'There were many criticisms against John.'

(40) John-no/ga ansatu-ga hidok-atta.
John-Gen/GA murder-GA terrible-was.
'John's murder of was terrible (where John is the theme of 'murder').'

By contrast, an adjunct modifier of the subject cannot appear in an NP-external position. An
adjunct does not receive a θ-role, hence there is no θ-role to promote. Thus, if it appears NP-
externally, it cannot be construed as being the modifier of the subject. This point is illustrated by the following examples, in which the adjunct modifier of the subject clearly does
not receive a θ-role.17 (41) and (42) are modified from Saito & Murasugi (1990).

(41) saikin-wa ame-no/*ga hi-ga ooi.
recently-Top rain-Gen/GA day- GA many-pres
'Recently, there have been many rainy days.'

(42) huta-kire-no/*ga hamu-ga yuusyoku-ni naru.
two-slice-Gen/GA ham-GA supper-to make.up
'Two slices of ham make up a supper.'

(43) sensyuu-no/*ga sinbun-ga husiginakoto-ni kyoo hatatu-sare-ta.
last.week-Gen/GA newspaper-GA strangely today deliver-pass-past
'Strangely, last week's newspaper was delivered today.'
Secondly, recall that in the structure in (27), a possessive nominative phrase occupies a specifier position in TP 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 TP, but not to a position within an NP. As observed by Fukuda (1991), Heycock (1993) and Takahashi (1996), this prediction is borne out.

\[(44) \text{kono tyoosa-ni-yoruto, kitahankyuu-ga (kyonen) usagi-no (*kyonen) mimi-ga nagakatta.} \]

This research-according.to N. Hemisphere-GA last.year rabbits-Gen last.year ears-GA long-Past

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

A third prediction concerns the prosodic structure of a sentence with a possessive multiple nominative construction. While major constituents like arguments and adjuncts determine the prosodic phrasing of a sentence, constituents within these constituents do not. (Ackema & Neeleman (forthcoming), Selkirk & Tateishi (1988, 1991)). According to the structure in (27) then, there should be a short break after a possessive nominative phrase, since it forms a prosodic domain on its own, but not after a possessive genitive phrase, since it is an NP-internal modifier. As Fukuda (1991, 34) observes, this is indeed true. # indicates a break.

\[(45) \text{kitahankyuu-ga # usagi-no (*#) mimi-ga naga-i.} \]

N. Hemisphere-GA rabbit-Gen ear-GA long-Pres

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

Finally, the structure in (27) predicts that the word order among \textit{ga}-phrases cannot be
changed, since predication requires c-command and each *ga*-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. ((46) is slightly modified from Takahashi (1994, 399))

(46) *usagi-ga   kita hankyuu-ga    mimi-ga    naga-i.
rabbit-GA     N. Hemisphere-GA  ear-GA    long-Pres

'(intended) rabbits in the Northern Hemisphere have long ears.'

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

(i) *pn associated with a possessive *ga*-phrase can be overtly realised;
(ii) a possessive *ga*-phrase has a possessive relation with the following *ga*-phrase;
(iii) there can be an indefinitely large number of possessive *ga*-phrases;
(iv) the first *ga*-phrase in a sentence must be focused;
(v) a subject-predicate relation holds between a possessive *ga*-phrase and the clause to its immediate right;
(vi) an argument of a subject can appear with *ga* externally to the subject, but an adjunct modifier of a subject cannot;
(vii) an adverb can appear in a position following a possessive nominative phrase, but not following a possessive genitive phrase;
(viii) a possessive *ga*-phrase determines the prosodic structure of a sentence, but a possessive genitive phrase does not;
(ix) the word order among *ga*-phrases is fixed in both constructions.

