Ga ga constructions in Japanese*

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Abstract

The Japanese nominative particle ga can mark a subject, a possessor of a subject, an adjunct and the object of a stative predicate. A prevalent view is that a tensed head licenses more than one nominative phrase in multiple specifier or adjoined positions in one projection (Heycock 1993, Ura 1996, among others). I argue, however, that such a head licenses exactly one nominative phrase and that proxy categories are created for multiple licensing (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.

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) a. *Possessive Multiple Nominative Construction* (modified from usagi-ga mimi-ga naga-i. Takahashi 1994: 395) rabbit-GA ear-GA long-Pres 'It is rabbits which have long ears.'
 - b. Adjunct Multiple Nominative Construction (Tateishi 1991: 30) ano ziko-ga takusan-no nihonzin-ga sinda. that accident-GA many-Gen Japanese-GA died. 'It was in that accident that many Japanese died.'

^{*}I am indebted to Ad Neeleman for all his help and support. I would also like to thank Takane Ito, Yoko Nakano, Takumoto Suda, Soko and Masahiko Tomita, Hiroyuki Uchida, for helping me with the data and Tomohiro Fujii, Caroline Heycock and Hiroto Hoshi for their useful comments. This is an expanded version of a talk given at the 5th Durham Postgraduate Conference in Linguistics in June 2002. Thanks to the organisers of the conference and the audience.

c. Stative Construction (Takezawa 1987:24)
John-ga nihongo-ga wakaru.
John-GA Japanese-GA understand
'John understands Japanese.'

Each sentence contains two constituents which are marked by the nominative marker ga. Despite this superficial similarity, there are some significant differences between the three constructions. Firstly, in (1a) and (1b), 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'. On the other hand, in (1c), it is the first nominative phrase, *John-ga*, which serves as the subject of the predicate *wakaru* 'understand'. Thus, in (1a) and (1b), the non-subject ga-phrase precedes the subject, while in (1c), it follows the subject.

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

Thirdly, while an indefinitely large number of ga-phrases is allowed in the possessive multiple nominative construction, as (2a) shows, the maximum number of such phrases permitted in the other two types is two, as shown in (2b) and (2c).

- (2) a. kitahankyuu-ga usagi-ga mimi-ga naga-i. N. Hemisphere-GA rabbit-GA ear-GA long-Pres 'It is the Northern Hemisphere where rabbits have long ears.'
 - b. *umi-ga ano ziko-ga takusan-no nihonzin-ga sinda. sea-GA that accident-GA many-Gen Japanese-GA died. 'It was in the sea that many Japanese died in that accident.'
 - c. *Tokyo-ga John-ga nihongo-ga wakaru. Tokyo-GA John-GA Japanese-GA understand 'It is in Tokyo that John understands Japanese.'

However, in all three constructions the sentence-initial *ga*-phrase is obligatorily focused (Kuno 1973). In the sentences in (1), *usagi-ga* 'rabbit-GA', *ano ziko-ga* 'that accident-GA' and *John-ga* 'John-GA' must all be focused, while the second *ga*-phrases are not obligatorily interpreted as such. Similarly, in (2a), *kitahankyuu-ga* 'N. Hemisphere-GA' 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.

¹ More precisely, it must receive an exhaustive listing reading.

Thus, the nominative marker ga seems to have multiple functions. It marks a subject, a possessor of a subject, an adjunct and the object of a stative predicate. Furthermore, 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, nonarguments 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 functional head. Such modification to Case theory seems undesirable.

Secondly, a functional head 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 construction (cf.(2)). 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 three constructions.

In this paper, I claim that an alternative analysis can indeed be obtained if we assume that a tensed head licenses exactly one ga-phrase in a single licensing domain. The licensing of multiple ga-phrases is mediated by movement of the verb to a proxy category in the sense of Nash & Rouveret (1997). Moreover, I propose a generalisation which captures the obligatory focus of the sentence-initial ga-phrase in terms of its licensing configuration. This generalisation operates as an interpretational rule and further regulates the distribution of ga. It is important to note here, however, that in this paper, I am concerned only with the configuration in which ga 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.

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 predication, mediated by a null operator. There, I demonstrate that any ga-phrase in this construction 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 an adjunct ga-phrase is a PP and that ga on a PP functions as a focus marker. In order for ga to be interpreted as such, an adjunct ga-phrase must move to sentence-initial position. This analysis of the adjunct multiple nominative construction is extended to the stative construction in section 4. I will argue that the subject ga-phrase of a stative predicate is ambiguous between a PP and an NP. 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 5.

1.2 Theoretical assumptions

- 1.2.1 What licenses ga? Takezawa (1987), among many others, argues that a tensed head licenses nominative case in Japanese. A nominative phrase, therefore, should not appear in a non-finite clause. The ungrammaticality of the following examples each illustrates that this is indeed the case in the three types of multiple nominative constructions. In (3a), the matrix predicate *omotta* 'thought' takes a small-clause like complement. In (3b) and (3c), the causative morpheme (s)ase takes a non-finite complement clause. In all three examples, a nominative phrase in the embedded clause is disallowed.
- (3) a. *John-wa [usagi-ga mimi-ga naga-ku] omotta.

 John-Top rabbit-GA ear-GA long-Inf thought

 'John considered rabbits' ears long.'
 - b. *John-wa [ano ziko-ga takusan-no nihonzin-ga sin]-ase-ta.

 John-Top that accident-GA many-Gen Japanese-GA die-Caus-Past.

 'It was in that accident that John made many Japanese died.'
 - c. *Mary-wa [John-ga sono koto-ga wakar]-ase-ta.

 Mary-Top John-GA this fact-GA understand-Caus-Past
 'Mary made John understand this fact.'

Thus, I assume, following Takezawa (1987), that a tensed head licenses the particle ga in Japanese. As noted above, however, I shall remain neutral as to whether case-licensing is achieved by feature-checking or assignment by a head.

1.2.2 How is ga licensed? A number of linguists (Fukui 1986, Heycock & Lee 1989, Heycock 1993, Koizumi 1994, Saito 1982, Takahashi 1994, 1996, Takezawa 1987, Tateishi 1991, Ura 1994, 1996, 1999, 2000, among others) have argued that a tensed head can license more than one nominative phrase in multiple specifier or adjoined positions in one projection. However, as noted by Neeleman & Weerman (1999), Japanese seems to obey the ban on assignment of identical cases by a single predicate, as double dative or accusative constructions are rare in this language. Thus, when there are two ga-phrases, there should also be two separate licensing domains for case.² I argue, following Nash & Rouveret (1997) and Neeleman & Weerman (1999), that an additional licensing domain can be obtained through

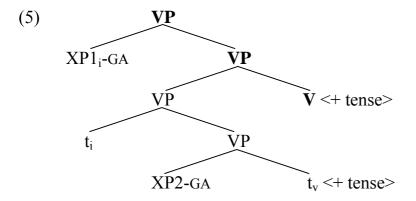
² I assume that a licensing domain for case is the maximal projection of a licensing head.

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. This operation is potentially recursive.

Consequently, when there are two ga-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 ga-phrases moves to a position in this functional projection for licensing of the particle. I propose the following principle for Japanese.

(4) Ga is licensed if it is dominated by a node projected by a tensed head.

This operation results in creating a structure shown in (5). Ga on XP1 is licensed in a separate domain from that on XP2. I shall indicate proxy categories and phrases projected by them in bold throughout the paper.



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-toone 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. The crucial point is that multiple licensing domains may be obtained by creating proxy categories.

