

**On Pseudo Double Nominative Constructions in Japanese:  
With Special Reference to Relativization\***

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**1. Introduction**

This paper is concerned mainly with pseudo double nominative constructions in Japanese. As is well known, the Japanese language has constructions that contain two nominative NPs, as typically illustrated in (1).

- (1) a. Taroo-ga Hanako-ga sukida.  
Taro-NOM Hanako-NOM like  
'Taro likes Hanako.'
- b. Zoo-ga hana-ga nagai.  
elephant-NOM trunk-NOM long  
'The elephant has a long trunk.'

Although these constructions have often been called double nominative constructions, they can in fact be classified into two types (see also Shibatani & Cotton (1976-77), Sugimoto (1986) and Noda (1996)). One type of double nominative construction is a construction that allows only the sentence-initial NP with the nominative case; in this case, it is impossible to alternate the NP in question with the dative or the genitive NP, as shown in (2a) and (2b). The other is a construction that allows the first nominative NP to alternate with the genitive or the dative NP, as in (3a)-(3c).

- (2) a. Taroo- $\{ga/*ni/*no\}$  Hanako-ga sukida.  
Taro- $\{NOM/DAT/GEN\}$  Hanako-NOM like  
'Taro likes Hanako.'
- b. Taroo- $\{ga/*ni/*no\}$  suugaku-ga tokuida.  
Taro- $\{NOM/DAT/GEN\}$  mathematics-NOM good at  
'Taro is good at mathematics.'
- (3) a. Zoo- $\{no/ga\}$  hana-ga nagai.  
elephant- $\{GEN/NOM\}$  trunk-NOM long  
'The elephant's trunk is long.'
- b. Taroo- $\{ni/ga\}$  okusan-ga ar-u.  
Taro- $\{DAT/NOM\}$  wife-NOM be-PRES  
'Taro has a wife.'

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- c. Taroo- $\{ni/ga\}$  eigo-ga wakar-u.  
 Taro- $\{DAT/NOM\}$  English-NOM understand-PRES  
 'Taro understands English.'

Following Sugimoto (1986), I will call constructions like (2a) and (2b) "*bona fide* double nominative constructions" and constructions like (3a)-(3c) "pseudo double nominative constructions".<sup>1</sup> Of these two types of double nominative constructions, this paper mainly concerns the latter constructions.

Interestingly, there are striking differences in relativization among pseudo double nominative constructions. In (4b), the second nominative NP *hunsui* 'fountain' in (4a) is relativized. Note that in this case, the sentence-initial NP can be realized as the locative NP, but not as the nominative NP.

- (4)a. Sono kooen- $\{ni/ga\}$  hunsui-ga ar-u.  
 DET park- $\{LOC/NOM\}$  fountain-NOM be-PRES  
 'There is a fountain in the park.'  
 b. [*Sono kooen- $\{ni/*ga\}$  t<sub>i</sub> ar-u*] hunsui<sub>i</sub>  
 DET park- $\{LOC/NOM\}$  be-PRES fountain  
 'a fountain in the park'

The fact observed here reveals that some pseudo double nominative constructions do not allow the sentence-initial NP to be marked with the nominative case when the second nominative NP is relativized. However, this restriction on the case marking is not observed with all pseudo double nominative constructions.

- (5)a. Taroo- $\{ni/ga\}$  (sono) kotoba-ga wakar-u.  
 Taro- $\{DAT/NOM\}$  (DET) language-NOM understand-PRES  
 'Taro understands the language.'  
 b. [*Taroo- $\{ni/ga\}$  t<sub>i</sub> wakar-u*] kotoba<sub>i</sub>  
 Taro- $\{DAT/NOM\}$  understand-PRES language  
 'the language that Taro understands'

In (5b), the second nominative NP (*sono kotoba* '(the) language' is relativized. Crucially, this example illustrates that unlike (4b), the *ga-ga* version in (5a) allows the sentence-initial NP to be assigned the nominative case even if the second nominative NP is relativized. The main purpose of this paper is to discuss what gives rise to the differences as to relativization among pseudo double nominative constructions in the framework of Lexical Conceptual Structure (cf. Jackendoff (1987, 1990, 1992), Kageyama (1996, 1997a, 1997b), Hatori (1997), Yumoto (1997), among others).

<sup>1</sup> Sugimoto (1986) does not, however, regard (3c) as an instance of the pseudo double nominative construction. I will state why he takes such a position in section 2.2.

This paper is organized as follows. In section 2, I will review Sato's (1985) analysis and Sugimoto's (1986) analysis, and point out some problems with their analyses. In Section 3, I will briefly review Takami and Kamio's (1996) analysis, which proposes the characterization condition for subjectivization (CCS), and then discuss what is required for satisfying the CCS. In section 4, I will introduce the framework of (Lexical) Conceptual Structure ((L)CS) in order that the required condition proposed in section 3 can be modified to accommodate some apparent counter-examples. In section 5, I will attempt to explicate the differences with respect to relativization among pseudo double nominative constructions within the framework of (L)CS. Offered in section 6 are some concluding remarks.

## 2. Previous Analyses

### 2.1. Sato's (1985) Analysis

According to Sato (1985), it is generally assumed in the literature that the possessive sentence in (6a) is derived from (6b) by "*ga/ni* conversion", and the existential sentence in (7a) from (7b) through the application of "subjectivization".

- (6) a. Taroo-*ni* titioya-*ga* ar-*u*.  
 Taro-DAT father-NOM be-PRES  
 'Taro has a father.'
- b. Taroo-*ga* titioya-*ga* ar-*u*.  
 Taro-NOM father-NOM be-PRES  
 'Taro has a father.'
- (7) a. Taroo-*ga* titioya-*ga* i-*ru*.  
 Taro-NOM father-NOM be-PRES  
 'Taro has a father.'
- b. Taroo-*ni* titioya-*ga* i-*ru*.  
 Taro-DAT father-NOM be-PRES  
 'Taro has a father.'

"*Ga/ni* conversion" is a syntactic operation that changes the underlying subject with the nominative case to a dative NP. On the other hand, "subjectivization" in general means a syntactic operation that changes an NP to a nominative NP, and makes it the new subject of the sentence (cf. Kuno (1973a, 1973b)). Hence, it is clear that the prevailing theory assumes that the underlying subject of a possessive sentence like (6a) and (6b) is the first nominative NP in (6b), whereas that of an existential sentence such as (7a) or (7b) is the nominative NP in (7b).<sup>2</sup>

<sup>2</sup> One might think that (7a) and (7b) are also possessives because they convey (almost) the same

Sato (1985) challenges this general assumption, claiming that the sentences in (6a)-(7b) are all existentials in the sense that the second NP with *ga* behaves as the underlying subject. Moreover, he contends that the first nominative NP in (6b) is also derived from the dative NP in (6a) by subjectivization.

Sato (1985) cites relativization as evidence in support of his claim. Let us begin with the following examples.

- (8) a. Taroo-ga (sono) onnanoko-o aisi-te i-ru.  
 Taro-NOM (DET) girl-ACC love be-PRES  
 'Taro loves the girl.'
- b. [Taroo-ga  $t_i$  aisi-te i-ru] onnanoko<sub>i</sub>  
 Taro-NOM love be-PRES girl  
 'the girl whom Taro loves'

Example (8b) shows that the subject NP *Taroo* 'Taro' can appear in the relative clause when the direct object NP (*sono*) *onnanoko* '(the) girl' is relativized. From this observation, Sato (1985) assumes that if an NP with *ga* behaves as subject, it can occur in the relative clause.

Sato (1985) proceeds to point out that sentences with *wakar-u* 'understand' allow the first nominative NP to appear in the relative clause, as illustrated by (9b).

