

POSSESSOR RAISING IN THE LOCATIONAL CONSTRUCTIONS

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(Abstract)

This article argues that Japanese locational sentences (with *aru* or *iru*), where possessor and locative phrases (in addition to a theme phrase) are co-existent in the clause (i.e. the extended locative construction), can only be derived from locative constructions via possessor raising out of the theme or locative phrases. In the extended locative construction, as a consequence of possessor raising, the clause originally conveying a locative meaning alone is turned into a clause where both locative and possessive relations are expressed, but the verb retains the properties of locative verbs. I propose that the relevant configuration cannot arise as a result of just adding a locative phrase to a possessive construction. Further, I argue that while the possessor in the extended locative construction is extracted from a possessed nominal via possessor raising, the possessor in an ordinary possessive clause containing just the possessor and theme arguments must be base-generated as an argument to the verb without possessor raising. These facts show that it is not possible to maintain the analysis which analyzes the possessor as uniformly originating from within a nominal constituent.

1. INTRODUCTION

In the Japanese literature, it has often been noted (see Koya 1992, Kishimoto 1996, 2000, Muromatsu 1996, and others) that the verbs *aru* (inanimate) and *iru* (animate), which can be viewed as the Japanese counterparts of the English verb *be*, can express possessive and locative meanings. It is also well-observed that these verbs display distinct behaviors in syntactic terms, depending on whether they denote locative or possessive meanings. Possessive and locative meanings are closely related, but still are distinct, so that they are not described by identical structures, despite the fact that they are often expressible by the same set of verbs (cf. Kuno 1973, Shibatani 1978, 1990). In Japanese, as argued by Kishimoto (2000) (see also Muromatsu 1996), when the verbs *are* and *iru* denote locative meanings, they form a clause structure which contains one theme argument plus an optional locative adjunct. But when the verbs carry possessive meanings, the clause comes to include two arguments, i.e. the possessor and theme arguments.

If the locational verbs *aru* and *iru* take different syntactic configurations depending on the meanings they carry, then it is expected that locative and possessive meanings are mutually exclusive. In Japanese, however, there are sentences which

express both locative and possessive meanings simultaneously. Sentences where possessor and locative phrases (in addition to a theme phrase) are co-existent in the clause provide a case in point (i.e. the extended locative construction). At first sight, it looks as though the single verb may describe both possessive and locative meanings simultaneously in this construction. If so, it is tempting to claim that the sentences are created by adding a locative phrase to a possessive sentence, as assumed by Takezawa (2001). On the contrary, I argue in this article that this type of sentence can only be formed by way of extracting a possessor from either the locative or the theme phrase in the locative construction. This means that once a locative phrase is selected, the verb can only denote a locative meaning, and that in order to express an additional possessive meaning, the possessor must be generated with recourse to possessor raising. I argue that in this case, the verb cannot carry a possessive meaning; instead, the possessive meaning is derived from the fact that the possessive relation is formed inside the nominal from which the possessor is extracted.

In the literature, it is often argued (see Szabolcsi 1983, 1994, Tsujioka 2001a, 2001b, among others) that the possessor is uniformly derived by raising it out of a nominal in a locational sentence expressing a possessive relation. A comparison of data from Japanese possessive and extended locative constructions, however, reveals that there are two sources of forming possessive relations. To be more concrete, I argue, by looking at the susceptibility to the Proper Binding Condition (PBC), that possessive constructions display some properties that crucially differ from the extended locative constructions, and propose that in the extended locative construction, the possessor is extracted from a possessed nominal via possessor raising, but that in the ordinary possessive clause, the possessor must be base-generated as an argument to the verb.

This article is organized as follows. In Section 2, I show that in what I call extended locative constructions, the possessor is extracted from either the theme or locative phrase, whereas an ordinary possessive sentence does not involve possessor raising. In Section 3, I show that the verbal properties of extended locative constructions are the same as those of locative constructions, but not those of ordinary possessive constructions. In Section 4, I show that possessor raising is also possible in the ordinary possessive construction, and that in that case, the verbs show properties that are expected of ordinary possessive verbs. In Section 5, a brief summary of the results is presented as a conclusion.

2. THE ORIGIN OF THE EXTENDED LOCATIVE CONSTRUCTIONS

The locational verbs *aru* and *iru* are used to express a locative or a possessive meaning in Japanese. (Here, the term ‘locational verb’ is intended as a general term to refer to locative and possessive verbs (cf. Clark 1978).) Although the maximal number of nominals allowed for these verbs is usually limited to two, we can sometimes find a different type of locational construction, in which three phrases, i.e. the possessor, locative and theme phrases, co-occur in the clause. In this section, I show that this type of construction is formed from a locative construction, where the verb has locative and theme arguments, and argue that the possessor phrase is not an argument selected by the verb, but is an argument extracted from either the theme phrase or the locative phrase by virtue of possessor raising. Further, I argue that since the

possessor in the ordinary possessive construction is not amenable to the constraint that arises from possessor raising, it cannot be extracted from a nominal, but must be an argument to the verb.