In the approach where a possessive *ga*-phrase is simply base-generated and is not related to
a position internal to the following nominative NP, some of the above observations cannot be
easily captured. Firstly, it is difficult to explain the possibility of overtly realising a *pro* associated
with a possessive *ga*-phrase. Secondly, the thematic possessive relation between two adjacent *ga-
phrases must be seen as a sheer coincidence. Thirdly, it seems unclear why an argument of a
subject can appear with *ga*, but not an adjunct modifier of a subject. Finally, it is difficult to see
how the approach can account for the fixed order among *ga*-phrases. This property is
particularly perplexing considering that Japanese is a language with relatively free word order.

The Possessor Raising approach can explain a number of properties observed above. However, the proposed analysis does not inherit the problems that the Possessor Raising
approach faces, namely having to assume that movement of a possessive phrase may violate the
CED and that nominative case may sometimes override genitive case. Moreover, the subject-
predicate relation between a possessive *ga*-phrase and the clause to its right seems to fall out
more naturally from an explicit analysis of predication as in the proposed analysis than in the two
alternative analyses.

In the following section, I will develop an analysis for the adjunct multiple nominative
construction. *Ga* on an adjunct cannot function as a case marker, since adjuncts do not usually
require case. Its presence must therefore be motivated for focus purposes. This is in sharp
contrast to *ga* on a possessive *ga*-phrase, whose function as a case marker is sufficient to motivate
its presence. I will demonstrate that a number of differences between the two constructions will
follow naturally from this contrast.

3. Adjunct Multiple Nominative Construction

3.1 Previous analyses

Recall that, unlike possessive *ga*-phrases, the maximum number of adjunct *ga*-phrases permitted
in a clause is one. I repeat here the example from (2).
To my knowledge, only Tateishi (1991) and Takahashi (1994) have analysed the adjunct multiple nominative construction as a distinct type from the possessive multiple nominative construction.\textsuperscript{18} They argue that the number of positions available for assigning nominative Case restricts the number of adjunct \textit{ga}-phrases permitted in this construction. In their analyses, I assigns nominative Case to SpecAgrSP and SpecIP positions and SpecVP and SpecIP positions,\textsuperscript{19} respectively. However, they both assume for the possessive multiple nominative construction that I may license nominative case more than once within one projection. Thus, as pointed out by Takahashi (1996), it is in fact unclear how the number of \textit{ga}-phrases in the adjunct multiple nominative construction can be restricted to two.\textsuperscript{20} Instead, I propose an account of the adjunct multiple nominative construction in terms of focus. In the following two subsections, I will argue that the adjunct \textit{ga}-phrase in (48) has the form of PP-\textit{ga} and that \textit{ga} on this phrase functions as a focus marker in the sense that it forces the adjunct to move to a position described by the focus generalisation in (13).

3.2 The adjunct \textit{ga}-phrase is a PP

The adjunct in question can be realised in two forms: either with the particle \textit{ga}, as we have already seen, or followed by a postposition. When it appears with a postposition, it need not be focused and may follow the subject \textit{ga}-phrase as shown in (48).\textsuperscript{21}

\begin{itemize}
\item\textsuperscript{21} (48) a. ano mise-de/ga gakusee-ga hon-o yoku kau.
\end{itemize}
\begin{itemize}
\item\textsuperscript{21} that shop-at/GA student-GA book-Acc often buy
\end{itemize}

'It is at that shop that students often buy books.'
b. gakusee-ga ano mise-de/*ga hon-o yoku kau.

student-GA that shop-at/GA book-acc often buy

Interestingly, \textit{ga} can appear following the postposition \textit{de}, if another element such as \textit{dake} 'only' intervenes, as illustrated below.\textsuperscript{22} There is a strong tendency to delete \textit{de} if immediately followed by \textit{ga}.

(49) ano mise-de\textsuperscript{22}(dake)-ga gakusee-ga hon-o yoku kau.

that shop-at-only-GA student-GA book-acc often buy

'It is only at that shop that students often buy books.'

Given this possibility of spelling out a postposition before \textit{ga}, it seems reasonable to assume that the adjunct \textit{ga}-phrase is not really an NP followed by \textit{ga}, but rather a PP followed by \textit{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)). (50) demonstrates that \textit{de} is indeed a postposition and that the adjunct \textit{ga}-phrase is not simply a nominative NP, since no floating quantifier is permitted.