- (9) a. Taroo-ga (sono) onnanoko-ga wakar-u.  
 Taro-NOM (DET)Mariko-NOM understand-PRES  
 'Taro understands the girl.'
- b. [Taroo-ga  $t_i$  wakar-u] onnanoko<sub>i</sub>  
 Taro-NOM understand-PRES girl  
 'the girl whom Taro understands'

According to Sato (1985), it is generally assumed in the literature that the underlying subject of a sentence with *wakar-u* 'understand' like (9a) is the first nominative NP. If it is the case that the nominative NP which functions as subject can appear in the relative clause, this general assumption is compatible with the fact observed in (9b). So he is amenable to the general assumption.<sup>3</sup>

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meaning as possessives like (6a) and (6b). However, it has generally been said in the literature that the verb *i-ru* 'be' only expresses the existence of some entity, as opposed to the verb *ar-u* 'be', which allegedly means both existence and possession. See Shibatani (1978), among others, with respect to this issue. See also Yamada (1998), in which I have argued that sentences such as (7b) should be classified into possessive constructions, as opposed to Shibatani (1978).

<sup>3</sup> Judging from this fact, it will follow that Sato (1985) thinks that the dative NP in (i) is derived from the first nominative NP in (9a) by *ga/ni* conversion, though he does not refer to this point.

- (i) Taroo-ni (sono) onnanoko-ga wakar-u.  
 Taro-DAT (DET) girl-NOM understand-PRES  
 'Taro understands the girl.'

On the other hand, possessive sentences behave differently from *wakar-u* sentences in relativization.

- (10) a. Taroo- $\{ni/ga\}$  kodomo-ga ar-u.  
 Taro- $\{DAT/NOM\}$  child-NOM be-PRES  
 'Taro has a child.'
- b. \*[Taroo-ga  $t_i$  ar-u] kodomo,  
 Taro-NOM be-PRES child  
 'the child whom Taro has'
- c. [Taroo-ni  $t_i$  ar-u] kodomo,  
 Taro-DAT be-PRES child  
 'the child whom Taro has'

If the first nominative NP in (10a) functions as the underlying subject, it will be predicted that the NP can appear in the relative clause. But this prediction is not borne out, as shown by (10b). This fact leads Sato (1985) to the claim that the first nominative NP in (10a) is not the underlying subject, but a result of subjectivization applied to the dative NP. So he concludes that the so-called possessive sentences are in fact existentials with the second NP with *ga* as the underlying subject.<sup>4</sup>

Up to this point, I have presented an overview of Sato's (1985) analysis. He may be right in that the (second) nominative NP functions as subject in possessive sentences like (10a). However, the problem is that he ascribes the contrast between (9a) and (10a) to the difference in subjecthood of the first nominative NP between them. In fact, careful considerations suggest that the ungrammaticality of (10b) will not be due to the status of the first nominative NP as a non-subject.

As suggested by the terminology, subjectivization normally means a syntactic operation that converts an NP into a subject NP with *ga* (cf. Kuno (1973a, 1973b)). Hence, if the first nominative NP in (10a) is derived from the dative NP through application of subjectivization, as Sato (1985) claims, the resultant nominative NP will be a subject in the sentence. This predicts that the first nominative NP in (10a) could appear in the relative clause, contrary to the fact. Therefore, the discussion here shows clearly that Sato's (1985) analysis will be self-contradictory if he uses the term "subjectivization" in the general sense.

One possible solution to this problem is that we tentatively differentiate derived

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<sup>4</sup> Sato (1985) considers examples like (10c) to be grammatical, but all of my informants judge them quite unnatural. This does not mean, however, that possessive constructions do not allow the dative NP to occur in the relative clause. In fact, some possessive sentences allow the appearance of the dative NP in the relative clause, as shown later. It is beyond the scope of this paper to discuss the reason why the dative NP in (10c) cannot appear in the relative clause.

subjects from underlying subjects. Given this distinction, the first nominative NP in (10a) cannot appear in the relative clause because it is not the underlying subject but the derived one. This explanation will be compatible with Sato's claim that the first nominative NP in (10a) is not the underlying subject but the derived one. However, it remains unexplained why such a derived subject cannot appear in the relative clause despite the fact that they can occur in the matrix sentence. Although one might assume that subjectivization cannot apply to an NP in embedded sentences like relative clauses, he will encounter some difficulties.

- (11) a. Bunmeikoku-*{no/ga}* dansei-*{no/ga}* heikin  
 civilized countries-*{GEN/NOM}* male-*{GEN/NOM}* average  
 zyumyoo-ga mizikai.  
 life span-NOM short  
 'The average life span of men of civilized countries is short.'
- b. [<sub>t</sub> dansei-*{no/ga}* heikin zyumyoo-ga mizikai] bunmeikoku,  
 male-*{GEN/NOM}* average life span-NOM short civilized countries  
 'the civilized countries in which the average life span of men is short'
- ((11b) is adapted from Sugimoto (1986))

Sentence (11a) is a well-known instance of multiple subjectivization. Note that subjectivization is applicable to the genitive NP *dansei* 'male' even in the relative clause, as illustrated by (11b). This fact leads us to the conclusion that we cannot accept the assumption that subjectivization cannot apply to an NP in embedded sentences. Therefore, it will be unreasonable to account for the contrast between (9a) and (10a) by distinguishing underlying subjects from derived ones.

Another possible solution is to assume that by subjectivization, Sato (1985) merely means a syntactic operation which changes an NP to a nominative NP.<sup>5</sup>

<sup>5</sup> This syntactic operation will correspond to "nominativization" in the sense of Shibatani (1977). It has generally been assumed in the literature that the subject NP triggers subject honorification or reflexivization (see Harada (1976), Kageyama (1978), Shibatani (1977, 1978) and Sugimoto (1986), among others). Based on this general assumption, Shibatani (1977) points out that the derived nominative NPs in (ia) and (ib) can trigger neither subject honorification nor reflexivization. In (ia), only *okusan* 'wife' can count as the target of honorification. In (ib), the reflexive *zibun* 'oneself' is coreferential with the NP *Yamada sensei no musuko* 'Prof. Yamada's son', and cannot be interpreted as co-referring to the NP *Yamada sensei* 'Prof. Yamada'.

- (i) a. Yamada sensei-*{no/ga}* okusan-ga o-wakai.  
 Yamada Prof.-*{GEN/NOM}* wife-NOM honorific prefix-young  
 'Prof. Yamada's wife is young.'
- b. \*Yamada sensei-*{no/ga}* musuko-ga zibun-ni unzarisite i-ru.  
 Yamada Prof.-*{GEN/NOM}* son-NOM self-DAT disgusted be-PRES  
 lit. 'Prof. Yamada's son is disgusted with himself.'

From these observations, Shibatani (1977) arrives at the conclusion that the derived nominative NPs in

Indeed, this assumption will enable us to regard the first nominative NP in (10a) as a non-subject, which ostensibly accounts for the fact that this NP cannot appear in the relative clause. However, there still remains a problem unsolved. Note that when the sentence-initial NP is marked with the dative case, it can appear in the relative clause, as demonstrated by (12b).

- (12) a. *Taroo*-{ni/ga} takusan-no okane-ga ar-u.  
 Taro-{DAT/NOM} much-GEN money-NOM be-PRES  
 'Taro has much money.'
- b. [*Taroo*-{ni/\*ga} t<sub>i</sub> ar-u] takusan-no okane;  
 Taro-{DAT/NOM} be-PRES much-GEN money  
 'a lot of money that Taro has'

If we follow Sato's analysis, the dative NP *Taroo* 'Taro' will not be a subject, either. Therefore, even if it is the case that the first nominative NP in (12a) does not behave as subject, it cannot give a full explanation of the fact that the sentence-initial NP can appear with the dative case, but not with the nominative case, in the relative clause.