Prior to going into the discussion, let us first look at the two basic uses of the locational verbs *aru* and *iru*. (The range of meanings expressed by these verbs are virtually identical, and we can assume that the verbs alternate depending on the animacy of their associated theme phrase.) First, the locational verbs *aru* and *iru* in (1) denote a possessive meaning.¹

- (1) a. John-ni-wa kuruma-ga ar-u.
 John-DAT-TOP car-NOM have.IN-PRES
 ‘John has a car.’
 b. John-ni-wa kyoodai-ga i-ru.
 John-DAT-TOP brother-NOM have.AN-PRES
 ‘John has a brother.’

In (1), a possessive relation obtains between the possessor and the theme.² The examples in (2), on the other hand, are the locative sentences where the same set of verbs express a locative (or spatial) meaning.³

- (2) a. Tokyo-ni-wa ookina yuuenti-ga ar-u.
 Tokyo-DAT-TOP big amusement.park-NOM be.IN-PRES
 ‘There is a big amusement park in Tokyo.’
 b. Kobe-ni-wa watasi-no sinseki-ga i-na-i.
 Kobe-DAT-TOP IGEN relative-NOM be.AN-NEG-PRES
 ‘My relatives are not in Kobe.’

In the Japanese literature, it is widely recognized that *ni*-marked phrases may be used in a number of ways, and in particular, that *ni*-marked phrases can be either adjuncts (i.e. PPs) or arguments (i.e. DPs) (cf. Martin 1975). Since the location expression is syntactically realized as a PP in Japanese, we can assume that in the locative sentences in (2), the theme phrase is construed as the sole argument of the verb. By contrast, in the possessor sentences in (1), the dative phrase serves as an argument, behaving as the subject, as I will discuss below; in this case, we can assume that the verb takes the two DPs of the possessor and the theme. (For a detailed discussion of the difference in the categorical status of *ni*-marked phrases between locative and possessive constructions, see Muromatsu 1996).⁴

While Kishimoto (2000) discusses only these two classes of sentences, Takezawa (2001) (see also Tsujioka 2001a, 2001b) notes the existence of another class of sentences, where locative and possessor phrases (in addition to a theme phrase) co-occur in a single clause, as illustrated in (3).⁵

- (3) a. John(-ni)-wa inaka-ni gootei-ga ar-u.
 John-DAT-TOP hometown-DAT mansion-NOM be.IN-PRES
 ‘John has a mansion in his hometown.’
 b. John(-ni)-wa Kobe-ni ootoo-ga i-ru.
 John-DAT-TOP Kobe-DAT brother-NOM be.AN-PRES

‘John has a brother in Kobe.’

In (3), the innermost nominative phrase counts as a theme phrase whose location is specified by the intermediate locative phrase. In addition, the possessor phrase stands in a possessive relation with the theme phrase. Semantically, then, the sentences in (3) are taken to express the two distinct “locative” and “possessive” meanings, simultaneously.

At first sight, the sentences in (3) might look like a mixture of locative and possessive constructions, which express a possessive relation that is defined relative to a certain location. Takezawa (2001) suggests that they should be derived from the following underlying constituent structure, assuming that the locative phrase is added to a possessive sentence.⁶

(4) $[_{TP} \quad [_{VP} \text{ Possessor } [_{VP} \text{ Locative Theme } V] v] T]$

In his analysis, all the phrases in (3) are thematically-related to the verb. In particular, since both the possessor and theme phrases are selected by the verb, the analysis is tantamount to saying that the verb is in the “possessive” use, and that the locative phrase is an added adjunct.

Takezawa’s (2001) analysis implies that the verbs *aru* and *iru* can comprises a locative phrase even if the verb is in the possessive use. Contrary to Takezawa’s claim, however, there is empirical evidence indicating that the relevant construction is built out of the locative construction, where the verb takes locative and theme arguments, rather than the possessive construction with the verb taking possessor and theme arguments. I argue that the sentences in (3) have the underlying structure in (5a), and that the surface form is derived via possessor raising from the theme phrase, as shown in (5b).

(5) a. $[_{TP} \quad [_{VP} \quad [_{VP} \text{ Locative } [_{DP} \text{ Possessor Theme }] V] v] T]$
 b. $[_{TP} \text{ Possessor}_i \quad [_{VP} \quad t_i \quad [_{VP} \text{ Locative } [_{DP} t_i \text{ Theme }] V] v] T]$

Since the verb is unaccusative, I assume that the theme occurs as a complement to the verb, and that the locative is adjoined to VP. I also assume that the possessor that appears in Spec of TP in (5b) moves through Spec of vP (as required by the Shortest Move Condition). In this analysis, the clause structure in (3) is derived by way of possessor raising, which extracts the possessor out of the theme DP into Spec of T, so that the sentence does not count as a possessive sentence, but is a variety of locative sentences. Under the present view, since this construction is an extended form of a locative construction, it is hereafter referred to as an “extended locative” construction.

I argue that this grammatical process crucially differs from the one forming an ordinary possessive sentences like (1), which contain possessor and theme arguments, but not a locative phrase.