(50) *[\text{NP (ano)} mise]-de/ga 2tu gakusee-ga hon-o yoku kau.

that shop-at/GA 2-Cl student-GA book-acc often buy

'It is at (those) two shops that students often buy books.'

\[
\begin{aligned}
\text{cf. } &[^{\text{NP (ano)}} 2tu-no \text{ mise]-de/ga gakusee-ga hon-o yoku kau.} \\
&\text{that 2-Cl-Gen shop-at/GA student-GA book-acc often buy}
\end{aligned}
\]

The data in (49) and (50) suggest strongly that the adjunct \textit{ga}-phrase is a PP followed by \textit{ga}. I
shall, therefore, henceforth assume that the adjunct ga-phrase is a PP.\(^\text{23}\)

Note that a possessive ga-phrase behaves differently from an adjunct ga-phrase. The genitive marker no cannot be realised before ga, even if dake 'only' intervened, as demonstrated in (51).

(51) usagi(*-no)(-dake)-ga mimi-ga naga-i.

rabbit-Gen-only-GA ear-GA long-Pres

'It is the rabbits that have long ears.'

Moreover, (52) illustrates that a possessive ga-phrase is able to host a floating quantifier, indicating that it is an NP.

(52) John-ga tomodati-ga 2ri se-ga takai.

John-GA friends-GA 2-Cl height-GA tall-Pres

'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 the adjunct multiple nominative construction should be analysed.

3.3. The structure of the adjunct multiple nominative construction

We have been assuming without questioning, that ga is a case marker. However, when it appears on an adjunct, it cannot function as a case marker, as adjuncts do not require case. Consequently, the sole motivation for its presence must be to focus the adjunct. In order for ga to be interpreted as a focus marker, it must be licensed in the configuration described by the focus generalisation in (13). This has the effect that an adjunct ga-phrase must appear as the
highest _ga_-phrase in TP, forcing the adjunct to be focused. _Ga_ can only function as a focus marker, if it is attached to a constituent that does not require case.

Thus, _ga_ on an adjunct has a different function from _ga_ on a possessive NP. The latter functions primarily as a case marker, since possessive phrases are NPs bearing a θ-role, 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 must be interpreted as a focus marker, forcing the adjunct to appear in a position where it is obligatorily focused. It is, however, important to note that there is only one _ga_ and that it is uniformly licensed in accordance with the principle in (11), as licensing is insensitive to the diversity of syntactic or interpretational function of the licensed element. What distinguishes an adjunct _ga_-phrase from a possessive _ga_-phrase is that the former is does not require case, while the latter does.

Recall that when an adjunct is not followed by _ga_, it may precede or follow the subject _ga_-phrase (cf. (48)). I assume, for the sake of concreteness, that the two possible orders, NP-_ga_ PP and PP NP-_ga_, are derived by scrambling. When the adjunct appears with _ga_, the adjunct _ga_-phrase must appear as the highest _ga_-phrase in TP, yielding a structure like the following.

(53) TP
     PP-_ga_ ano mise 'that shop'
     NP-_ga_ gakusee 'student'
     VP ka- 'buy'
     T u 'Pres'

A tensed head licenses _ga_ on both _ga_-phrases uniformly in accordance with the principle in (11). _Ga_ on the subject functions as a case marker here, as it is attached to an NP which bears a θ-role.
On the other hand, the presence of *ga on the adjunct can only be motivated, if it is interpreted as a focus marker, because an adjunct does not require case. Its interpretation as a focus marker is possible here, since the adjunct appears as the highest *ga-phrase in TP in accordance with the focus generalisation.

The structure in (53) explains why there cannot be more than one adjunct *ga-phrase in a sentence (cf. (6)-(8)). Placing an adjunct *ga-phrase above another renders the *ga attached to the lower adjunct uninterpretable. This is because it is not licensed in the position described by the focus generalisation, where it is interpreted as a focus marker. Recall that *ga attached to an adjunct cannot function as a case marker. Its presence on the lower adjunct can therefore not be motivated. The derivation violates the principle of Full Interpretation and hence crashes.