So far I have carefully examined two possible solutions to the problem with Sato's (1985) analysis, and the above discussion has revealed that neither of them will be feasible. Therefore, it will be reasonable to conclude that the status of the first nominative NP as a non-subject is irrelevant to the fact that the NP cannot appear in the relative clause. In section 5, I will discuss the reason why possessive sentences do not allow the first nominative NP to occur in the relative clause, as opposed to sentences with *wakar-u* 'understand'.

## 2.2. Sugimoto's (1986) Analysis

Let us turn to Sugimoto's (1986) analysis. He claims that pseudo double nominative constructions like the *ga-ga* versions in (13a) and (13b) are configurationally different from *bona fide* double nominative constructions like (13c): the former constructions have the syntactic structure in (14a), while the latter

(ia) and (ib) do not behave as subject, and that the process which Kuno calls subjectivization can be best termed nominativization.

As I see it, however, (ia) does not necessarily give strong evidence in support of Shibatani's claim that the derived nominative NPs in question do not behave as subject. In fact, there are some cases in which the derived nominative NP triggers subject honorification. For example, it is only *Tanaka sensei* 'Prof. Tanaka' that is regarded as the target of honorification in (ii).

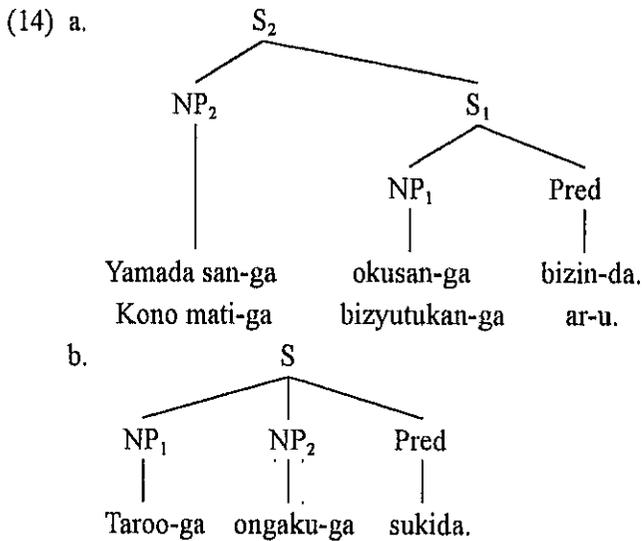
- (ii) *Tanaka sensei*-{no/ga} me-ga o-warui.  
 Tanaka Prof.-{GEN/NOM} eye-NOM honorific prefix-bad  
 'Prof. Tanaka is weak in sight.'

Furthermore, Sugimoto (1986) points out that some derived nominative NPs can trigger reflexivization. Hence, it will be hasty to conclude on the basis of examples (ia) and (ib) that the derived nominative NPs do not function as subject, and further investigation will be needed with respect to this issue.

constructions have the one in (14b).

- (13) a. Yamada san-{no/ga} okusan-ga bizin-da.  
 Yamada honorific title-{GEN/NOM} wife-NOM beautiful-be  
 'Mr. Yamada's wife is beautiful.'  
 b. Kono mati-{ni/ga} bizyutukan-ga ar-u.  
 this town-{LOC/NOM} museum-NOM be-PRES  
 'There is a museum in this town.'  
 c. Taroo-ga ongaku-ga sukida.  
 Taro-NOM music-NOM like  
 'Taro likes music.'

(Sugimoto 1986)



As is evident from (14a), pseudo double nominative constructions have complex structures; they contain two S nodes. According to Sugimoto (1986), the lower node  $S_1$  functions as a kind of predicate. On the other hand, *bona fide* double nominative constructions have simplex structures, as in (14b); they contain only one S node.<sup>6</sup>

Sugimoto (1986) claims that this structural difference between the two types of double nominative constructions is responsible for their divergence in relativization. He proposes a constraint that prohibits an NP from being relativized when it is included in the  $S_1$ , which functions as a kind of predicate. Pseudo double nominative constructions do not allow the second nominative NPs to be relativized, as in (15a) and (15b), because these NPs are extracted from  $S_1$ 's.

<sup>6</sup> In the literature, some proposals have been submitted concerning the structures of double nominative constructions, but I cannot refer to such proposals for lack of space. See Kiss (1981), Masuoka (1979), Shibatani (1977), Shibatani & Cotton (1976-77) and Tonoike (1979), among others.

(15) a. \*<sub>[NP [S<sub>2</sub> Yamada san-ga [S<sub>1</sub> t<sub>i</sub> bizin-na]] okusan<sub>i</sub>]</sub>  
 Yamada honorific title-NOM beautiful wife  
 ‘Mr. Yamada’s beautiful wife’

b. \*<sub>[NP [S<sub>2</sub> kono mati-ga [S<sub>1</sub> t<sub>i</sub> ar-u]] bizyutukan<sub>i</sub>]</sub>  
 this town-ga be-PRES museum  
 ‘a museum in this town’ (adapted from Sugimoto 1986)

By contrast, the relativization in *bona fide* double nominative constructions do not infringe the constraint because of their simple structures. Thus, the relativization of the second nominative NP in (13c) does not affect the grammaticality at all, as in (16).

(16) <sub>[NP[S Taroo-ga t<sub>i</sub> sukina] ongaku<sub>i</sub>]</sub>  
 Taro-NOM like music  
 ‘the music which Taro likes’

As we have seen so far, Sugimoto (1986) attributes the difference in relativization between the two types of double nominative constructions to the structural difference between them. His analysis may be correct in that the two constructions differ from each other structurally. However, the problem is that some pseudo double nominative constructions are compatible with the relativization of the second nominative NP. We have already observed in (5a) and (5b), repeated here as (17a) and (17b), that pseudo double nominative constructions with *wakar-u* ‘understand’ allow the first nominative NP to appear in the relative clause when the second nominative NP is relativized. Moreover, the same is true of pseudo double nominative constructions with *deki-ru* ‘can do’, as exemplified by (18a) and (18b).

(17) a. Taroo-<sub>{ni/ga}</sub> (sono) kotoba-ga wakar-u.  
 Taro-<sub>{DAT/NOM}</sub> (DET) language-NOM understand-PRES  
 ‘Taro understands the language.’

b. <sub>[Taroo-<sub>{ni/ga}</sub> t<sub>i</sub> wakar-u] kotoba<sub>i</sub></sub>  
 Taro-<sub>{DAT/NOM}</sub> understand-PRES language  
 ‘the language that Taro understands’

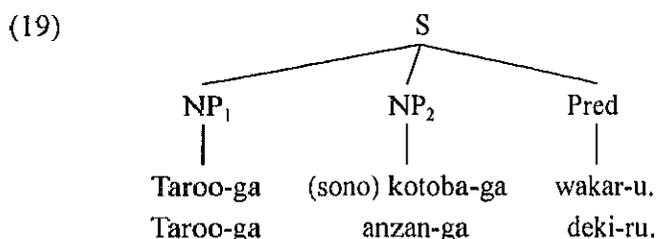
(18) a. Taroo-<sub>{ni/ga}</sub> anzan-ga deki-ru.  
 Taro-<sub>{DAT/NOM}</sub> mental arithmetic can do-PRES  
 ‘Taro can do mental arithmetic.’

b. <sub>[Taroo-<sub>{ni/ga}</sub> t<sub>i</sub> deki-ru] anzan<sub>i</sub></sub>  
 Taro-<sub>{DAT/NOM}</sub> can do mental arithmetic  
 ‘the mental arithmetic which Taro can do’

In (17a) and (18a), the first nominative NPs can alternate with the dative NPs, which means that the *ga-ga* versions in these examples should be classified into pseudo double nominative constructions by definition. Nevertheless, (17b) and (18b)

demonstrate that the relativization of the second nominative NP is possible with the *ga-ga* versions in (17a) and (18a).