(6) a. $[_{TP} \quad [_{VP} \text{ Possessor } [_{VP} \text{ Theme }] V] v] T]$
 b. $[_{TP} \text{ Possessor}_i \quad [_{VP} \quad t_i \quad [_{VP} \text{ Theme }] V] v] T]$

I argue that possessive verbs take two arguments; while the underlying structure for an ordinary possessive clause is something like (6a), the overt constituent is derived by moving the possessor, which is generated in Spec of *v*, into Spec of *T*, as illustrated in (6b). Notably, in this proposal, the possessor is not extracted from within a nominal if it occurs in an ordinary possessive construction.⁷

The proposed analysis suggests that the apparent possessive meaning of the extended locative construction in (3) is not derived from the verb meaning *per se*, but is derived from the fact that the possessor phrase bears a possessive relation (attributively) with either the theme or locative phrase, whereas an ordinary possessive clause establishes a possessive meaning in the clause. In what follows, for the purpose of this demonstration, I show first that the possessor phrases serve as subjects both in ordinary possessive and extended locative clause, and then argue that despite their similarities in the syntactic behavior, the possessor phrase in the extended locative clause cannot be an argument selected by the verb, whereas the possessor in the ordinary possessor clause is.

Evidence showing that the possessor phrases are construed as subjects both in the ordinary possessive and extended locative sentences can be adduced from a number of syntactic tests (see Kishimoto 2000). First, the following examples show that the possessor phrase can antecede the reflexive *zibun* ‘self’, which has a general subject orientation.

- (7) a. John_i-ni-wa Tokyo-ni zibun_i-no ootoo-ga i-ru.
 John-DAT-TOP Tokyo-DAT self-GEN brother-NOM be.AN-PRES
 ‘John has his younger brother in Tokyo.’
 b. *Zibun_i-no ootoo-ni Tokyo-ni tomodat_i-ga i-ru.
 self-GEN brother-DAT Tokyo-DAT friend-NOM be.AN-PRES
 ‘Self_i’s younger brother has a friend_i in Tokyo.’

This pattern of distribution in the extended locative sentences in (7) in regard to the reflexive *zibun* is analogous to that of the genuine possessive sentences in (8), where the possessor counts as the antecedent of *zibun*.

- (8) a. John_i(-ni)-wa zibun_i-no kodomo-ga i-ru.
 John-DAT-TOP self-GEN child-NOM be.AN-PRES
 ‘John has his child.’
 b. *Zibun_i-no ootoo-ni tomodat_i-ga i-ru.
 self-GEN brother-DAT friend-NOM be.AN-PRES
 ‘Self_i’s brother has a friend_i.’

When the verb is in the locative use, the theme phrase can be the antecedent of the reflexive *zibun*, so it must be the case that it serves as the subject of the verb, as shown in (9).⁸

- (9) John_i-ga zibun_i-no kenkyuu-situ-ni i-ru.
 John-NOM self-GEN office-DAT be.AN-PRES
 ‘John is in his office.’

In the extended locative sentence, only the possessor phrase can count as the antecedent of *zibun*, and its theme phrase, unlike the theme phrase of a locative sentence, cannot count as the subject of the clause.

- (10) John_i(-ni)-wa synyuu_j-ga zibun_{i/*j}-no kokyoo-ni i-ru.
 John-DAT-TOP close.friend-NOM self-GEN hometown-DAT be.AN-PRES
 ‘John has his close friend in his hometown.’

The fact that the theme phrase *sinnyuu* ‘close friend’ in the extended locative sentence in (10) cannot serve as the antecedent of the reflexive *zibun* ‘self’ suggests that it is not construed as subject.

Second, the distribution of an arbitrary PRO interpretation observed in (11) shows that the possessor phrase serves as subject in the extended locative construction, while the theme phrase does not.

- (11) a. [PRO Tokyo-ni sinseki-ga i-ru] koto-wa ii koto da.
 Tokyo-DAT relative-NOM be.AN-PRES that-TOP good thing COP
 ‘It is a good thing to have a relative in Tokyo.’
 b. *[John-ni Tokyo-ni PRO i-ru] koto-wa ii koto da.
 John-DAT Tokyo-DAT be.AN-PRES that-TOP good thing COP
 ‘It is a good thing for John to have PRO in Tokyo.’

An arbitrary PRO can only appear in subject position. The fact that only the possessor can be turned into PRO in (11) suggests then that in the extended locative construction, the possessor phrase should be construed as the subject of the clause. Again, we find the same type of distribution in authentic possessive sentences.

- (12) a. [PRO sinseki-ga i-ru] koto-wa ii koto da.
 relative-NOM have.AN-PRES that-TOP good thing COP
 ‘It is a good thing to have a relative.’
 b. *[John-ni PRO i-ru] koto-wa ii koto da.
 John-DAT have.AN-PRES that-TOP good thing COP
 ‘It is a good thing for John to have PRO.’

The locative construction stands in contrast to the possessor and extended locative constructions, in that the theme phrase, which counts as the subject of the clause, can be easily turned into PRO, as illustrated below.

- (13) [Koko-ni PRO i-ru] koto-wa ii koto da.
 here-DAT be.AN-PRES that-TOP good thing COP
 ‘It is a good thing to be here.’

The so-called “controlled PRO” construals show exactly the same pattern. In the extended locative construction, the possessor phrase, but not the theme, can be turned into a controlled PRO when embedded as a complement to a desiderative predicate like *hosii* ‘want’, as illustrated in (14).