1.2.3 The marker ga. Recall that a sentence-initial ga-phrase must be focused in all three constructions. According to the structure in (5), the obligatorily focused constituent is the one which moves for licensing of ga. 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 XP-ga is focused if ga on this phrase is licensed in the highest functional projection in a sentence.

The generalisation essentially states that the particle ga is interpreted as a focus marker if licensed in the described configuration, as the effect is that the constituent to which it is attached must be focused. I propose that this generalisation functions as an interpretational rule for ga and as such, it regulates the distribution of ga in addition to the general licensing principle for ga proposed in (4).

The generalisation captures that the obligatory focus of a sentence-initial ga-phrase is a property unique to multiple nominative constructions. If a sentence contains only one ga-phrase, it need not be focused, even if it appears sentence-initially, because ga on this phrase is licensed in-situ by the verb which is also in its base-position.³ In the following sentences, John-ga is not obligatorily focused.

In sum, I assume that a tensed head licenses ga 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 licensing configuration of ga. It is important to note that the three assumptions will remain constant and that the differences between the three types of constructions will fall out from independent properties of each type.

³ At first sight, it seems problematic to the generalisation that the subject of an intransitive stative predicate such as unergative adjectives and copula constructions must also be focused in Japanese (Kuno 1973). However, for these constructions, I adopt the analysis proposed by Heycock (1994), where the obligatory focus of the subject is explained in terms of 'information packaging' developed by Vallduví (1992). Briefly, in every sentence 'focus' must be present and 'link' (what is usually understood as 'topic') must be at least recoverable, if not overtly expressed. In the constructions in question, there is no event argument, which is available as a link. Consequently, the predicate must be the link and the subject must be the focus, rendering the obligatory focus interpretation of the subject.

2 Possessive Multiple Nominative Construction

2.1 Apparent CED violation

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

(8) kitahankyuu-ga/no usagi-ga/no mimi-ga naga-i. N.Hemisphere-GA/Gen rabbit-GA/Gen ear-GA 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 this construction 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.

(9) [IP/AgrSP [NP NP-Gen NP]i-Nom [IP/AgrSP [NP ti NP-Nom]...I/AgrS]]]

This approach captures neatly the possessive relation between two adjacent NPs.⁴ 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.⁵ Besides, crosslinguistically, 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.⁶

However, this apparent violation of the CED by movement of an NP is also found in topicalisation, relativisation and tough constructions. Interestingly, a resumptive

⁴ Ura (1996) claims that an alienable possessive relation should be distinguished from an inalienable possessive relation with respect to its syntactic structure. However, I believe that they have the same syntactic structure. I refer the reader to Vermeulen (2002) for discussion.

⁵ This option is widely known in the literature as ga/no conversion, most notably observed in relative clauses (Saito 1983, Tsujimura 1996, Watanabe 1996).

⁶ Fukuda (1991), for example, claims that the subject NP is not a barrier in Japanese.

pronoun may appear in the place of a trace, as indicated by a pronoun in parentheses in the following examples.

- (10) Topicalisation (modified from Kuno 1973: 249) sono sinsi_i-wa [$_{S[NP} O_j [_{S(kare_i-ga)} e_j kitei-ta]]$ yoohuku]-ga yogoretei-ta. that gentleman-Top (he-GA) wearing-Past suit-GA dirty-Past 'Speaking of that gentleman, the suit (he) was wearing was dirty.'
- (12) Tough construction (modified from Takezawa 1987: 211) [kono te-no hanzai]-ga keisatu-nitotte this kind of crime-GA police-for $[_{NP} \mathcal{O}_j [_S e_j \text{ (sore}_i\text{-o) okasi-ta}] \text{ ningen}]\text{-o sagasi-yasu-i.}$ (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 below (Saito 1985: 293).

(13)dekaketa yoo-desu. a. *e* moo already went out seem 'It seems that he/she/they went out already.' [John-ga e_i motte-kuru to] omoimasu b. e_i John-GA bring think Comp 'I think that John will bring it/them.'

Since the possessive multiple nominative construction also allows an apparent violation of the CED, the trace of the moved NP in (9) is perhaps a pro. This predicts that it should be possible to spell it out, which is true. ((15) is modified from Tateishi 1991: 270)

- (14)kitahankyuu_i-ga kyonen-no tyoosa-niyoruto N. Hemisphere-GA last.year-Gen survey-according.to mimi-ga naga-i. (soko_i-no) usagi-ga rabbit-GA there-Gen long-Pres ear-GA 'According to last year's survey, it is the Northern Hemisphere where rabbits (there) have long ears.'
- [?]John_i-ga (15)kyonen-no titioya-ga nyuuin-sita. natu-ni (kare_i-no) John-GA last.year-Gen summer-in he-Gen father-GA hospitalised 'It is John whose (his) father was hospitalised summer last year.'
- [?]John_i-ga (16)kinoo gakkoo-de (kare_i-no) imooto-ga John-GA yesterday school-at he-Gen younger.sister-GA tomodati-ga happyoo-o sita presentation-Acc did. friend-GA 'It is John whose (his) sister's friend gave a presentation at school yesterday'.

The above data suggest that in the possessive multiple nominative construction too, no movement of an NP is involved and that what appears to be a trace is a pro. This approach would enable us to achieve the same effect as the Genitive Raising approach in explaining the possessive relation between two adjacent ga-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 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 the English tough construction. 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).

Predicate

(17) John is
$$[\emptyset_i [AP]$$
 easy t_i to please $t_i]]$

This process turns the AP *easy to please* into a predicate with the NP *John* as its subject. ⁸ Consequently, *John*, despite being the subject, is interpreted as the complement of the embedded verb.

Since a possessive nominative NP is also associated with a position in the clause to its right, it seems reasonable to assume that it is licensed by predication. However, I argue that this predication is mediated by a null operator similarly to the case of the English tough construction. I propose the structure in (18) on the next page for the possessive multiple nominative construction in (2a)⁹.

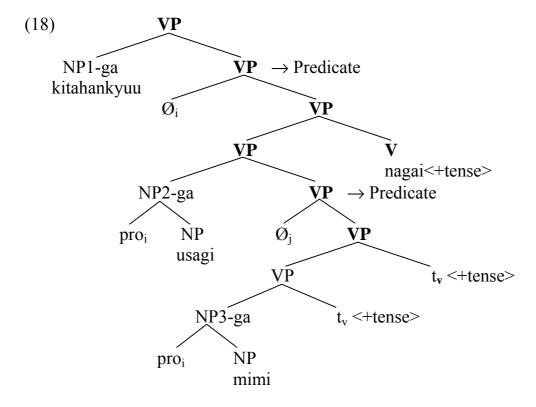
Possessive ga-phrases are each base-generated in an adjoined position to a VP projected by the verb which has moved to a proxy category. Nominative case on each NP is, therefore, licensed in a separate domain. Recall that a single predicate cannot license more than one occurrence of the same case in 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. 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

⁷ Although a null operator is traditionally assumed to move only to the specifier position of the infinitival clause, I assume with Browning (1987) that it moves further to SpecAP. This should make no difference to the point being made here.

⁸ See Vermeulen (2002) for discussion on predicate-hood of the AP.

⁹ *Naga-i* 'long-Pres' is in fact an adjective. Thus, VPs should be replaced by APs in (18). 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 *naga-i* is a tensed head and *ga* is licensed by a node projected by it.

phrase (see Vermeulen 2002 for how exactly θ -roles are promoted). This explains the possessive relation between two adjacent NP-ga's.



The structure in (18) 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 nominative NP occupies a position in a newly created VP as in (18), while a possessive genitive NP is in a position within an NP projection, as illustrated in (19).