In fact, Sugimoto (1986) notices this problem. In order to explain the compatibility of examples like (17a) and (18a) with the relativization of the second nominative NP, he proposes that they have the same underlying structures as *bona fide* double nominative constructions, as shown by (19). He claims that they allow the relativization of the second nominative NPs for this reason.



However, there seem to be at least two problems with Sugimoto's proposal. First, as argued by Kageyama (1978) and Shibatani (1977), there are some reasons to believe that in sentences like (17a) and (18a), *ni-ga* constructions are basic and *ga-ga* constructions derived. Kageyama (1978) adduces three reasons for this. First, "our native intuition tells us that the *ni-ga* case marking is unmarked and natural." Second, "*Ga-Ni* Conversion is simply ad hoc" whereas subjectivization is "independently motivated by such pairs of existential constructions as *Tokyoo ni tikatetu ga aru* 'There is a subway in Tokyo' → *Tokyoo ga tikatetu ga aru*." Finally, the first nominative NPs in sentences like (17a) and (18a) designate what Kuno calls the 'exhaustive listing', namely 'Taro and only Taro', which is characteristic of derived subjects. I agree with Kageyama (1978) in these three respects, and therefore, it seems unreasonable to assume that (17a) and (18a) have the same underlying structures as *bona fide* double nominative constructions.

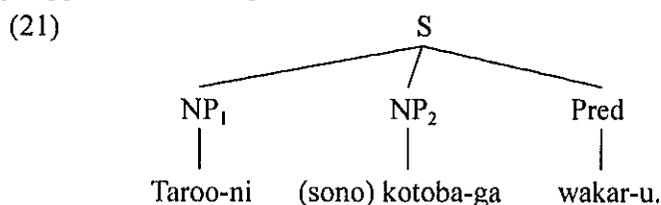
A second problem with Sugimoto's analysis is that ungrammatical sentences like (20b) may be generated by *ga/ni* conversion under the assumption at issue.

- (20) a. Taroo-ga kuruma-ga sukida.  
       Taro-NOM car-NOM like  
       'Taro likes some cars.'
- b. \*Taroo-ni kuruma-ga sukida.  
       Taro-DAT car-NOM like  
       'Taro likes some cars.'

If the *ga-ga* constructions in (17a) and (18a) were similar to *bona fide* double nominative constructions such as (20a) in underlying structure, it would not be strange that *ga/ni* conversion can also be applied to *bona fide* double nominative constructions,

contrary to the fact. Clearly, the difference in applicability of *ga/ni* conversion between (17a) and (18a) on the one hand, and (20b) on the other, cannot be explained under the assumption that the double nominative constructions in (17a) and (18a) are the same as *bona fide* double nominative constructions in underlying structure.

One possible solution to these problems is to assume that (19) is not the underlying structure but the derived one. In other words, (19) is derived from (21) through application of subjectivization.



This assumption enables us to solve the two problems above. First, it is compatible with the claim that in sentences like (17a) and (18a), *ni-ga* constructions are basic and *ga-ga* constructions derived. Second, if the first nominative NP in (19) is derived from the dative NP in (21) by subjectivization, the inapplicability of *ga-ni* conversion to the first nominative NP in (20a) will not raise any problems; such inapplicability is problematic only on the assumption that (19) is the underlying structure, not the derived one. However, note that this solution raises a new problem. Based on this assumption, we have to conceive that the *ga-ga* constructions in (17a) and (18a) are structurally different from the *ga-ga* constructions in (13a) and (13b) in spite of the fact that they are all classified into pseudo double nominative constructions by definition. I will return to this problem in section 5.

### 3. Conditions Required for Subjectivization

Before dealing with the relativization in pseudo double nominative constructions, it will be useful to explicate the conditions under which the dative/locative NP or the genitive NP can be subjectivized. Takami and Kamio's (1996) analysis is instructive on this point. They propose the following condition for subjectivization.<sup>7</sup>

(22) Characterization Condition for Subjectivization (CCS)

Subjectivization is acceptable if and only if the subjectivized subject is characterized by the rest of the utterance. (Takami and Kamio (1996: 224))

<sup>7</sup> Takami and Kamio (1996) regard the derived nominative NP as a subject, thus using the term "subjectivization." In this study, I also use "subjectivization", not "nominativization", for convenience's sake. In fact, it is irrelevant to the discussion here which of the two terms is more appropriate for the process that converts some NP to a nominative NP. So the term "nominativization" may be employed for the process at issue.

According to Takami and Kamio (1996), the CCS plays a crucial role in determining the acceptability of subjectivization. Let us consider the following examples.

- (23) a. Taroo- $\{no/ga\}$  me-ga warui.  
 Taro- $\{GEN/NOM\}$  eye-NOM bad  
 'Taro is weak in sight.'
- b. Suugaku- $\{no/*ga\}$  sensei-ga nakunat-ta.  
 mathematics- $\{GEN/NOM\}$  teacher-NOM die-PAST  
 'A teacher of mathematics died.'

The contrast between (23a) and (23b) shows that the alternation between the genitive NP and the nominative NP is constrained by the CCS in (22). In (23a), the fact that Taro is weak in sight can be regarded as offering an intrinsic property of Taro. On the other hand, the *ga-ga* construction in (23b) does not satisfy the CCS; the fact that a teacher of mathematics died cannot be said to be predicated of mathematics.

Furthermore, the CCS is relevant to the alternation between dative/locative and nominative NPs, on which Takami and Kamio (1996) do not make observations.

- (24) a. Taroo- $\{ni/ga\}$  saisi-ga ar-u.  
 Taro- $\{DAT/NOM\}$  wife and child-NOM be-PRES  
 'Taro has a wife and a child.'
- b. Hondana- $\{ni/*ga\}$  Tyomusukii-no hon-ga ar-u.  
 bookshelf- $\{LOC/NOM\}$  Chomsky-GEN book-NOM be-PRES  
 'On the bookshelf is a book by Chomsky.'

In (24a), the characterization of the subjectivized NP goes well because the fact that Taro has a wife and a child can be interpreted as offering Taro's property. In (24b), on the other hand, the subjectivized NP does not undergo successful characterization; this sentence describes the situation of there being a book by Chomsky on the bookshelf, which cannot be regarded as offering the attribute of the bookshelf. Hence, the unacceptability results.

Similarly, the CCS correctly predicts the acceptability of (25a) and (25b).

- (25) a. Taroo- $\{ni/ga\}$  huransugo-ga wakar-u.  
 Taro- $\{DAT/NOM\}$  French-NOM understand  
 'Taro understands French.'
- b. Hanako- $\{ni/ga\}$  karate-ga deki-ru.  
 Hanako- $\{DAT/NOM\}$  karate-NOM can do-PRES  
 'Hanako can do karate.'

In each instance, the subjectivized NP is characterized by the rest of the utterance. In (25a), the fact that Taro understands French can be readily interpreted as offering an attribute of Taro; in (25b), the fact that Hanako can do karate can be construed as

describing a property of Hanako. Therefore, these sentences are judged acceptable.