- (14) a. Watasi-wa John_i-ni [PRO_i Tokyo-ni tomodati-ga i-te] hosi-i.
 I-TOP John-DAT Tokyo-DAT friend-NOM be.AN want-PRES
 'I want John to have a friend in Tokyo.'
 b. *Watasi-wa tomodati_i-ni [John-ni Tokyo-ni PRO_i i-te] hosi-i.
 I-TOP friend-DAT John-DAT Tokyo-DAT be.AN want-PRES
 'I want a friend_i for John to have PRO_i in Tokyo.'

The ordinary possessive construction displays the same behavior, since the possessor, but not the theme, can serve as a controlled PRO when embedded as the complement of *hosii*, as shown in (15).

- (15) a. Watasi-wa John_i-ni [PRO_i tomodati-ga i-te] hosi-i.
 I-TOP John-DAT friend-NOM be.AN want-PRES
 'I want John to have a friend.'
 b. *Watasi-wa tomodati_i-ni [John-ni PRO_i i-te] hosi-i.
 I-TOP friend-DAT John-DAT be.AN want-PRES
 'I want a friend_i for John to have PRO_i.'

Since a controlled PRO stands in subject position only, it is clear that in both ordinary possessive and extended locative constructions, the possessor, but not the theme, serves as the subject of the clause.

The data presented thus far show that the possessor serves as subject in both extended locative and ordinary possessive constructions. Given this fact, it is tempting to conclude that the extended locative sentences are constructed, based on possessive sentences, merely by adding locative adjuncts to them. On the contrary, however, there is evidence showing that the possessor phrase in the extended locative construction is turned into the subject of the clause by virtue of possessor ascension (possessor raising), which means that the locative and possessor phrases cannot be selected by the same verb simultaneously.

Evidence in support of the present view comes from the fact that the possessor phrase in the extended locative construction in (3) cannot stand to the right of the theme phrase whose referent is construed as an entity being possessed by the possessor. The following examples illustrate the extent of the phenomenon.⁹

- (16) a. ?*Gooteiga-ga_i John(-ni)-wa inaka-ni-mo t_i ar-u.
 mansion-NOM John-DAT-TOP hometown-DAT-ALSO be.IN-PRES
 'John has a mansion in his hometown as well.'
 b. ?*Ootoo-ga_i John(-ni)-wa Kobe-ni t_i i-ru.
 younger.brother-NOM John-DAT-TOP Kobe-DAT be.AN-PRES
 'John has a younger brother in Kobe.'

In (16), the theme phrase, which is marked with nominative case, is moved across the possessor phrase via scrambling. This scrambling operation results in ungrammaticality.¹⁰ In contrast, when the same theme phrase is moved only internal to the possessor, the sentences are acceptable.

- (17) a. John(-ni)-wa gootei-ga_i inaka-ni-mo t_i ar-u.
 John-DAT-TOP mansion-NOM hometown-DAT-ALSO be.IN-PRES
 ‘John also has a mansion in his hometown.’
 b. John(-ni)-wa ototoo-ga_i Kobe-ni t_i i-ru.
 John-DAT-TOP younger.brother-NOM Kobe-DAT be.AN-PRES
 ‘John has a younger brother in Kobe.’

The locative phrase, in opposition to the possessed phrase, is free from this type of constraint, so that it can be moved across the possessor phrase without affecting acceptability, which is illustrated in (18).

- (18) a. Inaka-ni-mo_i John(-ni)-wa t_i gootei-ga ar-u.
 hometown-DAT-ALSO John-DAT-TOP mansion-NOM be.IN-PRES
 ‘John has a mansion in his hometown as well.’
 b. Kobe-ni-mo_i John(-ni)-wa t_i ototoo-ga i-ru.
 Kobe-DAT-ALSO John-DAT-TOP younger.brother-NOM be.AN-PRES
 ‘John has a younger brother in Kobe as well.’

It is worth noting here that there is no restriction on the ordering of the possessor and theme phrases in genuine possessive sentences that lack locative phrases. So, the following sentences, where the theme phrase is scrambled over the possessor phrase, are well-formed.

- (19) a. Gootei-ga_i John-ni-mo t_i ar-u.
 mansion-NOM John-DAT-ALSO have.IN-PRES
 ‘John also has a mansion.’
 b. Ototoo-ga_i John-ni-mo t_i i-ru.
 younger.brother-NOM John-DAT-ALSO have.AN-PRES
 ‘John also has a younger brother.’

The important generalization covering the scramble facts is that in extended locative sentences, the possessor cannot stand to the right of the theme, but that in ordinary possessive sentences, the positioning of the possessor to the right of the theme is possible.

In Japanese, scrambling may operate on arguments fairly freely. This being so, the question that immediately arises is why movement of the theme phrase is restricted in the extended locative construction. I propose here that the theme phrase in an extended locative sentence cannot appear to the left of a possessor phrase, since the possessor phrase is raised to Spec of TP out of the theme phrase, while leaving a trace inside the theme phrase, as schematically represented in (20) (=5b)).

- (20) [_{TP} Possessor_i [_{VP} t_i [_{VP} Locative [_{DP} t_i Theme] V] v] T]

Under the view held here, the sentences in (16), where the theme phrase is moved over the possessor phrase, have a surface configuration like (21).