(19)
$$[\mathbf{v_P}[NP2] NP1 - no NP2] - ga [\mathbf{v_P} \emptyset_i [\mathbf{v_P}[NP3] pro_i NP3] - ga t_v] V]]]$$

However, unlike in the Genitive Raising approach, no movement of a possessive Rather, as argued above, a possessive nominative phrase is NP is involved. 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 the possessive multiple nominative construction described so far. Firstly, as already noted, the operation of θ -role promotion explains the possessive relation between two adjacent NP-ga's. In analyses, where all possessive ga-phrases are assumed to be base-generated in multiple specifier or adjoined positions in one projection (Fukui 1986, Heycock 1993, Heycock & Lee 1989, Namai 1997 Saito 1982), which I will call 'a base-generation approach', the possessive relation between the NP-ga's 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, recall that creating a proxy category is potentially a recursive operation. This explains the possible occurrence of an indefinitely large number of possessive *ga*-phrases, without claiming that nominative case is an exception to the general ban on identical cases.

Finally, the structure in (18) together with the focus generalisation in (6) captures correctly the obligatory focus of the sentence-initial possessive nominative phrase. The focus generalisation states that a ga-marked constituent is focused, if ga attached to it is licensed in the highest functional projection in a sentence. Thus, the first possessive NP-ga, kitahankyuu-ga 'N.Hemisphere-GA', in the tree in (18) must be focused, since its ga is licensed in the highest functional projection. This is illustrated by the following example, repeated from (2a).

(20) [kitahankyuu]-ga usagi-ga mimi-ga naga-i.

N. Hemisphere-GA rabbit-GA ear-GA 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-GA' should be focused, since this is now the *ga*-phrase which has its *ga* licensed in the configuration described by the generalisation. (21) shows that this is indeed true.

(21) [kitahankyuu-no usagi]-ga mimi-ga naga-i. N. Hemisphere-Gen rabbit-GA ear-GA long-pres [+ focus]

The focus generalisation captures furthermore that no constituent need be focused, when both possessive phrases are realised in the genitive. This is because there is now only one nominative case to be licensed and hence, the verb remains in-situ, i.e. no proxy category is created. This is illustrated below.

(22) [kitahankyuu-no usagi-no mimi]-ga naga-i. N. Hemisphere-Gen rabbit-Gen ear-GA long-Pres [± focus]

There is one significant consequence to this approach, however. As mentioned above, θ -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) 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. Nevertheless, the crucial point is that subjects generally display these properties. Thus, if a possessive gaphrase were to be identified as the subject of the clause to its right, it should display these properties.

Firstly, when embedded under an ECM/control verb, the leftmost possessive NPga may alternatively appear with accusative case (Heycock 1993, Takahashi 1994). This property is generally associated with a subject. 10

[kitahankyuu-ga/o (23) wareware-wa mimi-ga usagi-ga N. Hemisphere-GA/Acc rabbit-GA we-Top ear-GA omoi-gati-daga.... naga-i]-to long-Pres-Comp think-have.tendency-but... 'We have a tendency to think that it is the Northern Hemisphere where rabbits have long ears, but...'

Secondly, a possessive nominative phrase should be able to bind the subjectoriented reflexive zibun. This prediction is borne out (Fukuda 1991, Heycock 1993, Kuno 1973, Takahashi 1996, Ura 1996). 11 ((24b) is modified from Tateishi

(1991:270)

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 1996 and references cited there).

- (24) a. [?]John_i-ga imooto_j-ga tomodati_k-ga
 John-GA younger.sister-GA friend-GA
 zibun-no_{i/j/k} gakkoo-de happyoo-o sita.
 self-Gen school-at presentation-Acc did.
 'John_i's younger sister_j's friend_k gave a presentation in self_{i/j/k}'s school.'
 - b. Taroo_i-ga titioya_j-ga otooto_k-ga [zibun_{i/j/k}-de Taroo-GA father-GA younger.brother-GA self-by hatumeesita kusuri-ga gen'in-de] nyuuinsita (koto). discovered medicine-GA cause-by hospitalised (fact) 'It was Taroo_i whose father_j's younger brother_k was hospitalised due to medicine discovered by himself_{i/i/k}.'

Thirdly, an antecedent of PRO in a *nagara*-clause 'while'-clause must be the closest c-commanding subject (Perlmutter 1984, D. Takahashi 1996, Ura 2000). The following examples show that a possessive NP-ga can control PRO.

- (25) a. John_i-ga [PRO_i [(zibun_i-no) kodomotati-ga minna se-ga John-GA self-Gen children-GA all height-GA hiku-i]-to nageitei-nagara] musume-ga se-ga takai. short-Pres-Comp lamenting-while daughter-GA height-GA high-Pres 'While PRO_i lamenting that (his_i) children are small, it is John_i whose daughter is tall.'
 - b. usagi_i-ga [PRO_i ninzin-busoku-de komattei-nagara] rabbit-GA carrots-shortage-by suffering-while mimi-ga nagai. ears-GA long-Pres 'While PRO_i suffering from a shortage of carrots, it is rabbits_i which 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-ga is a person for whom the speaker has respect, subject honorification is triggered on the predicate (Takahashi 1994, 1996, among others), as illustrated below. ¹²

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. (cont.)

bessoo-ga (26) Yamaoka-sisyaku-ga go-rippa-da. (Takahashi 1994: 398) Yamaoka-viscount-GA villa-GA splendour-SH-Cop 'It is Viscount Yamaoka whose villa is splendid.'

Considering that a possessive NP-ga displays the above 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-ga

Evidence for predicate-hood of the clause in question comes from two predicatehood tests. Firstly, 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 **Predicate** [husahusa-site-i]-te [mimi-ga (27) usagi-ga naga-i] furry-doing-and rabbit-GA long-Pres ear-GA '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-ga as its subject.

At first sight, (27) may appear to be a case of left-dislocation, where the clauseexternal NP-ga is base-generated in an adjoined position and A'-binds a pro in each conjunct as in (28). Note that (27) 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 Genitive Raising approach.

(28)[vp pro husahusa-site-i]-te [vp [pro naga-i] usagi-ga mimi]-ga rabbit-GA furry-be-and long-Pres ear-GA

However, the analysis in (28) is unlikely to be true. A quantifier such as every cannot usually appear in a dislocated position, yet *subete-no usagi-ga* 'every rabbit-GA' may appear in this position:

^{*}Yamaoka-sisyaku-ga (i) musuko-ga o-warai-ni-nat-ta. Yamaoka-viscount-GA son-GA laugh-SH-Past 'It is Viscount Yamaoka whose son laughed.'

(29) subete-no usagi-ga [husahusa-site-i]-te [mimi-ga naga-i] all-Gen rabbit-GA furry-be-and ear-GA long-Pres

Secondly, predicates can usually be modified by a degree adverb (Bresnan 1973, Jackendoff 1977). The examples in (30) show that both conjuncts are predicates, as they can be modified by *totemo* 'very'.

(30) a. usagi-ga totemo [husahusa-site-iru]
rabbit-GA very furry-doing-Pres
b. usagi-ga totemo [mimi-ga naga-i]
rabbit-GA very ear-GA long-Pres

These facts along with the evidence from the subjecthood tests demonstrate that a possessive NP-ga 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 the base-generation approaches. Firstly, the structure in (18), like the other two approaches, predicts that an adverb should be able to follow a possessive nominative NP, but not a possessive genitive NP. This is because 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.

kono tyoosa-ni-yoruto, kitahankyuu-ga (kyonen) (31)this research-according to N. Hemisphere-GA last.year usagi-no (*kyonen) mimi-ga nagakatta. rabbits-Gen last.year long-Past ears-GA 'According to this research, it was the Northern Hemisphere, where rabbits had long ears last year.'