We have seen so far that the CCS proposed by Takami and Kamio (1996) plays an important role in determining the acceptability of subjectivization. Furthermore, it should be emphasized here that the subjectivized NP has a possessor-possessee relationship to the second nominative NP in a broad sense.<sup>8</sup> In what follows, I will argue that in order for an NP to be subjectivized, it must enter into a possessor-possessee relation with the nominative NP.<sup>9</sup>

First, let us reconsider (23a) and (23b). Crucially, the relation between the two nominative NPs in (23a) differs from the one between the two nominative NPs in (23b). In (23a), the first nominative NP bears a possessor-possessee relationship to the second nominative NP in the sense that the eyes are inalienably possessed by Taro. In (23b), by contrast, there is no such possessor-possessee relationship between the two NPs; the first nominative NP would merely function as a modifier of the second nominative NP. The contrast between these examples indicates that a possessor-possessee relation is required between the two NPs in question for subjectivization.<sup>10</sup>

The same is true of the following examples, in which the locative NP alternates with the nominative NP.

- (26) a. Ano kooen-{ni/ga}          hunsui-ga          ar-u.  
           that park-{LOC/NOM} fountain-NOM be-PRES  
           ‘There is a fountain in that park.’

<sup>8</sup> By possessor-possessee relationships, I mean inalienable possession, alienable possession, and a part-whole relation. Kimball (1973: 263) defines inalienable possession as follows: A is inalienably possessed by B if A exists only insofar as it is possessed by B.

<sup>9</sup> Takami and Kamio (1996) propose another condition for subjectivization.

(i) Identifiability Condition for Subjectivization (ICS)

An utterance of the structure [X-ga Y-ga] is acceptable if and only if the Y can be identified by the X. (Takami and Kamio (1996: 230))

This condition may be parallel to the condition proposed here in the sense that the possessed NP is identified by the possessor NP. However, even if this is the case, it will turn out that the ICS should be modified to accommodate such examples as observed below. So I do not take the trouble to introduce the ICS into the discussion here.

<sup>10</sup> One might wonder whether the verb used here is responsible for the unacceptability of (26b). The following example indicates, however, that subjectivization is possible with sentences with the verb *nakumar-u* ‘die’.

(i) Taroo-{no/ga}          musuko-ga nakunat-ta.  
     Taro-{GEN/NOM} son-NOM die-PAST  
     ‘Taro’s son died.’

It is important to see that in this case, the first nominative NP *Taroo* ‘Taro’ is associated with the second nominative NP *musuko* ‘son’ by a kinship, which classes with inalienable possession. Comparison of the sentence in (i) with (23b) also shows that a possessor-possessee relation between the subjectivized NP and the second nominative NP plays an important role in determining the acceptability of subjectivization.

- b. *Ano kooen*-{*ni*/\**ga*} *Taroo-no zityensya-ga ar-u.*  
 that park-*{LOC/NOM}* Taro-GEN bicycle-NOM be-PRES  
 'In that park is Taro's bicycle.'

Sentence (26a) makes a minimal pair contrast to sentence (26b); they differ from each other only in the referent of the (second) nominative NP, which yields the difference in acceptability between them. Note that in (26a), the fountain constitutes a part of the park. So it is clear that the locative NP *hunsui* 'fountain' enters into a part-whole relation with the nominative NP *ano kooen* 'that park'. In (26b), on the other hand, it is proper to conceive that the relation between the locative NP and the nominative NP is taken merely as a spatial relation, because Taro's bicycle can be in another place a few hours later.

The comparison of (26a) with (26b) suggests that a possessor-possessee relationship must hold between the locative NP and the nominative NP for subjectivization. This is also certified by the following examples.

- (27) a. *Kuruma-ni enzin-ga ar-u.*  
 car-in engine-NOM be-PRES  
 'There is an engine in the car.' (Muromatsu (1997))
- b. *Kuruma-ga enzin-ga ar-u.*  
 car-NOM engine-NOM be-PRES  
 'The car has an engine.'

Muromatsu (1997) points out that sentence (27a) is ambiguous between two readings. One reading is that the car has an engine. In this case, the engine is an integral part of the car, and thus, (27a) expresses an integral relation between the car and an engine. This relation can be regarded as a kind of part-whole relation. The other reading is that there happens to be an engine in the car. In this case, (27a) merely expresses a spatial relation between the car and an engine.<sup>11</sup> With these in mind, let us consider

<sup>11</sup> Muromatsu (1997) terms sentences like (27a) with the former reading "Integrals", which will correspond to so-called possessive constructions, and sentences like (27a) with the latter reading "Spatial", which will be parallel to what is generally called existential constructions. She claims that Integrals are structurally different from Spatial, arguing that subjectivization can only be applied to the *ni* phrase in Integrals, which functions as subject (see Muromatsu (1997) for a detailed discussion). However, a further consideration will be needed as to whether or not the applicability of subjectivization can be related to the subjecthood of the *ni* phrase.

- (i) *Ano kooen*-{*ni*/*ga*} *koosyuu benzyo-ga settis-are te i-ru.*  
 that park-*{LOC/NOM}* communal lavatory-NOM locate-PASS be-PRES  
 'A communal lavatory is located in that park.'

It is unlikely that the locative NP *ano kooen* 'that park' is taken as the subject of the (passive) sentence in (i). If this is the case, it will be hasty to conclude that subjectivization can only apply to the *ni* phrase which behaves as subject. Note that in this case, too, a part-whole relation is established between the two NPs *ano kooen* 'that park' and *koosyuu benzyo* 'communal lavatory'. This fact also

(27b). Of much importance is that subjectivization disambiguates the meaning of (27a), allowing the former reading only. This fact also indicates that some possessor-possessee relation is required between the two NPs in question for subjectivization.

Finally, dative NPs can also be subjectivized when they bear a possessor-possessee relationship to the (second) nominative NPs.

- (28) a. Taroo- $\{ni/ga\}$  kodomo-ga ar-u.  
 Taro- $\{DAT/NOM\}$  child-NOM be-PRES  
 'Taro has a child.'  
 b. Hanako- $\{ni/ga\}$  bessoo-ga ar-u.  
 Hanako- $\{DAT/NOM\}$  villa-NOM be-PRES  
 'Hanako has a villa.'

In (28a), the child is inalienably possessed by Taro. In (28b), the villa is alienably possessed by Hanako. These examples indicate that the dative NP must have a possessor-possessee relation with the (second) nominative NP for subjectivization.

We have thus far observed some examples, in which subjectivization can apply to the sentence-initial NP, and other examples, in which the process cannot. The observations have revealed that an NP can be subjectivized if it enters into a possessor-possessee relation with the (second) nominative NP. This condition can probably be taken as a sub-condition of the CCS. It is evident from the discussion above that in order to satisfy the CCS, the rest of the utterance must be interpreted as offering an intrinsic or extrinsic property of the entity referred to by the subjectivized NP. If an NP which is associated with the subjectivized NP is included in the rest of the sentence, it will be easier to speculate that the information relevant to the subjectivized NP is given by the rest of the utterance. This may (partly) motivate the condition which requires that the NP to which subjectivization applies must enter into a possessor-possessee relation with the (second) nominative NP.

#### 4. A (Lexical) Conceptual Structure Approach to Subjectivization

In the previous section, I argued that in order for an NP to be subjectivized, it must bear a possessor-possessee relationship with the (second) nominative NP in a broad sense. There are, however, some apparent counter-examples, in which such a relation does not hold between the two NPs in question.

- (29) a. Taroo- $\{ni/ga\}$  huransugo-ga wakar-u. (=25a)  
 Taro- $\{DAT/NOM\}$  French-NOM understand  
 'Taro understands French.'

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adduces corroborating evidence for the discussion here.