The ungrammaticality of the order subject-*ga adjunct-*ga can be explained in a similar manner. In principle, it is possible to base-generate the subject in a position higher than the adjunct *ga-phrase, yielding the ungrammatical order NP-*ga PP-*ga, as shown below.

\[(54) \quad *[_{TP} \quad NP_{i-ga} \quad [_{TP} \quad PP_{-ga} \quad VP] \quad T]\]

However, in this derivation, *ga on the PP cannot be interpreted. Since *ga on the PP cannot function as a case marker and fails to be interpreted as a focus marker, the presence of *ga on the adjunct is again not motivated, rendering the derivation to crash.

It appears that Tateishi's (1991) and Takahashi's (1996) analyses for the adjunct multiple nominative construction can also account for the ungrammaticality of the order subject-*ga adjunct-*ga. Recall that in their analyses, nominative Case may be assigned to SpecAgrSP and SpecIP positions and SpecVP and SpecIP positions, respectively. Tateishi assumes that a 0-marked subject is base-generated in SpecAgrP. Thus, the adjunct *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 unavailable to adjuncts. The adjunct,
therefore, moves to SpecIP to receive nominative Case. In both accounts, the result is that the adjunct *ga*-phrase precedes the subject. However, as mentioned in section 3.1, both Tateishi and Takahashi assume for the possessive multiple nominative construction that a tensed head may license nominative case multiple times. Thus, it is unclear how, for example, adjunction of the subject to IP above an adjunct *ga*-phrase can be prevented, yielding the ungrammatical order.

Importantly, an adjunct *ga*-phrase 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 *every* cannot occur in a dislocated position, yet (55) shows that an adjunct *ga*-phrase may appear with such a quantifier. An adjunct *ga*-phrase is therefore not left-dislocated.

(55) kono toori-de-wa subete-no honya-ga [gakusee-ga hon-o yoku kau].
this street-on-Top every-Gen book.shop-GA student-GA book-Acc often buy

"On this street, it is at every shop that students often buy books."

Let us now consider some predictions that the proposed analysis makes.

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.\(^{24}\)

(56) *Topicalisation* (modified from Saito (1985, 337))

\[*_{IP} Hiroshima-kara]-wa Amerika-ni
Hiroshima-from-top America-in
\[_{NP} [_{IP} \epsilon_i (soko-kara) kita] hito]-ga oozei iru.\]
'Lit.: Speaking of from Hiroshima, there are many people in America who came (from there).'

(57) *[PP Anna taipu-no zyosei-to]-ga

\[ \begin{align*}
\text{that type of} & \quad \text{woman-with-GA} \\
[\text{NP } \epsilon_i (\text{kanozyo-to}) \text{ kekkon-site-i-ru}] \text{ otoko]-to } \text{hanasi-niku-i}. & \\
(\text{she-with}) & \quad \text{marry-Pres} \quad \text{man-with} \quad \text{talk-hard-Pres}
\end{align*} \]

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

Accordingly, moving an adjunct ga-phrase out of an island in violation of the CED should result in ungrammaticality and no overt pro corresponding to the adjunct should be allowed. These predictions are borne out. (58) illustrates that a pro cannot be overtly realised. In the ungrammatical example of (59), an adjunct ga-phrase has been extracted out of a relative clause, violating the CED.

(58) ano mise-ga kyonen (*soko-de) gakusee-ga (*soko-de) hon-o yoku katta.

\[ \begin{align*}
\text{that shop-GA} & \quad \text{last.year} \quad \text{there-at} \quad \text{student-GA} \quad \text{there-at} \quad \text{book-Acc} \quad \text{often} \quad \text{bought} \\
'& \text{It was at that shop that students often bought books last year.'}
\end{align*} \]