Moreover, Fukuda (1991: 34) observes that a sentence sounds more natural with a short break after a possessive NP-ga, but not after a possessive NP-no, as demonstrated in (32). # indicates a break.

(32) kitahankyuu-ga # usagi-no (**#) mimi-ga naga-i. N. Hemisphere-GA rabbit-Gen ear-GA long-Pres

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 (18) 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 (modified from Takahashi 1994: 399).

(33)*usagi-ga kitahankyuu-ga mimi-ga naga-i. N. Hemisphere-GA ear-GA rabbit-GA long-Pres '(intended) rabbits in the Northern Hemisphere have long ears.'

The data such as (33) is problematic for the base-generation approach. Since possessive nominatives 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.

Thus, the proposed analysis 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 NP-ga's is involved, the CED is The apparent violation of the condition is explained by the not violated. association of a possessive nominative NP with a pro in a specifier of the immediately following NP. The association is mediated by a null operator. Furthermore, it is not necessary to assume that nominative case is an exception to the ban on assignment of identical cases or that nominative case may sometimes override genitive case.

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

- (34) (i) the possessive relation between two adjacent NP-ga's;
 - (ii) the obligatory focus of the sentence-initial possessive NP-ga's;
 - (iii) the subject-predicate relation between a possessive NP-ga and the clause to its right;
 - (iv) the occurrence of an indefinitely large number of possessive NP-ga's;
 - (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 NP-ga's.

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 Construction

3.1 Previous analyses

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

(35) ano ziko-ga takusan-no nihonzin-ga sinda. that accident-GA many-Gen Japanese-GA died. 'It was in that accident that many Japanese died.'

To my knowledge, only Tateishi (1991) and Takahashi (1994) have analysed the adjunct multiple nominative construction as a distinct class of a multiple nominative construction. They both argue for two positions where a ga-phrase may be licensed in Japanese: SpecIP and SpecAgrP positions, and SpecIP and SpecVP positions, are 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 ga-phrases, it seems undesirable to claim that the two positions for ga-licensing are occupied simultaneously only in the adjunct multiple nominative construction. This is particularly unattractive, given that a clause may contain more than two possessive ga-phrases. Furthermore, Tateishi and Takahashi both adopt the Genitive Raising approach to the possessive multiple nominative construction, where a tensed head

 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 he has a separate account for the adjunct multiple nominative construction.

(i) nenmatu-ga/no hugu-ga/no syokutyuudoku-ga yoku okor-u. year-end-GA/Gen blowfish-GA/Gen food poisoning-GA 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 possessives rather than adjuncts. I assume with Tateishi (1991), therefore, that the maximum number of ga-phrases permitted in this type of multiple nominative construction is two.

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, as demonstrated by the possibility of replacing the nominative markers with the genitive markers.

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 ga-phrases in the adjunct multiple nominative construction can be restricted to two. Instead, I propose an account of this construction in terms of focus. I claim that an adjunct ga-phrase has the form of PP-ga and that ga on an adjunct must be interpreted as a focus marker which has the effect that the adjunct moves to sentence-initial position in accordance with the focus generalisation in (6).

3.2 The adjunct ga-phrase is PP-ga

An adjunct can appear either with ga or with the postposition de, in which case, it need not be focused and it may follow the subject as shown in (36b) (modified from Tateishi (1991: 30)). 15

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

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

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

I have already argued in footnote 14 that the example in (ii) is an instance of a possessive multiple nominative construction. Although the example in (ii) is grammatical for Takahashi, it sounds extremely awkward for my informants. It appears that, similarly to the example in (i), the first gaphrase, syokutyuudoku-ga 'food poisoning-GA', 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-nosyu-no) syokutyuudoku-ga kono tyoosa-niyoruto hugu-ga every-Gen kind-Gen food poisoning-GA this survey-according to blowfish-GA (sore-ga) yoku okoru. it-GA often occur-Pres 'According to this survey, it is every kind of food poisoning that occurs most frequently with blowfish.'

¹⁵ Tateishi (1991) cites the following example similar to (36b) as grammatical. The quantifier takusan 'many' has floated out of the NP nihonzin-ga 'Japanese-GA'. However, nihonzin-ga seems to be left-dislocated here, as takusan cannot appear with it.

- (36) a. ano ziko-de/ga takusan-no nihonzin-ga sinda. that accident-by/GA many-Gen Japanese-GA died. 'Many Japanese died in that accident.'
 - b. takusan-no nihonzin-ga ano ziko-de/*ga sinda. many-Gen Japanese-GA that accident-by/GA died.

Interestingly, ga may follow de, only if another element such as dake 'only' intervenes, as illustrated below. It seems that de is optionally deleted, if immediately followed by ga. ^{16,17}

(37) ano ziko-de-[?]*(dake)-ga takusan-no nihonzin-ga sinda. that accident-in-only-GA many-Gen Japanese-GA died 'It was only in that accident that many Japanese died.'

Given this possibility of spelling out the postposition before ga, it appears that the adjunct ga-phrase is not 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 carrying a case marker allows a floating quantifier, while an NP followed by a postposition disallows it (Miyagawa 1989). (38) demonstrates that *de* is indeed a postposition and that *ga* here is not simply a nominative case marker, since no floating quantifier is permitted. (Cl stands for 'classifier')

(38) *ano ziko-de/ga 2tu takusan-no nihonzin-ga sinda. that accident-by/GA 2-Cl many-Gen Japanese-GA died. 'It was in those two accidents that many Japanese died.'

The data in (37) and (38) suggest strongly that the adjunct ga-phrase is a PP followed by ga. I shall, therefore, henceforth assume that an adjunct in the adjunct multiple nominative construction is a PP.

Note that a possessive ga-phrase behaves differently from an adjunct ga-phrase.

¹⁶ Hiroto Hoshi (p.c.) 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*. See Schütze (2001) for a similar phenomenon in Korean.

¹⁷ Some kind of a particle deletion rule is obviously required to account for the optional deletion of the postposition. It seems that such a rule is generally required in Japanese. A particle, when adjacent to another, is often deleted. Providing a correct formulation of a particle deletion rule is, however, beyond the scope of this paper. I shall, therefore, not address the matter here.

The genitive marker no on a possessive phrase cannot be realised before ga, even if elements such as *dake* 'only' intervened, as demonstrated in (39).

(39) kitahankyuu(*-no)(-dake)-ga usagi(*-no)(-dake)-ga mimi-ga naga-i. N. Hemisphere-Gen-only-GA rabbit-Gen-only-GA ear-GA long-Pres

Moreover, (40) illustrates that a possessive ga-phrase is able to host a floating quantifier, indicating that it has the form of NP-ga.

(40)John-ga tomodati-ga 2ri takai. se-ga friends-GA John-GA 2-c1 height-GA tall-Pres 'It is John whose two friends are tall.'

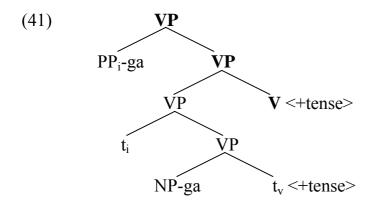
These data show that a possessive ga-phrase is an NP followed by ga, while an adjunct ga-phrase is a PP followed by ga. As will be discussed in the next subsection, this has significant effects on how the adjunct multiple nominative construction should be analysed.

3.3 The structure of the adjunct multiple nominative construction

We have been assuming without questioning, that ga is a case marker. However, 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 be prevented by economy. Consequently, it can only be interpreted as a focus marker. This has the effect that PP-ga must move to sentence-initial position in accordance with the focus generalisation. As a result the PP is focused. I propose, therefore, that ga functions as a focus marker, when attached to a constituent that does not require case.