- (21) [_{TP} [_{DP} t_i Theme]_j Possessor_i [_{VP} t_i [_{VP} Locative t_j V] v] T]

In (21), the trace inside the fronted theme nominal is not c-commanded by its antecedent, i.e. the possessor. The unacceptability of (16) can then be attributed to a violation of the Proper Binding Condition (PBC), which requires that traces be c-commanded by their antecedents in the surface configuration, (or whatever principle which ultimately rules out the presence of unbounded traces) (see Fiengo 1977 and May 1977).¹¹

The fact that the PBC is generally in force in Japanese can be seen by the ungrammaticality of (22), for instance (see Saito 1989).

- (22) *[John-ga t_i kat-ta to]_j Mary-wa hon-o_i t_j it-ta.
 John-NOM buy-PAST that Mary-TOP book-ACC say-PAST
 ‘Mary said that John bought a book.’

In (22), the direct object *hon* ‘book’ is first moved out of the embedded clause, and then the embedded clause is moved to the front while leaving the direct object behind. In this configuration, the direct object cannot c-command its trace, thereby the sentence being excluded as unacceptable in violation of the PBC.

It is worthy of note that in Japanese the PBC also operates on constructions which involve raising out of a nominal constituent (cf. Grimshaw and Mester 1988, Miyamoto 1999, and others). To exemplify, consider the following sentence where the goal phrase is moved out of the theme phrase.

- (23) Syatyoo-ga amerika-e ?*(yusyutu-o) kime-ta.
 president-NOM America-to export-ACC decide-PAST
 ‘The president decided (on export) to the United States.’

In (23), it is not possible to omit the theme nominal while retaining the goal phrase. This fact indicates that the goal phrase *amerika-e* ‘to the United States’ is thematically related to the theme nominal *yusyutu* ‘export’, but not to the verb *kimeru* ‘decide’.¹² In (23), since the PP does not receive genitive marking, which is required when it is located inside the nominal, we can postulate the following surface configuration for (23).

- (24) [_{TP} Agent_i [_{VP} t_i [_{VP} Goal_j [_{DP} t_j Theme] V] v] T]

Since the goal is extracted from the theme in (24), we predict that the theme cannot be moved across the goal by virtue of the PBC. This is in fact the case.

- (25) a. ?*Yusyutu-o_j amerika-e_i syatyoo-ga t_i t_j kime-ta.
 export-ACC America-to president-NOM decide-PAST
 ‘The president decided on export to the United States.’
 b. ?*Syatyoo-ga yusyutu-o_i amerika-e t_i kime-ta.
 president-NOM export-ACC America-to decide-PAST
 ‘The president decided on export to the United States.’

As shown in (25), the positioning of the goal to the right of the theme results in unacceptability, since the goal fails to c-command the theme containing its trace. In contrast, the goal phrase can be fronted to the sentence-initial position as long as it c-commands the theme nominal *yusyutu* ‘export’.

- (26) a. Amerika-e_i syatyoo-ga t_i yusyutu-o kime-ta.
 America-to president-NOM export-ACC decide-PAST
 ‘The president decided on export to the US.’
 b. Amerika-e_i yusyutu-o_j syatyoo-ga t_i t_j kime-ta.
 America-to export-ACC president-NOM decide-PAST
 ‘The president decided on export to the US.’

The facts naturally follow if we assume that the goal phrase is extracted out of the theme phrase while leaving its trace within the theme phrase.

To return, the data given in (16) indicate that the order of the possessor and the theme phrase in the extended locative sentence is constrained by the PBC. The PBC is sensitive to overt constituent structure, which leads to the prediction that the theme phrase cannot be moved higher than the possessor phrase by other syntactic operations such as topicalization and clefting. This prediction is borne out.

- (27) a. *Gootei-wa_i John(-ni)-mo inaka-ni t_i ar-u.
 mansion-TOP John-DAT-ALSO hometown-DAT be.IN-PRES
 ‘John also has a mansion in his hometown.’
 b. ?*[John-ni inaka-ni t_i ar-u] no wa gootei(-dake) da.
 John-DAT hometown-DAT be.IN-PRES that TOP mansion-only COP
 ‘What John has in his hometown is only a mansion.’

In particular, (27b), where the theme is located in focus position to the right end of the sentence, shows that the linear order of constituents is not a relevant factor for the determination of well-formedness, and that the unacceptability of (16) must be relegated to a configurational structure that gives rise to a PBC violation.

In the case of an ordinary possessive sentence, which has the possessor and the theme arguments only, no difficulty arises as to the movement of the theme phrase to a higher position over the possessor by way of topicalization or clefting, as illustrated below.

- (28) a. Gootei-wa_i John-ni-mo t_i ar-u.
 mansion-TOP John-DAT-ALSO be.IN-PRES
 ‘John also has a mansion.’
 b. [John-ni t_i ar-u] no wa gootei(-dake) da.
 John-DAT be.IN-PRES that TOP mansion-only COP
 ‘What John has is (only) a mansion.’

The examples in (28) illustrate the absence of the PBC effects in ordinary possessive sentences. The data here further confirm that the possessor is not extracted from the theme nonnominal in an ordinary possessive sentence, unlike an extended possessive construction.