(59) *ano mise-ga [TP John-ga [NP \epsilon_i \ t] \ text{hon-o} \ yoku kau]

\[ \begin{align*}
\text{that shop-GA} & \quad \text{John-GA} \quad \text{book-Acc} \quad \text{often} \quad \text{buy} \\
\text{gakusee]-nituite} & \quad \text{hanasita}. \\
\text{student-about} & \quad \text{talked}
\end{align*} \]

'John was talking about a student who often buys books at that shop.'
The above are difficult to capture in analyses where adjunct *ga*-phrases are treated as nominative NPs, as NP-*pro* does exist in Japanese (section 2.1).25

Another prediction is that an adjunct *ga*-phrase, in contrast to a possessive *ga*-phrase, should not have a subject-predicate relation with the clause to its right, since no predication is involved in deriving an adjunct multiple nominative construction. For independent reasons, however, the subjecthood tests applied to a possessive *ga*-phrase in sections 2.3 and 2.4 are not applicable to an adjunct *ga*-phrase. 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.

\[(60) \ast \text{ano mise-} \text{ga} \; \text{[totemo ookiku]} \; \text{katu [gakusee-} \text{ga hon-o yoku kau]}^{26}\]

\[\text{that shop-GA very big-Pres.Conj and student-GA book-Acc often buy}\]

'(intended) It is that shop which is very big and [it is at that shop that] students often buy books.'

Secondly, although predicates can usually be modified by a degree adverb (section 2.2), as the ungrammaticality of the example in (61) illustrates, the clause in question cannot be.
Despite the fact that the subjecthood tests cannot be applied to an adjunct PP-\text{ga}, the fact that the clause to its right does not behave like a predicate suffices to show that an adjunct \text{ga}-phrase is not a subject. In the analyses, where an adjunct \text{ga}-phrase and a possessive \text{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 a subject-predicate relation between an adjunct \text{ga}-phrase and the clause to its right.

4. Concluding Remarks

In this paper, I have attempted to show that the two types of multiple nominative constructions must be distinguished in contrast to the standard analysis, which treat all \text{ga}-phrases as nominative NPs or DPs. I have proposed that a possessive \text{ga}-phrase is an NP, while an adjunct \text{ga}-phrase is a PP. The particle \text{ga} can encode information as a case marker as well as a focus marker. It functions as a case marker whenever it marks an NP bearing a \( \theta \)--role. However, according to the focus generalisation proposed in this paper, it is also be interpreted as a focus marker, if the constituent to which it is attached appears as the first \text{ga}-phrase in a sentence. \text{Ga} on a possessor of the subject therefore functions as a case marker, since it is an NP bearing a \( \theta \)--role. The first possessive \text{ga}-phrase in a sentence must be interpreted as a focus marker, since \text{ga} attached to this phrase is licensed in the configuration described by the focus generalisation. On the other hand the presence of \text{ga} on an adjunct can only be motivated, if it is interpreted as a focus marker, as adjuncts do not need case. The proposed analysis can capture various observed
properties of the two constructions, which are difficult to capture in the standard analysis. In particular:

(i) a possessive *ga*-phrase has a possessive relation with the following *ga*-phrase, but an adjunct *ga*-phrase does not;

(ii) the first *ga*-phrase in a sentence in both constructions is obligatorily focused;

(iii) a possessive *ga*-phrase can host a floating quantifier but an adjunct *ga*-phrase cannot;

(iv) *pro* associated with a possessive *ga*-phrase can be overtly realised, but *pro* associated with an adjunct *ga*-phrase cannot;

(v) a possessive *ga*-phrase has a subject-predicate relation with the clause to its immediate right, but an adjunct *ga*-phrase does not;

(vi) there can be an indefinitely large number of possessive *ga*-phrases, but only one adjunct *ga*-phrase in a clause;

(vii) the word order among *ga*-phrases is fixed in both constructions.

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 adjuncts 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 these 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 occurrences, namely that the former is a prerequisite for the latter. Thus, the
hypothesis would be that a language with multiple case constructions must have morphological case, but the reverse is not necessarily true. 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 its role is to derive a predicate from a non-predicate, as pointed out by Chierchia & McConnell-Ginet (1990). 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 the possessive multiple nominative construction, namely the structure in (2).