- b. Hanako-*{ni/ga}* karate-ga dēki-ru. (=25b)  
 Hanako-*{DAT/NOM}* karate-NOM can do-PRES  
 ‘Hanako can do karate.’

In these cases, the sentence-initial NPs *Taroo* and *Hanako* do not have any possessor-possessee relationship to the second nominative NPs *huransugo* ‘French’ and *karate* ‘karate’, respectively. So it seems that these examples adduce evidence against the claim that the (second) nominative NP must denote a possessee.<sup>12</sup> However, they are not necessarily counter-examples to the claim. In the previous section, I have given enough examples to show that a possessor-possessee relationship must hold between the NP to which subjectivization applies and the (second) nominative NP. Taking this into consideration, it is reasonable to assume that in cases like (29a) and (29b), the constituent which denotes a possessee is in the conceptual meaning of the verb. This assumption leads us to introduce the framework of (Lexical) Conceptual Structure ((L)CS), which assumes that the observed syntactic and morphological behavior of a lexical item is determined (at least partly) by its meaning that is represented at (L)CS (cf. Jackendoff (1987, 1990, 1992), Kageyama (1996, 1997a, 1997b), Hatori (1997), Yumoto (1997), among others).<sup>13</sup>

Let us begin with the LCSs for existential and possessive verbs. Each LCS representation will be schematized as in (30b) and (31b).

- (30) a. Sono kooen (Y)-ni Taroo-no zitensha (X)-ga ar-u.  
 DET park-LOC Taro-GEN bicycle-NOM be-PRES  
 ‘In the park is Taro’s bicycle.’ (existential construction)  
 b. [STATE [X] BE<sub>Position</sub> [AT-[Y]]]
- (31) a. Taroo (Y)-ni saisi (X)-ga ar-u.  
 Taro-DAT wife and child-NOM be-PRES  
 ‘Taro has a wife and a child.’ (possessive construction)  
 b. [STATE [X] BE<sub>Possession</sub> [AT-[Y]]]

In the LCSs in (30b) and (31b), the existential verb *ar-u* ‘be’ and the possessive verb *ar-u* ‘be’ are represented as BE<sub>Position</sub> and BE<sub>Possession</sub>, respectively (cf. Kageyama (1996: 54)). X and Y represent open arguments (or variables). As for (30b), X and Y

<sup>12</sup> Notice that (29a) and (29b) also cannot be explained in terms of the identifiability condition for subjectivization (ICS) proposed by Takami and Kamio (1996) (cf. note 9); in these cases, it cannot be said that the (second) nominative NP is identified by the subjectivized NP. Therefore, the ICS should also be modified to accommodate such examples as observed here.

<sup>13</sup> Strictly speaking, Lexical Conceptual Structure (LCS) should be differentiated from Conceptual Structure (CS), but the present study does not distinguish between them. One of the reasons is that it is difficult to represent the conceptual meanings of adjectives within the framework of LCS. I will leave this issue open here.

correspond to *Taroo-no zitensha* ‘Taro’s bicycle’ and *sono kooen* ‘the park’, respectively. As for (31b), they are linked to the NPs *saisi* ‘wife and child’ and *Taroo*, respectively. The semantic predicate AT is an abstract representation of location, and AT Y is realized as the locative or dative NP.<sup>14</sup> Furthermore, I will call the open argument X the first argument of BE<sub>Position/Possession</sub> and AT Y the second argument of BE<sub>Position/Possession</sub> for ease of reference.

Next, let us turn to the identificational sentence with the adjective *nagai* ‘long’. Kageyama (1996) argues that the verb *be* in (identificational) sentences like (32a) essentially have the same LCS representations as that in sentences like (33a), which expresses the location of some entity (see Kageyama (1996) for a detailed discussion).

- (32) a. She is healthy.  
 b. [<sub>STATE</sub> she BE<sub>Ident</sub> AT-[<sub>STATE</sub> healthy]] (Kageyama (1996))
- (33) a. She is home.  
 b. [<sub>STATE</sub> she BE<sub>Position</sub> AT-[<sub>PLACE</sub> home]] (ibid.)

Assuming that in Japanese, (identificational) sentences like (34a) also have in them a verb which corresponds to *be* in English, I will represent the conceptual meaning of (34a) as follows.

- (34) a. Zoo (X)-no hana (Y)-ga nagai.  
 elephant-GEN trunk-NOM long  
 ‘The elephant’s trunk is long.’  
 b. [<sub>STATE</sub> [X’s Y] BE<sub>Ident</sub> [AT-[<sub>STATE</sub> LONG]]]

In (34b), the open arguments X and Y correspond to the NPs *zoo* ‘elephant’ and *hana* ‘trunk’, respectively. Here, I will term X’s Y as a whole the first argument of BE<sub>Ident</sub> and AT LONG the second argument of BE<sub>Ident</sub>. Moreover, Y in the first argument of BE<sub>Ident</sub> will be called the head of the first argument.

In the previous section, I argued that an NP can be subjectivized if it enters into a possessor-possessee relation with the (second) nominative NP. In the (L)CS framework, this will be modified as follows:

- (35) An NP can be subjectivized if it is linked to the conceptual argument that can be interpreted as entering into a possessor-possessee relation with (the head of) the first argument in (L)CS.

Keeping this condition in mind, let us reconsider the examples in (30a), (31a) and (34a).

<sup>14</sup> One might wonder whether the dative NP in possessive sentences like (31a) could also be interpreted as designating a location. On Sugimoto’s (1986) view, a possessor can be construed as a kind of location in which an entity like a thing, an ability and an experience exists. Following his analysis, I will regard a possessor NP as designating a kind of (abstract) location.

- (36) a. [<sub>STATE</sub> [Taro's bicycle<sub>X</sub>] BE<sub>Position</sub> [AT-[the park<sub>Y</sub>]]]  
 b. [<sub>STATE</sub> [wife and child<sub>X</sub>] BE<sub>Possession</sub> [AT-[Taro<sub>Y</sub>]]]  
 c. [<sub>STATE</sub> [elephant<sub>X</sub>'s trunk<sub>Y</sub>] BE<sub>Ident</sub> [AT LONG]]]

In (36a), the conceptual argument that corresponds to the locative NP in (30a) cannot be interpreted as bearing a possessor-possessee relationship to the first argument of BE<sub>Position</sub>. Thus, the locative NP cannot be subjectivized, as shown by (26b). On the other hand, the dative NP in (31a) can be subjectivized, as in (24a), because in (36b), the corresponding argument can be construed as having a possessor-possessee relation with the first argument of BE<sub>Possession</sub>. Similarly, the genitive NP in (34a) can alternate with the nominative NP, as demonstrated by (3a). This is so because in (36c), the argument that corresponds to the genitive NP can be interpreted as entering into a possessor-possessee relation with the head of the first argument of BE<sub>Ident</sub>.

Now, returning to the main subject, I will discuss the apparent counter-examples above, that is, the sentences with the verbs *wakar-u* 'understand' and *deki-ru* 'can do'. I will postulate the LCS representations in (37b) and (38b) for these verbs.