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 ga on this phrase is licensed. By contrast, ga on an adjunct PP can only be interpreted 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 functions of the licensed element.

Recall that when an adjunct is not followed by ga, it may precede or follow the subject NP-ga (cf. (36b)). I assume, for the sake of concreteness, that the two possible orders, NP-ga PP and PP NP-ga, are derived by scrambling. The crucial point is that no proxy category is created, since there is only one ga-phrase. On the other hand, when the adjunct appears with ga, a proxy category must be created in order to provide two licensing domains for ga. Thus, I propose the following structure for the adjunct multiple nominative construction.



Ga on the subject is licensed in the lowest VP, while that on the adjunct is licensed in a position in the newly created functional projection, explaining the obligatory focus of the latter.

Importantly, an adjunct *ga*-phrase cannot be analysed as left-dislocated. Recall that a quantifier such as *every* cannot occur in a dislocated position, yet (42) shows that an adjunct *ga*-phrase may appear with such a quantifier.

(42) kotosi-wa subete-no ziko-ga [takusan-no nihonzin-ga sinda]. this.year-Top every-Genaccident-GA many-Gen Japanese-GA died 'This year, it was in every accident that many Japanese died.'

An adjunct ga-phrase is therefore not left-dislocated.

One obvious question that arises from the structure in (41) is: why is the order not reversed? In other words, why could ga on the adjunct PP not be licensed in the lower VP and that on the subject, in the higher VP, yielding the ungrammatical order NP-ga PP-ga, as shown in (43a)? This order can also be derived by moving the subject NP-ga in (41) to a position above the adjunct PP-ga, as in (43b).

(43) a.
$$*[\mathbf{v_P} \text{ NP}_i\text{-ga}[\mathbf{v_P}[\mathbf{v_P} \text{ PP-ga} t_i t_v] \mathbf{V}]]$$

b. $*[\mathbf{v_P} \text{ NP}_i\text{-ga}[\mathbf{v_P}[\mathbf{v_P} \text{ PP}_i\text{-ga}[\mathbf{v_P}[\mathbf{v_P} t_i t_v]] t_v]] \mathbf{V}]]$

The ungrammaticality of the above structures can be explained straightforwardly by the focus generalisation. Movement of NP-ga to a position above PP-ga makes ga on the PP uninterpretable, as it is not licensed in the highest functional projection, the configuration described by the focus generalisation. The presence of an uninterpretable particle renders the sentence ungrammatical.

It appears that Tateishi's (1991) and Takahashi's (1994) analyses of the adjunct multiple nominative construction can also account for the ungrammatical order.

Tateishi assumes that a θ -marked subject is base-generated in SpecAgrP. Thus, the adjunct ga-phrase must occupy the other nominative position, SpecIP, which he assumes is structurally higher than SpecAgrP. 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 ga-phrase precedes the subject. However, as argued 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 in fact unclear how, for example, adjoining the subject to IP can be prevented, yielding the ungrammatical order. In the base-generation approach too, it is unclear how the ungrammatical order could be ruled out, since both the adjunct and the subject are assumed to be base-generated in multiple specifier or adjoined positions.

3.4 Predictions

The proposed approach makes three predictions. Firstly, 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: 18,19

(i) New York-kara-no/ga miti-ga warui. New York-from-Gen/GA road-GA 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-GA this survey-according.to from-there-Gen road-GA bad-Pres

I propose 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, as in the adjunct multiple nominative construction (cf. (36)), while such an option is unavailable to other possessive phrases (cf. (33)).

(cont.)

¹⁸ What is being overtly realised is actually a pro associated with an NP within the PP. It seems rather unclear what exactly PP-pro is.

¹⁹ One may find an example of a possessive multiple nominative construction like the following to be a piece of evidence for the existence of PP-pro in Japanese.

(44) *Topicalisation* (modified from Saito 1985: 337)

*[PP Hirosima-kara_i]-wa Amerika-ni Hiroshima-from-Top America-in

 $[_{\mathrm{NP}} \mathcal{O}_{\mathrm{j}} [_{\mathrm{IP}} e_{\mathrm{j}} (\mathrm{soko\text{-}kara_{\mathrm{i}}}) \quad \mathrm{kita}] \quad \mathrm{hito}]\text{-}\mathrm{ga} \quad \mathrm{oozei} \quad \mathrm{iru}.$ (there-from) came person-GA many are

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

(45) *Tough Construction* (modified from Takezawa 1987: 215)

*[PP anna taipu-no zyosei-to]i-ga that type of woman-with-GA

 $[_{NP} \emptyset_j [_S e_j \text{ (kanozyo-to}_i)]$ kekkon-site-i-ru] otoko]-to hanasi-niku-i. (she-with) marry-Pres man-with talk-hard-Pres '?*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: (46a) shows that the CED cannot be violated and (46b) illustrates that a pro cannot be overtly realised.

- (46) a. *ano zikoj-ga [$_{\text{VP}}$ John-ga [$_{\text{NP}}$ \mathcal{O}_{i} [$_{\text{VP}}$ e $_{\text{i}}$ t $_{\text{j}}$ sinda]hito]-nituite hanasita. that accident-GA John-GA died person-about talked 'John was talking about a person who died in that accident.'
 - b. ano ziko-ga kyonen (*sore-de)
 that accident-GA last.year it-by
 takusan-no nihonzin-ga *(sore-de) sinda.
 many-Gen Japanese-GA it-by died.
 'It was in that accident that many Japanese died (by it) last year.'

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 (cf. section 2.1).

Secondly, since, no θ -role promotion is involved, unlike a possessive ga-phrase,

(iii) miti-ga New York-kara warui. road-GA New York-from bad-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. 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'.

an adjunct ga-phrase and the clause to its right should not have a subject-predicate relation. For independent reasons, however, the subjecthood tests applied to a possessive ga-phrase in section 2.3 are not applicable to an adjunct ga-phrase. For the ECM/control type of construction, 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: 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 possible to conjoin it with another predicate. The ungrammatical example below indicates that it is not a predicate.

(47) *ano ziko-ga [sensoo-no hazimari-no gen'in]-de cause-Cop.and that accident-GA beginning-Gen war-Gen [takusan-nonihonzin-ga sinda]. Japanese-GA died many-Gen '(intended) It was that accident which was the cause of the beginning of the war and [it was in that accident that] many Japanese died.'

Secondly, although predicates can usually be modified by a degree adverb, as the ungrammaticality of the example in (48) shows, the clause in question cannot be.

*ano ziko-ga hidoku [takusan-no asi-o (48)hito-ga otta]. people-GA that accident-GA badly many-Gen leg-Acc broke 'It was in that accident that many people broke their leg badly.' takusan-no hito-ga hidoku otta].) (cf.: ano ziko-ga [asi-o

Despite the fact that the subjecthood tests cannot be applied to an adjunct gaphrase, 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 base-generation approach, it is difficult to explain the lack of subject-like properties of this phrase.

Finally, the structure in (41) 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 ga on the lower adjunct uninterpretable, as it is not licensed in the position described by the focus generalisation. 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.

(49) *umi-ga ano ziko-ga takusan-no nihonzin-ga sinda. sea-GA that accident-GA many-Gen Japanese-GA 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 multiple adjunct ga-phrases.