The sentences in (3) are not the only type of possessor raising in extended locative constructions, however. Japanese extended locative constructions can utilize another type of possessor raising, which extracts a possessor out of a locative phrase, rather than a theme phrase, as exemplified in (29).

- (29) a. Kono-kuruma(-ni)-wa koobu-zaseki-ni zassi-ga ar-u.
 this-car-DAT-TOP back-seat-DAT magazine-NOM be.IN-PRES
 ‘This car has a magazine on the back seat.’
 b. Kobe-daigaku-ni-wa tosyokan-ni hon-ga takusan na-i.
 Kobe-Univ.-DAT-TOP library-DAT book-NOM many be.NEG.IN-PRES
 ‘Kobe University does not have many books in the library.’

The fact that the sentences in (29) do not involve possessor raising out of the theme phrase can be ascertained by their semantic interpretation. For instance, (29a) has a semantic interpretation which is akin to (30a), but not to (30b).

- (30) a. Kono-kuruma-no koobu-zaseki-ni-wa zassi-ga ar-u.
 this-car-GEN back-seat-DAT magazine-NOM be.IN-PRES
 ‘This car has a magazine on the back seat.’
 b. #Koobu-zaseki-ni-wa kono-kuruma-no zassi-ga ar-u.
 back-seat-DAT-TOP this-car-GEN magazine-NOM be.IN-PRES
 ‘The back seat has this car’s magazine.’

Note here that only (30a) carries the interpretation that corresponds to the interpretation obtained in (29a). The interpretation available for (30a) stands in contrast to the interpretation obtained in (31) (= (3b)).

- (31) John(-ni)-wa Kobe-ni otooto-ga i-ru.
 John-DAT-TOP Kobe-DAT younger.brother-NOM be.AN-PRES
 ‘John has a younger brother in Kobe.’

The semantic interpretation obtained in (31) is the one represented in (32a), but not in (32b). (Note that (32b) is not acceptable in an ordinary context).

- (32) a. Kobe-ni John-no otooto-ga i-ru.
 Kobe-DAT John-GEN younger.brother-NOM have.AN-PRES
 ‘John’s younger brother is in Kobe.’
 b. *John-no Kobe-ni otooto-ga i-ru.
 John-GEN Kobe-DAT younger.brother-NOM have.AN-PRES
 ‘A younger brother is John’s Kobe.’

The fact indicates that in (29) the possessor bears a possessive relation with the locative phrase, which in turn implies that it should be extracted out of the locative phrase. If this is the case, we can posit the structure in (33) for (29).

- (33) [_{TP} Possessor_i [_{VP} t_i [_{VP} [_{PP} t_i Locative] Theme V] v] T]

This analysis, according to which possessor raising takes place out of the locative, makes the prediction that in (29) the possessor does not allow the locative to be moved across it, while the movement of the theme across the possessor is permitted. This prediction is correct. To see this, first consider (34).

- (34) Zassi-ga_i kono-kuruma(-ni)-wa koobu-zaseki-ni t_i ar-u.
magazine-NOM this-car-DAT-TOP back-seat-DAT be.IN-PRES
‘This car has a magazine on the back seat.’

In (34), where the theme is moved to the sentence front, the possessor c-commands the locative.

- (35) [TP Theme_j [TP Possessor_i [vP t_i [vP [PP t_i Locative] t_j V] v] T]]

The movement of the theme across the possessor does not incur a violation of the PBC, since the possessor is extract from the locative, but not from the theme. In contrast, the locative phrase that contains the trace of the possessor cannot be moved across the possessor.

- (36) ???Koobu-zaseki-ni_i kono-kuruma(-ni)-wa t_i zassi-ga ar-u.
back-seat-DAT this-car-DAT-TOPP magazine-NOM be.IN-PRES
‘This car has a magazine on the back seat.’

If the locative phrase is moved to the sentence initial position, the possessor phrase no longer c-commands its trace inside the locative phrase, as illustrated by (36), so that the sentence is excluded in violation of the PBC.

- (37) [TP [DP t_i Locative]_j [TP Possessor_i [vP t_i [vP t_j Theme V] v] T]]

Notice that the locative can be moved without causing a deviance as long as it lies within the c-command domain of the possessor, as illustrated below.

- (38) Kono-kuruma(-ni)-wa zassi-ga_i koobu-zaseki-ni-mo t_i ar-u.
this-car-DAT-TOP magazine-NOM back-seat-DAT-ALSO have.IN-PRES
‘This car has a magazine on the back seat as well.’

The pattern of distribution observed above shows that the possessor is extracted from the locative in (29).

The ungrammaticality of the sentences in (16) and (36) comes as a surprise if extended locative sentences are derived from ordinary possessive sentences merely by adding locative phrases. If this were the case, the verb in the extended locative construction would select the possessor, and we would expect that the arguments could be scrambled fairly freely. But the fact of the matter is that the “possessed” phrase cannot be moved across the “possessor” phrase, which clearly indicates that possessor raising is invoked so as to place the possessor phrase in Spec of TP, while leaving a trace inside the possessed nominal.

In essence, the scrambling facts provide evidence for the adequacy of the present analysis which analyzes an extended locative sentence as being formed from a locative sentence, with recourse to possessor raising.