- (37) a. Taroo (Y)-ni tyuugokugo (X)-ga wakar-u.  
 Taroo-DAT Chinese-NOM understand  
 'Taro understands French.'  
 b. [<sub>STATE</sub> [KNOWLEDGE OF Chinese<sub>X</sub>] BE<sub>Possession</sub> [AT-[Taro<sub>Y</sub>]]]
- (38) a. Hanako (Y)-ni kensui (X)-ga deki-ru.  
 Hanako-DAT dangling-NOM can do-PRES  
 'Hanako can chin herself up.'  
 b. [<sub>STATE</sub> [ABILITY OF dangling<sub>X</sub>] BE<sub>Possession</sub> [AT-[Hanako<sub>Y</sub>]]]

According to Kageyama (1997a), "open argument positions are normally linked to NPs in sentence structure," but "there are verbs which have one or more positions occupied by lexically specified constants." I assume that *wakar-u* and *deki-ru* are members of the verbs, and that in the LCSs postulated for these two verbs, the first arguments are lexically specified as KNOWLEDGE OF (X) and ABILITY OF (X), respectively. I have stated above that unless the (second) nominative NP denotes a possessee, such a constituent will be in the conceptual meaning of the verb. The existence of the constants KNOWLEDGE OF (X) and ABILITY OF (X) in the LCS representations is based on this assumption. Note that these constants designate some attributes, each of which can be regarded as a kind of possessee. Furthermore, it is assumed that they occupy the first argument positions, respectively, on the grounds that in (31b) and (34b), the conceptual argument which refers to a possessee corresponds to (the head of) the first argument of BE. Finally, I assume that the constants KNOWLEDGE and ABILITY are incorporated into BE<sub>Possession</sub> and realized

as *wakar-u* ‘understand’ and *deki-ru* ‘can do’, respectively.<sup>15</sup>

As has been observed, the dative NPs in sentences like (37a) and (38a) can be subjectivized (cf. (29a) and (29b)). We are now in a position to provide a reasonable explanation for this fact by postulating the LCS representations in (37b) and (38b). As has been argued, if an argument can be interpreted as standing in a possessor-possessee relation to the head of the first argument (of BE), the corresponding NP can be subjectivized. It is evident that this condition is satisfied in the cases of (37a) and (38a). In (37b), the conceptual argument that corresponds to the dative NP *Taroo* can be regarded as bearing a possessor-possessee relation with the head of the first argument, i.e. KNOWLEDGE, which makes it possible for the dative NP to be subjectivized. In (38b), the conceptual argument that is linked to the dative NP *Hanako* can be construed as entering into a possessor-possessee relation with the head of the first argument, i.e. ABILITY. Hence, the dative NP can be subjectivized.

Finally, I would like to consider the following example.

- (39) a. Sono tihoo (X)-no nanbu (Y)-no kikoo (Z)-ga ondanda.  
 DET district-GEN southern part-GEN climate-NOM mild  
 ‘The climate of the southern part of the district is mild.’  
 b. [<sub>STATE</sub> [the climate<sub>Z</sub> of the southern part<sub>Y</sub> of the district<sub>X</sub>] BE<sub>Ident</sub>  
 [<sub>STATE</sub> AT-[MILD]]]

In (39a), the climate can be regarded as a kind of property of the southern part (of the district), because any part of any district has some climate characteristic of it. In addition, the climate of the southern part (of the district) cannot be possessed by anywhere else. It can be said, therefore, that the climate is inalienably possessed by the southern part of the district in this sense. This means that the head of the first

<sup>15</sup> Kageyama (1997a, 1997b) investigates the constraints on the formation of denominal verbs in English from the perspective of LCS, claiming that the parent noun of a denominal verb is originally inserted into an open slot in LCS as a lexically specified constant. For instance, he suggests the following LCS representation for the verb *button*.

(i) button: [ ]<sub>x</sub> CAUSE [BECOME [BUTTON-of-[ ]<sub>z</sub> BE AT-FIXED]]] (Kageyama (1997a))

It is noteworthy that he claims that the internal argument (i.e. the first argument of BE in my sense) can participate in denominal verb formation only if the prepositional argument (i.e. Y in the second argument in my sense) is already specified by semantic material, as in (i). If the restriction on the position a constant can occupy applies to verbs other than denominal ones, it seems that his claim is incompatible with my analysis. Under my analysis, the first arguments are lexically specified as the constants KNOWLEDGE and ABILITY in the LCSs postulated for the verbs *wakar-u* ‘understand’ and *deki-ru* ‘can do’, though the Ys in the second arguments are not specified by semantic material. One possible explanation for this is that the dative NPs, which are linked to the second arguments in question, behave as/like subject, as opposed to other postpositional phrases. This will allow the first arguments to be occupied by the constants KNOWLEDGE and ABILITY. I will not pursue this issue any further here.

argument *climate* is associated not with the argument *the district* but with the argument *southern part*.<sup>16</sup> Nonetheless, the sentence-initial NP *sono tihoo* ‘the district’ can be subjectivized, as demonstrated by (40).

- (40) Sono tihoo-{no/ga}            nanbu-no            kikoo-ga            ondanda.  
 DET district-{GEN/NOM} southern part-GEN climate-NOM mild  
 ‘The climate of the southern part of this district is mild.’

It is important to note that a part-whole relation holds between the arguments *the district* and *southern part*. Thus, it follows that in (39a), the argument *the district* is interpreted as entering into a possessor-possessee relation with the argument *southern part*, which is in turn construed as entering into such a relation with the head of the first argument *climate*. In other words, the argument that corresponds to the sentence-initial NP can be taken as being indirectly associated with the head of the first argument. The example in (40) shows that in such a case, too, the sentence-initial NP can be subjectivized. So it is inappropriate to conceive that the fact observed in (40) gives evidence against the condition in (35).

### 5. A (Lexical) Conceptual Structure Approach to the Relativization in Pseudo Double Nominative Constructions

In the previous section, I argued that an NP can be subjectivized if the corresponding argument can be interpreted as entering into a possessor-possessee relationship with (the head of) the first argument. In what follows, I will argue that this is relevant to the differences as to relativization among pseudo double nominative constructions.

Let us begin with the following examples.

- (41) a. Sono kooen (Y)-ni hunsui (X)-ga ar-u.  
 DET park-LOC fountain-NOM be-PRES  
 ‘There is a fountain in the park.’  
 b. [<sub>STATE</sub> [a fountain<sub>X</sub>] BE<sub>POSSESSION</sub> [AT-[the park<sub>Y</sub>]]]  
 (42) a. Taroo (Y)-ni takusan-no okane (X)-ga ar-u.  
 Taro-DAT much-GEN money-NOM be-PRES  
 ‘Taro has a lot of money.’

<sup>16</sup> This predicts that the genitive NP *nanbu* ‘southern part’ can be subjectivized, which is borne out by the following example.

- (i) Sono tihoo-no nanbu-{no/ga}            kikoo-ga            ondanda.  
 DET district-GEN southern part-{GEN/NOM} climate-NOM mild  
 ‘The climate of the southern part of this district is mild.’

b. [<sub>STATE</sub> [much money<sub>X</sub>] BE<sub>possession</sub> [AT-[Taro<sub>V</sub>]]]

In (41a) and (42a), the locative/dative NP enters into a possessor-possessee relation with the nominative NP. This also means that in each LCS, a possessor-possessee relation holds between the argument which corresponds to the locative/dative NP and the first argument of BE<sub>possession</sub>. Therefore, the locative/dative NP can be subjectivized, as exemplified by (43a) and (44a).

With this in mind, let us consider the examples in which the second nominative NP is relativized.

(43) a. Sono kooen-{ni/ga} hunsui-ga ar-u. (= (4a))

b. [Sono kooen-{ni/\*ga} t<sub>i</sub> ar-u] hunsui<sub>i</sub> (= (4b))

(44) a. Taroo-{ni/ga} takusan-no okane-ga ar-u. (= (12a))

b. [Taroo-{ni/\*ga} t<sub>i</sub> ar-u] takusan-no okane<sub>i</sub> (= (12b))

As we have observed, in cases like (43b) and (44b), the sentence-initial NP can be realized with the locative/dative NP, but not as the nominative NP, in the relative clause. What should be pointed out here is that the relativized NP corresponds to the first argument, which denotes a possessee (cf. (41b) and (42b)). If such an NP is relativized, it will make a situation in which there is no conceptual constituent that designates a possessee in the relative clause. For this reason, the second nominative NP cannot move outside the relative clause.