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

- (50) (i) an adjunct ga-phrase cannot host a floating quantifier;
 - (ii) an adjunct ga-phrase is obligatorily focused;
 - (iii) an adjunct ga-phrase must precede the subject NP-ga;
 - (iv) there is no possessive relation between the two ga-phrases;
 - (v) a violation of the CED by movement of an adjunct ga-phrase results in ungrammaticality;
 - (vi) a pro associated with an adjunct ga-phrase cannot be overtly realised;
 - (vii) there is no subject-predicate relation between an adjunct *ga*-phrase and the clause to its right;
 - (viii)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 multiple nominative constructions examined so far is rather difficult to capture in other types of approach, such as the base-generation approach. Firstly, if all ga-phrases were base-generated in multiple specifier or adjoined positions in one projection, one would have to assume that an indefinitely large number of possessive ga-phrases, but only one adjunct ga-phrase, 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 Stative Construction

4.1 Is the subject ga-phrase an NP or a PP?

The object of a simplex stative predicate must appear in the nominative, while the subject of such a predicate may appear either with ga or with the marker ni, as shown in (51a). Moreover, when the subject appears with ni, it may follow the object, as illustrated in (51b).²⁰

- (51) a. John-ga/ni nihongo-ga/*o wakaru. (Takezawa 1987: 24) John-GA/to Japanese-GA/Acc understand 'John understands Japanese.'
 - John-ni/*ga b. nihongo-ga wakaru. Japanese-GA John-to/GA understand 'It is Japanese that John understands.'

Like the postposition de on an adjunct, the marker ni on the subject can be followed by ga, if another element such as dake 'only' intervenes, as shown below. This suggests that the subject ga-phrase is a PP followed by ga.

(52)John-ni-*(dake)-ga nihongo-ga wakaru. John-to-only-GA Japanese-GA understand

The marker ni is often claimed to be ambiguous between a case marker and a postposition. Saito (1982), Takezawa (1987) and Sadakane and Koizumi (1995) claim that ni in the above use is a postposition. They reach this conclusion as a result of applying to the subject ni-phrase the diagnostic involving a floating quantifier (cf. section 3.2). Recall that an NP followed by a case marker can host a floating quantifier, while an NP followed by a postposition cannot. The following example illustrates that ni on the subject is indeed a postposition, as a floating quantifier associated with it is disallowed.

*kodomotati-ni 3nin (Saito 1982: 82) (53)eigo-ga wakaru. English-GA children-to 3-C1 understand 'Three children understand English.'

Subjecthood of the sentence-initial ga/ni-phrase and objecthood or non-subjecthood of the second ga-phrase are well-established in the literature (Dubinsky 1993, Perlmutter 1984, Shibatani 1977, Takezawa 1987, Ura 1999, 2000). I shall therefore not concern myself here with the status of the respective arguments.

It seems reasonable at this point to assume that, like an adjunct ga-phrase, the subject ga-phrase of a stative predicate has the form of PP-ga, with the postposition being optionally deleted.²¹

However, there is one crucial difference between an adjunct ga-phrase and the subject ga-phrase of a stative predicate. When the latter is followed by ga alone, it is able to host a floating quantifier as shown in (54a). As we saw above in (38), repeated here as (54b), such an option is unavailable to the former.

- (54) a. kodomotati-ga 3nin eigo-ga wakaru. (Takezawa 1987:120) children-GA 3-CL English-GA understand 'Three children understand English.'
 - b. *ano ziko-ga 2tu takusan-no nihonzin-ga sinda. that accident-GA 2-Cl many-Gen Japanese-GA died. 'It was in those two accidents that many Japanese died.'

Furthermore, when the subject in (54a) is followed by *ni-dake-ga*, a floating quantifier is no longer allowed.

(55) *kodomotati-ni-dake-ga 3nin eigo-ga wakaru. children-to-only-GA 3-CL English-GA understand

These examples suggest strongly that a subject *ga*-phrase in the stative construction does not always have the underlying form of NP-*ni-dake-ga*. I propose that it can be either NP-*ga* or PP-*ga*. In the case of the former, *ga* functions as the nominative case marker and can also be interpreted as a focus marker, if licensed in the configuration described by the focus generalisation, while in the case of the latter, it can only be interpreted as a focus marker.

The claim that *ga* here can be a case marker is supported by an observation made by Kuno (1973). When the predicate is simplex, intransitive and stative, its subject must be focused, as demonstrated in (56). However, when it contains a quantifier, a non-focused interpretation becomes available, as (57) shows.

(56) John-ga dokusin desu John-GA single Cop [+focus] 'It is John who is single.'

²¹ see footnote 16.

(57) [daibubun-no gakusee]-ga dokusin desu. (Kuno 1973: 58) student-GA single most-Gen Cop [± focus] 'Most (of the) students are single.'

Recall that in the type of stative construction we are considering here, the subject ga-phrase must also be focused (section 1.1). If it were always a PP followed by ga, it is predicted that even when the subject is quantified, it would still be focused. This is because ga on a PP can only be interpreted as a focus marker, as argued before. On the other hand, if the subject ga-phrase can also be an NP followed by ga, a non-focused interpretation of the subject should be available. The following example shows that the latter is indeed the case.

[Daibubun-no gakusee]-ga nihongo-ga wakaru. (58)student-GA Japanese-GA most-Gen understand [± focus] 'Most (of the) students understand Japanese.'

In (57) and (58), it must be possible for ga on the subject to function as a case marker and not as a focus marker, as the subject may be interpreted as non-focused. This approach explains the above floating quantifier puzzle. Since a subject gaphrase can be either an NP or a PP followed by ga, the fact that subject-ga, but not subject-ni-dake-ga, allows a floating quantifier does not constitute a problem.

4.2 The structure of the stative construction

Recall that when the subject is followed by the postposition ni, the object may either precede or follow the subject (cf.(51)). Similarly to the adjunct multiple nominative construction, I assume that the two possible orders subject-ni object-ga and object-ga subject-ni are derived by scrambling. Since there is only one gaphrase, no proxy category is created.

It is interesting to note that it is the object of a stative predicate, but not the subject, which must appear in the nominative. Given this observation, I propose that the following principle holds in Japanese.

The first argument to be merged with a tensed head must bear nominative (59)case. 22,23

²² This principle can be seen as a reformulation of the one proposed by Shibatani (1978: 65): (cont.)

This principle is in accordance with the Elsewhere Condition (Kiparsky 1973). Assuming that nominative case and accusative case are both licensed structurally by the verb, the former is licensed in a more specific context, namely when the verb is tensed. The latter is licensed elsewhere. In other words, priority must be given to nominative case over accusative case whenever tense feature is present. Effects of the above principle has in fact been already observed in the possessive multiple nominative construction. It was argued that a clause to the right of a possessive nominative phrase becomes a predicate as a result of θ -role promotion mediated by a null operator. Thus, the principle predicts correctly that a possessive nominative phrase appears with nominative case, as it is the first argument which is merged with a newly created tensed predicate (cf. (18)).

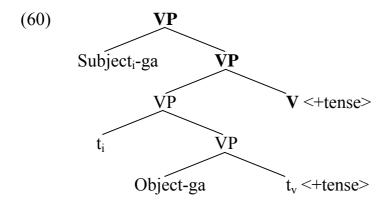
In the stative construction, since the object is the first argument to be merged with a tensed head, it must bear nominative case. In other words, ga on this phrase is licensed by the verb in the lowest VP. Consequently, when the subject also appears with ga, the latter moves to a position in the higher VP created through verb movement to a proxy head for licensing of ga. I propose the structure in (60) for the stative construction with a simplex transitive predicate.