- (39) a. $[_{TP} \text{ Possessor}_i [_{vP} t_i [_{VP} \text{ Locative } [_{DP} t_i \text{ Theme }] V] v] T]$
 b. $[_{TP} \text{ Possessor}_i [_{vP} t_i [_{VP} [_{PP} t_i \text{ Locative }] \text{ Theme } V] v] T]$

In the extended locative construction, since the possessed phrase from which the possessor is extracted contains its trace, the possessor cannot be scrambled to the right of its host possessed phrase (which may be either a theme or a locative), due to the PBC. The syntactic operation by which the possessed nominal is moved across the possessor results in a violation of the PBC.

In the case of an ordinary possessive sentence with the possessor and theme arguments only, by contrast, scrambling may apply freely, and the possessor can be scrambled to the right of the theme phrase without any problem. This suggests that the possessor does not start out from within the theme phrase, and that the theme phrase does not contain a trace of the possessor. Thus, the sentences in (1) should have the surface configuration in (40) (= (6b)), in which the possessor is generated in Spec of vP, and is raised to Spec of TP.

- (40) $[_{TP} \text{ Possessor}_i [_{vP} t_i [_{VP} \text{ Theme }] V] v] T]$

Possessive sentences are often analyzed as having the base structure where the possessor is generated inside a nominal constituent, i.e. the theme nominal, and the surface form is derived via extraction of the possessor (see Szabolcsi 1983, 1994, Tsujioka 2001a, 2001b), as shown in (41).

- (41) $[_{TP} \text{ Possessor}_i [_{vP} t_i [_{VP} [_{DP} t_i \text{ Theme }] V] v] T]$

In an ordinary possessive clause, no deviance is detected even when the theme is fronted to the clause-initial position across the possessor. Since the PBC takes effect if a nominal is extracted from another nominal, it should be clear that an ordinary possessive sentence cannot be created by means of possessor raising. The difference in the possibility of scrambling between ordinary possessive and extended locative constructions shows that in an ordinary possessive sentence, the possessor is an argument selected by the verb, and cannot be generated by extraction from the theme.

Note, in this connection, that if we assume that the argument raised to Spec of TP counts as the subject of the clause, we can offer a natural account for the fact that both in extended locative and ordinary possessor constructions, the possessor is construed as the subject of the clause. In extended locative constructions, the possessor extracted from inside a nominal is moved into Spec of TP, and in ordinary possessive constructions, the possessor is base-generated in Spec of vP and is moved to Spec of TP. In both cases, then, the possessor fills Spec of TP, so that it is accorded the status of the subject of the clause. The theme, on the other hand, stays within its base-generated position (without movement to Spec of TP), so that it does not acquire any subjecthood.

In the case of ordinary locative sentences, the theme is generated as a complement to the verb, as in the case of the possessive sentence, but it is subsequently raised to Spec of TP.

(42) $[_{TP} \text{ Theme}_i \ [_{VP} \ t_i \ [_{VP} \ t_i \] \ V] \ v \] \ T \]$

This is because the locative is realized as a PP, as a result of which it can never serve as subject (wherever it appears in a clause). Since the theme phrase is the only DP, it comes to count as the subject of clause by virtue of moving into Spec of TP. Given the assumption that a DP argument associated with Spec of TP acquires the subjecthood of the clause, it naturally falls out that the possessor serves as subject in both extended locative and possessor constructions.¹³

At first sight, it looks as though the verb in the extended locative construction can carry both possessive and locative meanings, but the data indicate that the verb in the extended locative construction denotes a spatial relation only. If both possessive and locative meanings are to be expressed (with more than two arguments), we need to resort to some other means; that is, in order to encode both types of meanings in a single clause, it is necessary to apply possessor raising to a locative sentence, and extract a possessor from either a theme or a locative nominal. A question worth addressing at this moment is why it is that once a location is specified in a locational sentence, the relevant clause must count as an extended form of a locative construction, where the verb specifies a locative meaning, and cannot be a variety of possessive construction.

The answer to this question is fairly straightforward. In Japanese, the locational verbs *aru* and *iru* can specify two argument relations, but not three argument relations, which means that they can express either a locative or a possessive meaning, but not both. However, the device of possessor raising makes it possible to add a possessor to a locative sentence, the result of which is the formation of the extended locative construction. An addition of a locative phrase to a possessive sentence, however, is not possible in the absence of a raising operation that generates a *ni*-marked locative phrase in the clause. (In Japanese, as we saw earlier, a goal expression can sometimes be amenable to raising out of a nominal, but there is no such syntactic operation which extracts a *ni*-marked locative expression from within a nominal.) Consequently, if a locative phrase is to be expressed, the locational verb must select it; otherwise, we cannot generate any locative phrase in a locational sentence. Thus, an extended sentence containing the possessor, locative and theme phrases can only be built out of a locative sentence by extracting the possessor from either the locative or theme phrase. The impossibility of forming an extended form of a possessive sentence by adding a locative phrase comes from the fact that Japanese cannot implement locative raising, which extracts a locative expression from within a nominal.