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 third highest TP 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 θ-role promotion for a possessive ga-phrase is shown below. The same process is repeated if NP1 contained a pro, allowing for an indefinitely large number of possessive nominative phrases. Note that the following structure is a semantic representation, which mirrors the syntactic structure because of principles of compositionality. I am not claiming that semantic representations are present in the syntax.
 NOTES:

1 In fact, there are two other types of multiple nominative constructions: one involves a stative predicate (Kuno (1973); Kuroda (1986); 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-GA Japanese-GA understand

'John understands Japanese.'

(ii) New York-ga koosoo-kentiku-ga takusan aru.

New York-GA high-rise buildings-GA 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 types in this paper, but the reader is referred to Vermeulen (2002b), where they are discussed.

2 An anonymous reviewer has pointed out to me that the following sentences, where a *ga*-phrase appears in non-finite clauses, are grammatical for him.

(i) [Eigo-ga wakari]-sae John-ga sita.

English-GA understand-INF-even John-GA did
'John even understood English.'

(ii)  ko-ko-ke-ni cansite-wa  wa  waru-ku  omou.

regarding this matter-top  I-top  John-ga  bad-INF  think

'Regarding this matter, I consider John guilty.'

However, my informants find these sentences ungrammatical. It seems to be the case that there are some dialectal variations with respect to the licensing of *ga* and in the dialect of the reviewer, *ga* can be licensed by elements other than tense.

3 Although I am calling the positions in which *ga*-phrases are licensed 'specifiers', they can equally be considered as 'adjoined positions'. Whether the positions are specifiers or adjoined positions makes no difference to the proposed analysis.

4 See Vermeulen (2002a) for an alternative approach that assumes multiple heads for licensing multiple *ga*-phrases.

5 There is one exception to the focus generalisation. In an embedded clause, the first possessive *ga*-phrase need not be focused, as observed by Kuroda (1986), as shown below.

(i)  mosi  usagi-ga  mimi-ga  mizikak-ereba, pro ookina  nezumi-ni  mieta-daroo.

if  rabbit-GA  ear-GA  short-Cond.  big  rats-to  look-like-would

'It seems that the kind of obligatory focus imposed on the first *ga*-phrase in a sentence is unavailable to the first *ga*-phrase in an embedded clause. Thus, it is the first and hence the highest *ga*-phrase in a sentence, rather than in a clause, that must be focused. This predicts that an adjunct *ga*-phrase should be disallowed precisely in this environment. The following example shows that this prediction is borne out.

(ii)  *mosi  ano  mise-ga  gakusee-ga  yoku  hon-o  kau-naraba,

if  that shop-GA  student-GA  often  book-Acc  buy-Cond

Mary-wa  John-ni  matigatte  hokano  honya-o  suisen-sita.

Mary-Top  John-to  mistakenly  other-Gen  bookshop-Acc  recommended.
'If it is at that shop that students often buy books, Mary has mistakenly recommended the wrong shop to John.'

cf. *mosi gakusee-ga yoku hon-o ano mise-de kau-naraba,...

if student-GA often book-Acc that shop-at buy-Cond

6 In Japanese, when the predicate is an intransitive stative predicate such as unergative adjectives and in copula constructions, the subject *ga*-phrase is also obligatorily focused, although it is the only *ga*-phrase in the sentence (Kuno (1973)). It seems that in these constructions, the obligatory focus of the subject *ga*-phrase is determined by other factors. See Heycock (1994) for an analysis of focus in these kinds of constructions using Vallduví’s (1992) system of 'information package'.

7 Ura (1996) claims that when a possessive nominative phrase is in an alienable possessive relation with the following NP, it is what we consider as an adjunct *ga*-phrase in this paper ('major subject' in his terminology). His claim is based on the observation that another adjunct *ga*-phrase cannot be introduced in a clause, if it already contains an alienable possessor in the nominative. The following example is used to illustrate this point (Ura (1996: 104)).