I assume, following Neeleman & Weerman (1999), that aspectuality is responsible for the observed difference in case on the object. Non-stative predicates have aspectual properties, since they describe events, while stative predicates lack such properties, as they do not describe events. Neeleman & Weerman argue that aspect must always occur internal to tense, because the type of an event must be determined before it can be placed in time. This is evidenced in languages which have preverbal tense and aspect particles. The order typically found is tense-aspect-verb rather than aspect-tense-verb. Aspectuality is determined by the combination of verb and object. Thus, although tense is generated on the verb, when it is non-stative, tense feature is unavailable in the lowest VP. Accordingly, an object of a non-stative verb cannot therefore appear with nominative case. On the other hand, stative predicates lack aspectuality, rendering tense to be available in the lowest VP, allowing nominative case on the object to be licensed.

⁽i) An independent sentence in Japanese requires at least one nominative NP.

²³ At first sight, this principle may appear problematic for clauses with a non-stative predicate, where the object must bear accusative case, as illustrated below.

⁽i) John-ga hon-o/*ga yonda. John-GA book-Acc/GA read 'John read a book.'



The obligatory focus of the subject ga-phrase is captured by the focus generalisation in (6). Ga attached to this constituent is licensed in the highest functional projection. When the subject is an NP, ga on this phrase functions as a case marker. Similarly to the case of a sentence-initial possessive ga-phrase, the obligatory focus results from the configuration in which case is licensed. On the other hand, when the subject ga-phrase is a PP, ga on this constituent can only be interpreted as a focus marker, as in the case of an adjunct ga-phrase, since PPs do not require case. This has the effects that the subject moves to sentence-initial position and receives an obligatory focus interpretation. Recall that ga on the subject, regardless of whether it functions as a case marker or a focus marker, is licensed uniformly by a tensed head, as the interpretation of the licensed element is irrelevant for licensing.

A remark is in order concerning the option between ga and the postposition ni on the subject. It is often claimed that when an element can be realised in more than one form, a different interpretation is identified with each form. Considering that the subject ga-phrase, but not the subject ni-phrase, must always be focused, it seems that when the subject of a stative predicate is marked with ga, it must receive a focused interpretation while when it is not marked as such, it need not be focused. In other words, attaching ga on the subject, regardless of whether it is an NP or PP, can be seen as for focus purposes. However, it is important to note that the obligatory focus of the subject ga-phrase is derived differently, depending on the categorial status of the subject, as discussed in the previous paragraph.

The ungrammatical order object-ga subject-ga with the two possible derivations below can be ruled out correctly by the proposed analysis. The structure in (61a) is achieved by moving the object instead of the subject to a position in the higher VP, while that in (61b) is obtained by moving the object after movement of the subject ga-phrase in the structure in (60).

²⁴ See for example, Bolinger (1977), de Hoop (1996) and Williams (1997).

(61) a. $*[\mathbf{vP} \text{ object}_j\text{-ga} [\mathbf{vP} [\mathbf{vP} \text{ subject-ga} [\mathbf{vP} t_j t_v]] \mathbf{V}]]$ b. $*[\mathbf{vP} \text{ object}_j\text{-ga} [\mathbf{vP} [\mathbf{vP} \text{ subject}_i\text{-ga} [\mathbf{vP} [\mathbf{vP} t_j t_v]] \mathbf{V}]]$

In both structures, movement of the object renders ga on the subject superfluous. As argued just above, attaching ga on the subject is for focus purposes. By moving the object to a position higher than the subject, the latter is no longer in a position where it must be interpreted as focused. The ungrammaticality results from this clash of marking the subject for focus and the focused interpretation for the subject being unavailable.²⁵

The ungrammaticality of the derivations in (61) is difficult to explain in analyses which assume for this construction that one head can license nominative case multiple times in a single licensing domain (Heycock & Lee 1989, Hoshi 2001, Koizumi 1994, Saito 1982, Tada 1992, Takezawa 1987, Ura 1999). Although most of the analyses argue that nominative case on the object is licensed in a lower position than that on the subject, it is unclear how further movement of the object to a position higher than the subject can be prevented.

4.3 Predictions

The proposed approach makes two predictions. Firstly, it predicts that a pro corresponding to the subject *ga*-phrase in the stative construction cannot be overtly realised. Recall from section 3.4 that there is no PP-pro in Japanese. Thus, when the subject *ga*-phrase is a PP, there is no pro to be overtly realised. Moreover, a resumptive pronoun is often argued to be a strategy to avoid a violation of the CED.²⁶ Since movement of the subject NP does not violate any syntactic

 $^{^{25}}$ There is another reason for the ungrammaticality of the structure in (61b). When the subject is PP-ga, its ga is licensed in an A'-position, as ga here is not a case marker. The position which the object moves to is also an A'-position, since this movement is for focus purposes. Movement of the object-ga over the subject PP-ga thus violates Relativized Minimality.

²⁶ Sells (1984) argues that there are two types of resumptive pronouns: those that tend to appear in an island in order to avoid a violation of some syntactic constraints and those that do not. English, for example, displays the former type, while those in Hebrew are an example of the latter type. Japanese resumptive pronouns behave similarly to the English ones in that its appearance seems to be constrained by whether or not it is in an island. We saw in (10-12) and (14-16) that a resumptive pronoun is available, when movement of the relevant constituent would otherwise violate the CED. However, in constructions where such movement does not violate the CED, a resumptive pronoun is prohibited, as shown below. (cont.)

constraint, a resumptive pro associated with the subject should be unavailable. The following example demonstrates that the prediction is borne out.

John_i-ga (62)kyonen-no siken-no kekka-nivoruto, result-according.to John-GA last.year-Gen exam-Gen (*kare_i-ni/ga) nihongo-ga wakaru. he-to/GA Japanese-GA understand 'According to last year's exam results, it is John who understands Japanese.'

Secondly, like the adjunct multiple nominative construction, there should be no more than two ga-phrases. Placing an adjunct ga-phrase in a position above the subject ga-phrase renders the obligatory focus of the latter unavailable. This is because ga on the subject is no longer licensed in the highest functional projection in a sentence, where it is interpreted as a focus marker.²⁷ We have already seen in (2c), repeated here, that this prediction is correct.

(63)*Tokyo-ga John-ga nihongo-ga wakaru. Tokyo-GA John-GA Japanese-GA understand 'It is in Tokyo that John understands Japanese'

Similarly to the ungrammatical order object-ga subject-ga, it is unclear how an example such as above can be ruled out in analyses where a tensed head can license nominative case more than once in a single licensing domain.

Thus, the proposed analysis accounts for various properties of the stative construction with a simplex predicate: the obligatory focus of the subject gaphrase, the correct ordering of the constituents, the impossibility of overtly realising a pro associated with the subject and why no adjunct ga-phrase is allowed. However, so far, we have only been considering stative predicates which are