This explanation is based on the assumption that the applicability of subjectivization is conditioned at least partly by whether or not the NP that corresponds to the conceptual argument designating a possessee is left in the clause. Of course, further investigation will be needed as to why such an NP must be left in the clause for subjectivization, but this assumption seems to be the case. Let us consider the following examples.

(45) a. Yamada san (X)-no okusan (Y)-ga bizin-da. (cf. (13a))

[<sub>STATE</sub> [Mr. Yamada<sub>X</sub>'s wife<sub>V</sub>] BE<sub>ident</sub> [BEAUTIFUL]]]

b.\*[Yamada san-ga t<sub>i</sub> bizin-na] okusan<sub>i</sub> (cf. (15a))

(46) a. Bunmeikoku (X)-no dansei (Y)-no heikin zyumyoo (Z)-ga mizikai.

(cf. (11a))

[<sub>STATE</sub> [the average life span<sub>Z</sub> of men<sub>V</sub> of the civilized countries<sub>X</sub>] BE<sub>ident</sub>

[<sub>STATE</sub> AT-[SHORT]]]

b. [t<sub>i</sub>dansei-{no/ga} heikin zyumyoo-ga mizikai] bunmeikoku<sub>i</sub>

(cf. (11b))

In (45b), the relativized NP *okusan* 'wife' corresponds to the head of the first argument in (45a), which refers to a possessee. This is responsible for the ungrammaticality of (45b). In (46b), on the other hand, the relativized NP

*bunmeikoku* ‘civilized countries’ does not correspond to the head of the first argument. Note that the NP *heikin zyumyoo* ‘average life span’, which corresponds to the head of the first argument, is left in the relative clause. This makes it possible for the genitive NP *dansei* ‘men’ to be subjectivized in the relative clause, because the corresponding argument can be interpreted as entering into a possessor-possessee relation with the head of the first argument *the average life span*. The facts observed here can be accounted for straightforwardly on the assumption that the NP that corresponds to the conceptual argument designating a possessee is left in the clause.

As has been pointed out, sentences with *wakar-u* ‘understand’ or *deki-ru* ‘can do’ allow the sentence-initial NP to be assigned not only the dative case but also the nominative case in the relative clause, as opposed to the examples observed above.

- (47) a. [Taroo- $\{ni/ga\}$   $t_i$  *wakar-u*  $kotoba_i$  (cf. (17b))  
 b. [Taroo- $\{ni/ga\}$   $t_i$  *deki-ru*] *anzan\_i* (cf. (18b))

In these cases, the applicability of subjectivization to the dative in the relative clause can be attributed to the LCS representations for the verbs *wakar-u* ‘understand’ and *deki-ru* ‘can do’.

- (48) a. [<sub>STATE</sub> [KNOWLEDGE OF the language<sub>x</sub>] BE<sub>possession</sub> [AT-[Taro<sub>v</sub>]]]  
 b. [<sub>STATE</sub> [ABILITY OF the mental arithmetic<sub>x</sub>] BE<sub>possession</sub> [AT-[Taro<sub>v</sub>]]]

In (48a) and (48b), the conceptual arguments that designate possesseees are not *the language* and *the mental arithmetic*, but the constants KNOWLEDGE and ABILITY. So the relativization of the second nominative NP is irrelevant to the applicability of subjectivization to the dative NP, because the corresponding argument does not denote a possessee. Recall that it is assumed in this study that each of the constants KNOWLEDGE and ABILITY is incorporated into BE<sub>possession</sub>. This means that the constituents designating possesseees are included in the conceptual meanings of the verbs *wakaru* and *deki-ru*. In (47a) and (47b), the dative NP can be subjectivized in the relative clause because the conceptual argument that denotes a possessee is left in it by being incorporated into the semantic predicate BE<sub>possession</sub>.

Finally, I would like to discuss a problem left unsolved in section 2.2. Sugimoto (1986) claims that *ga-ga* constructions with *wakar-u* ‘understand’ have the same structures as *bona fide* double nominative constructions. In section 2.2, I argued that if the structures postulated for those constructions are not the underlying structures but the derived ones, the two problems with Sugimoto’s analysis, which I pointed out, will be solved. However, recall that such a solution gives rise to a new problem: why is it that the *ga-ga* constructions with *wakar-u* ‘understand’ are structurally different from other pseudo double nominative constructions despite the fact that they are all members of pseudo double nominative constructions by

definition? I am not sure whether or not the two types of pseudo double nominative constructions are in fact structurally different from each other, but if this is the case, the structural difference between them might be attributed to their difference in LCS. As is evident from the discussion above, the constituent referring to a possessee is required in the rest of the sentence for subjectivization. This will mean that the existence of such a constituent plays an important role in assigning an additional nominative case to an NP. Recall that the conceptual constituent that designates a possessee is incorporated into the conceptual meaning of the verb *wakar-u*. In cases like this, it might be that the sentence-initial NP, which is normally marked with the dative case, can be assigned the nominative case by the verb itself (or the head of IP). In possessive sentences like (43a) and (44a), by contrast, the second NP with *ga* denotes a possessee. In cases like this, it might be that the verb in itself (or the head of IP) cannot assign the nominative case to an NP. It might be that because of this, another S (or IP), which functions as a kind of predicate in the sense of Sugimoto (1986), needs to be added to the node S (or IP). Of course, further investigation will be needed with respect to this issue, and I will not pursue it any further here.

## 6. Concluding Remarks

This paper has dealt mainly with pseudo double nominative constructions in Japanese. In section 3, I presented an overview of Takami and Kamio (1996), which proposed the characterization condition for subjectivization (CCS). Furthermore, I claimed that a possessor-possessee relationship must hold between the NP to which subjectivization applies and the (second) nominative NP in order to satisfy the CCS. In the present study, it is assumed that this is a sub-condition of the CCS. In section 4, moreover, the sub-condition was modified to accommodate some counter-examples. To conclude, an NP can be subjectivized if the corresponding argument can be interpreted as entering a possessor-possessee relation with (the head of) the first argument in (Lexical) Conceptual Structure ((L)CS).

In this study, I have also been concerned with the differences as to relativization among pseudo double nominative constructions. In case like (43b), (44b) and (45b), the sentence-initial NP cannot be assigned the nominative case in the relative clause, but in cases like (47a) and (47b), it can. In section 2, we have seen that Sato (1986) accounts for a difference like this from the perspective of so-called grammatical relations, and that Sugimoto (1986) gives an explanation of the contrast between (43b), (44b) and (45b) on the one hand, and (47a) and (47b) on the other, by assuming the difference in underlying structure between them. There are, however, some problems with their analyses, as discussed in section 2. Alternatively, I claimed in section 5

that the differences as to relativization among the constructions in question are due to whether or not the constituent designating a possessee is left in the relative clause. In cases like (43b), (44b) and (45b), the relativized NP corresponds to the conceptual argument that designates a possessee. When such an NP is relativized, no constituent that denotes a possessee is included in the relative clause, which results in ungrammaticality. In cases like (47a) and (47b), on the other hand, the constituent which designates a possessee is not the (second) nominative NP, but is included in the conceptual meaning of the verb. This means that even if the second nominative NP is relativized, the constituent that refers to a possessee is left in the relative clause. Thus, the sentence-initial NP can be subjectivized even in the relative clause.

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