(i) fuyu-ga John-ga kuruma-ga seibifuryoo-da.

winter-GA John-GA car-GA ill-conditioned

'It is in winter that John is such a person that his car is ill-conditioned.'

Ura argues, following Kuroda (1986), that such possessive nominative phrase is base-generated in clause-initial position and is not associated with a position within the following NP.

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-GA civilised country-GA male-GA life expectancy-GA 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.

8 Fukuda (1991) claims that the subject NP does not constitute a barrier in Japanese. Takahashi (1994) argues that there is restructuring within NP, which enables NP in the highest specifier to move out of a subject without violating the CED.

9 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.

10 The choice of what kind of degree expressions can modify a gradable predicate depends on the categorial status of the predicate. I will not discuss this issue for reasons of space, but see Doetjes, Neeleman and van de Koot (2002), for example, who argue that there are two classes of degree expressions.

11 Unlike the case of the English tough construction, the null operator in (27) never moves. It is not a peculiar kind of a null operator, as there are other null operators which are base-generated, for example a construction in English where an island contains a resumptive pron, as shown below. The construction involves an apparent violation of the CED.

(i) John saw the man [Øi that [the fact that Mary likes him]] surprised everyone.

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

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-GA son-GA laugh-SH-Past

'It is Viscount Yamaoka whose son laughed.'

An anonymous reviewer has pointed out to me that the coordinate particle *katsu* should be used for a reliable instance of coordination in Japanese.

An anonymous reviewer questions the idea that non-maximal projections are coordinated in the structure in (34). However, coordination of non-maximal projections is generally allowed.

(i) [DP the [NP old [NP books] and [NP articles]]] have arrived.

(ii) The experiments took place [PP 3 metres [PP under the ground] and [PP above the water]]

This of course raises the question of what kind of elements receives a θ-role. When an adjunct modifier of the subject can appear NP-externally with *ga*, it may be that this adjunct bears a possessor role. There seems to be a variation between types of modifiers with respect to whether they can appear external to the subject with *ga.*

Kuroda (1986) 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 possessive *ga*-phrases from adjunct *ga*-phrases. Thus, I do not think that Kuroda (1986) has a separate account for the adjunct multiple nominative construction.

Takahashi (1994) argues with the following example 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 syokuryuuudoku-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 \textit{ga}-phrases seem to be possessive phrases rather than adjuncts. I assume with Tateishi (1991), therefore, that the maximum number of \textit{ga}-phrases permitted in the adjunct multiple nominative construction is two.

20 Takahashi (1994) argues that possessive nominative phrases occupy adjoined positions, where adjuncts cannot be assigned nominative Case. Possessive phrases, but not adjuncts, must be assigned Case, because they are arguments and are therefore subject to the Visibility Condition. An anonymous reviewer has proposed to me a similar alternative using SpecCP for an adjunct \textit{ga}-phrase and multiple SpecTPs for possessive \textit{ga}-phrases. He or she assumes that there can be only one SpecCP. However, in both analyses, it seems rather strange to claim that an adjunct can be assigned nominative Case in one position, but not in another, where the same Case is available. Besides, in the reviewer's analysis, multiple SpecCPs must be allowed, since other elements such as topics can precede an adjunct \textit{ga}-phrase. In addition, it appears more desirable to be able to capture the obligatory focus of the first \textit{ga}-phrase in both constructions.

21 Tateishi (1991) cites the following example as grammatical, where the subject precedes an adjunct \textit{ga}-phrase \textit{ano ziko-ga} 'that accident-GA'. The quantifier \textit{takusan} 'many' has floated out of the subject \textit{nihonzin-ga} 'Japanese-GA'.

(i) nihonzin-ga ano ziko-ga takusan sinda.

Japanese-GA that accident-GA many died

However, the subject seems to be left-dislocated here, as it cannot appear in this position with the quantifier \textit{takusan} 'many', making it non-specific.
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) (*takusan-no) nihonzin-ga ano ziko-ga sinda.