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sore<sub>i</sub>-o
(i) a. *[NP Ø_i]_S sono sinsi-ga
                                                       kite-ita]
                                                                        yoohuku<sub>i</sub>.
                     that gentleman-GA it-Acc
                                                       wearing-Past
                                                                        suit
             'the suit that that gentleman was wearing (it)'
      b. *[_{NP} Ø_i [_{S} kare_i-ga]]
                                  sono yoohuku-o kite-ita]
                                                                        sono sinsi<sub>i</sub>.
                                  that suit-Acc
                     he-GA
                                                       wearing-Past
                                                                       that gentleman
             'the gentleman who (he) was wearing the suit'
```

Thus, Japanese resumptive pronouns seem to be possible only if no corresponding movement is available.

As with the ungrammatical order of object-ga subject-ga, if the subject is a PP-ga, movement of this adjunct ga-phrase would be prevented by Relativized Minimality. This is because the subject PP-ga would be in an A'-position and the adjunct would also target an A'-position.

simplex and transitive. There is, in fact, another type of stative predicates, namely complex transitive predicates containing a stative morpheme. It will be shown in the next subsection that the latter type will give further support for the analysis proposed here.

4.4 Complex predicates with a stative morpheme

The following is an example of a complex stative predicate with the potential morpheme (r)e. As the gloss indicates, tense is generated on the matrix verb.

(64) John-ga/ni nihongo-ga hanas-e-ru. John-GA/to Japanese-GA speak-can-Pres 'John can speak Japanese.'

As with a simplex stative transitive predicate, the subject may appear either with ga or ni. Interestingly, the object may bear the accusative case marker o, provided that the subject appears with ga.

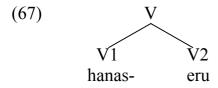
(65) John-ga/*ni nihongo-o hanas-e-ru. John-GA/to Japanese-Acc speak-can-Pres

Thus, the following combinations of cases are possible.

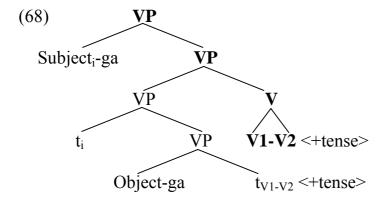
(66) a. subject-ga object-gab. subject-ni object-gac. subject-ga object-o

Many linguists (Neeleman & Weerman 1999, Sugioka 1985, Tada 1992, among others) have argued that the option of case alternation results from an ambiguity between a bi-clausal and a mono-clausal structure. In the former, the object is marked as accusative, while in the latter, it carries nominative case. Here, I would like to follow Neeleman & Weerman (1999) in particular, who offer an account of the construction along the lines of the approach presented in this paper.

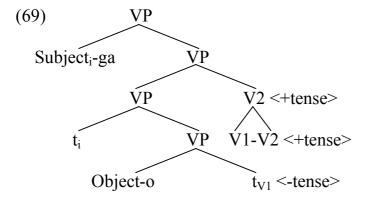
In a mono-clausal structure, the embedded verb *hanas* 'speak' and the matrix verb *eru* 'can-Pres' are base-generated together as a complex predicate, as shown in (67).



This complex predicate behaves as a single predicate and merges with an object. In this case, the object appears in the nominative. This is predicted by the principle in (59), which states that the first argument to be merged with a tensed head appears in the nominative. The effect is that the structure will be almost identical to that with a simplex stative verb, as it contains only one tensed verb. The difference is that the tensed verb is complex here. When the subject is followed by the postposition ni, no proxy category need be created. On the other hand, when the subject appears with ga, a proxy category is created so that ga on the subject is licensed in a separate domain from that on the object as shown below (cf.(60)).



In a bi-clausal analysis, the two verbs are base-generated separately with tense being generated on the modal. The complex predicate is derived in overt syntax by movement of the infinitival V1 to the modal V2. This is reminiscent of Verb Raising widely observed in Germanic OV languages (Evers 1975). The object cannot bear nominative case, as it is not the first argument to be merged with a tensed head. By the Elsewhere Condition, it appears in the accusative. Since nominative case is unavailable within the lowest VP, the subject moves to a position in the higher VP, headed by the modal. This is illustrated below.



The ungrammaticality of the order subject-ni object-o is accounted for. The subject cannot remain in the lower VP in (69) carrying ni, because the EPP requires

that V2 have a subject in its projection. Since the moved subject is the first argument to be merged with the tensed verb, by the principle in (59), it must appear in the nominative.

Tada (1992) and Neeleman & Weerman (1999) note a piece of evidence from scopal facts for the approach proposed here. The approach predicts that scope of the object with respect to the modal should depend on its case. When it bears nominative case, i.e. in a mono-clausal structure in (68), it should take scope over the modal. This is because the object c-commands the complex predicate, while the modal is contained in the complex and therefore cannot c-command the object. On the other hand, when the object appears in the accusative, i.e. in a bi-clausal structure in (69), the modal should take scope over the object. This is because the modal is base-generated in a position higher than the object. As a result the modal c-commands the object, but not vice versa. The following example illustrates that the prediction is borne out.

- (70) a. John-ga migime-dake-ga tumur-e-ru (Tada 1992: 94)
 John-GA right-eye-only-GA close-can-Pres
 'John can wink only his right eye.' (can>only)
 - b. John-ga migime-dake-o tumur-e-ru
 John-GA right-eye-only-Acc close-can-Pres
 'It is only his right eye that John can close.' (only>can)

The proposed analysis makes a further prediction. The subject ga-phrase should be focused, only if the object appears in the nominative. When the object carries ga, the structure is mono-clausal. Ga on the subject is therefore licensed in the highest functional projection as in (68), rendering the subject to be focused. On the other hand, when the object bears accusative case, the structure is bi-clausal, where no proxy category is created as in (69). Ga on the subject is thus licensed by a tensed verb in-situ and no focus is imposed on the subject. This prediction is true, as shown below.

- (71) a. John-ga nihongo-ga hanas-e-ru.

 John-GA Japanese-GA speak-can-Pres
 [+focus]
 - 'It is John who can speak Japanese.'
 b. John-ga nihongo-o hanas-e-ru.

John-GA Japanese-Acc speak-can-Pres

'John can speak Japanese.'

In sum, the proposed approach accounts for the following properties of the stative construction:

- (72) (i) a subject ga-phrase must precede an object ga-phrase;
 - (ii) a pro associated with a subject ga-phrase cannot be overtly realised;
 - (iii) there can be no adjunct ga-phrase;
 - (iv) a subject ga-phrase must be focused when the predicate is simplex and when the object of a complex predicate appears with ga;
 - (v) when the predicate is simplex, the object must appear with ga;
 - (vi) when the predicate is complex, either the subject or the object must appear with ga;
 - (vii) when the predicate is complex, a nominative object has scope over the modal, while the modal has scope over an accusative object.

The proposed analysis of the stative construction gives further support for the idea that the licensing of multiple ga-phrases is mediated by proxy categories. The mechanism that licenses the particle ga also explains the restriction on the number of ga-phrases permitted and the fixed order of ga-phrases. It is unclear how these properties in particular could be accounted for, if a tensed head can license more than one ga-phrase in a single licensing domain.

5 Concluding remarks

In this paper, I have attempted to offer a uniform analysis of three types of multiple nominative constructions in Japanese. In doing so, I argued that, although the marker ga can function as a case marker as well as a focus marker, a tensed head licenses it uniformly in a single domain no more than once. Ga on an NP functions as a case marker, while that on a PP is interpreted as a focus marker, as PPs do not require case. In the case of multiple ga-phrases, proxy categories are created recursively. This explains the possible appearance of an indefinitely large number of possessive nominative phrases. On the other hand, only a maximum of two gaphrases is permitted in the other two types. A third ga-phrase leads to the presence of an uniterpretable ga on a non-sentence-inital adjunct ga-phrase and to a clash of marking the subject ga-phrase of a stative predicate for focus and a focused interpretation for it being unavailable. The approach also accounts for the rigid ordering of ga-phrases in all three constructions. Moreover, the obligatory focus of a sentence-initial ga-phrase is explained in terms of the licensing configuration of ga on the phrase, namely in the highest functional projection in a sentence. Throughout the paper, problems with various 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 a subject, a possessor of a 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.

A second issue concerns a typological issue, namely why multiple nominative constructions are not found in many languages. These constructions are in fact also found in Korean (Schütze 2001, Takahashi 1994, 1996, Whitman 1993, 2001) and Arabic (Demirdache 1989, Doron & Heycock 1999, Mohammad 1999). Interestingly, these languages, like Japanese, have a nominative case particle. 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: 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.

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