*many-Gen Japanese-GA that accident-GA died*

I have already argued in footnote 19 that the above example is an instance of a possessive multiple nominative construction. Moreover, although the example in (ii) is grammatical for Takahashi, it sounds extremely awkward to my informants. It appears that, as in the example in (i), the first *ga*-phrase, syokuyuuudoku-ga 'food poisoning-GA', is left-dislocated. This point is illustrated below by the impossibility of quantifying syokuyuuudoku-ga and the possibility of overtly realising a *pro* associated with it in a position below hugu-ga.

(iii) (*subete-no syu-no) syokuyuuudoku-ga kono tyoosa-niyoruto

*every-Gen kind-Gen food poisoning-GA this survey-according.to*

hugu-ga (sore-ga) yoku okoru.

*blowfish-GA it-GA often occur-Pres*

'According to this survey, it is (every kind of) food poisoning that occurs most frequently with blowfish.'

Thus, the subject cannot precede an adjunct *ga*-phrase, unless the former is left-dislocated.

22 Hiroto Hoshi (personal communication) pointed out to me that *de* can be realised before *ga* without *dake* (also cf. Kuroda (1986)). However, all my informants felt 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.
23 It is also possible for an adjunct to be an NP in Japanese. *Ga* attached to such an NP must be interpreted as a focus marker, since it is still an adjunct and hence does not require case. For the purpose of exposition, I will continue to represent adjuncts as PPs in the main text. However, the analysis proposed in this paper can be extended to adjunct NPs.

24 One may find an example where a possessive *ga*-phrase appears to be a PP and hence a piece of evidence for the existence of PP-*pro* in Japanese. However, in such an example, a PP-*pro* associated with the possessive *ga*-phrase cannot be overtly realised, as shown below.

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

N.Y-from-GA this survey-according.to from-there-Gen road-GA 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 the adjunct we have been considering in this paper. When it appears without *ga* or *no*, it may follow the subject NP (cf. (48)), as shown in (ii), while such an option is unavailable to other possessive phrases, as illustrated in (iii).

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

road-GA New York-from bad-Pres

'The roads are bad from New York.'

(iii) *mimi-ga* usagi-ga/no/Ø naga-i.

ear-GA rabbit-GA/Gen/Ø long-Pres

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.

However, an anonymous reviewer has pointed out to me with examples like the following that there can be actually more than one PP-*ga*, contrary to what the above proposal predicts.

(iii) a. kono eki-kara-ga Tokyo-hoomen-e-ga zyookyaku-ga ooi.

this station-from-GA Tokyo-direction-to-GA passengers-GA many
'There are many passengers from this station to the direction of Tokyo.'

b. Singapooru-kara-ga yooroppa-hoomen-e-ga kookuumen-ga yasui

Singapore-from-GA Europe-direction-to-GA airline.ticket-GA cheap

'The airline tickets are cheap from Singapore to the direction of Europe.'

Jackendoff (1973) observes that a certain class of directional PPs exhibits some peculiar properties in that when there are two such PPs, they form one constituent with the second one being embedded under the first, as shown below.

(iv) \[ PP P NP [PP P NP] \]

The PPs in the above examples seem to fall precisely into this class of PPs. For example, the order between the two PPs cannot be reversed.


Tokyo-direction-to-GA this station-from-GA passengers-GA many

Moreover, they must be adjacent.


this station-from-GA everyday Tokyo-direction-to-GA passengers-GA many

Thus, it appears that the two PP-ga’s in these examples do form one constituent, with one PP-ga being embedded under the other, counting as one adjunct ga-phrase. However, at the moment, I have no account of why ga can or must appear on both PPs.

25 Even if an adjunct ga-phrase is an NP, it is impossible to extract it out of an island or to overtly realise pro associated with it. This is because NP-pro must refer to an argument.

26 The order of the two conjuncts must be as is shown, in order to avoid the possibility of having a structure like the following:

(i) *[ano mise-ga gakusee-ga hon-o yoku kai] katu [pro totemo ookii]

that shop-GA student-GA book-Acc often buy-Conj and very big-Pres
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