The discussion makes it clear that the possessive meaning that obtains in the extended locative construction comes from the fact that the possessor phrase is an element extracted from either the theme or the locative phrase. The possessive meaning therefore is not part of the denotation expressed by the verb in the relevant construction. In contradistinction, the possessors are not subject to the PBC in ordinary possessive sentences. This fact indicates that the possessor of an ordinary

possessive clause cannot be generated via possessor raising, which extracts it from the theme nominal, contrary to what is often argued (see Muromatsu 1996, Tsujioka 2001a, 2001b, Szabolsci 1983, 1995).

3. PROPERTIES OF VERBS IN EXTENDED LOCATIVE CONSTRUCTIONS

In the foregoing section, I have seen that the possessor, which serves as the subject of an extended locative sentence, is extracted from within the theme or locative phrase. In the extended locative construction, although the clause has the possessor, locative and theme phrases, the verb retains the argument structure <locative, theme>, and their arguments are mapped in the same way that the phrases of the locative *aru* and *iru*, as shown in (43).

(43) $[_{TP} \quad [_{VP} \quad [_{VP} \text{ locative theme } V] v] T]$

In the present analysis, since the number of nominals selected by verb remains unchanged in the extended locative construction, we expect that the verbs should behave like the verbs *aru* and *iru* expressing a locative meaning. This expectation is in fact fulfilled. In this section, I present two arguments in support of the view that the verbs in the extended locative construction pattern with the verbs in ordinary locative constructions.

A first argument can be deduced from agreement, which is triggered by the animacy of the theme nominal. First, in the locative construction, the verb must agree in animacy with the theme phrase, irrespective of whether the agreement-inducing theme nominal is animate or inanimate, so the following paradigm is obtained.

- (44) a. Asoko-ni John-no *kyoodai-ga* i-ru/*ar-u.
 there-DAT John-GEN brother-NOM be.AN-PRES/be.IN-PRES
 ‘John’s brother is there.’
 b. Asoko-ni *kooen-ga* ar-u/*i-ru.
 there-DAT park-NOM be.IN-PRES/be.AN-PRES
 ‘There is a park there.’

Second, in the possessive construction, when the theme is animate, the verb does not have to agree with it, but when it is inanimate, agreement is mandatory.

- (45) a. John-ni-wa *kyoodai-ga* i-ru/ar-u.
 John-DAT-TOP brother-NOM have.AN-PRES/have.IN-PRES
 ‘John has a brother.’
 b. John-ni-wa *okane-ga* ar-u/*i-ru
 John-DAT-TOP money-NOM have.IN-PRES/have.AN-PRES
 ‘John has money.’

The crucial difference between possessive and locative verbs obtains when the theme is an animate noun like *kyoodai* ‘brother’. That is, with this type of noun, only *iru* is acceptable in the locative construction, but both *aru* and *iru* are permitted in the

possessive construction. If we follow Kishimoto (2000), the possibility of agreement is determined according to whether or not the theme raises to its agreement position, which is assumed to be Spec of vP. The specific technical details of his analysis need not concern us here, but the important point is that since agreement possibility differs depending on whether the verb is in a locative or a possessive use, we can discern the status of the locational verbs by looking at the agreement facts.¹⁴

If the extended locative constructions contain possessive verbs, but not locative verbs, the prediction is that agreement should be mandatory when the theme is an inanimate noun, and that when it is an animate noun like *kyoodai*, ‘brother’, agreement is not enforced. If the verbs are in a locative use, agreement should always be obligatory. The fact of the matter is that in the extended locative construction, the theme phrase always induces agreement regardless of its animacy classification.

- (46) a. John-wa Tokyo-ni *kyoodai-ga* i-ru/*ar-u.
 John-TOP Tokyo-DAT brother-NOM be.AN-PRES/be.IN-PRES
 ‘John has a brother in Tokyo.’
 b. John-wa inaka-ni *zaisan-ga* ar-u/*i-ru.
 John-TOP hometown-DAT property-NOM be.IN-PRES/be.AN-PRES
 ‘John has property in his hometown.’

The examples in (46) represent a case in which the possessor is extracted from the theme phrase. Even if the possessor is extracted from the locative phrase, the same agreement pattern emerges.

- (47) a. Kono-kuruma-ni-wa koobuzaseki-ni *zassi-ga* ar-u/*i-ru.
 this-car-DAT-TOP back-seat-DAT magazine-NOM be.IN-PRES/be.AN-PRES
 ‘There is a magazine in the back seat section in this car.’
 b. Kono-kuruma-ni-wa koobuzaseki-ni *kyoodai-ga* i-ru/*ar-u.
 this-car-DAT-TOP back-seat-DAT brother-NOM be.AN-PRES/be.IN-PRES
 ‘A brother is in the back seat section in this car.’

Thus, the extended locative construction behaves on a par with the locative construction, rather than the possessive construction, in that the choice of the verb must be *iru* if the theme nominal is animate.

The obligatory nature of agreement in the extended locative construction gains further confirmation with reference to the noun *sinseki* ‘relative’, which may be categorized either as an animate noun, referring to an concrete individual, or as an inanimate noun, referring to an abstract relation or a house. If this noun appears as the nominative phrase of the locative construction, the verb can be either *aru* or *iru*.

- (48) Tokyo-ni-wa sinseki-ga ar-u/i-ru.
 Tokyo-DAT-TOP relative-NOM be.IN-PRES/be.AN-PRES
 ‘There is a relative in Tokyo.’

But if we add a certain class of numeral quantifiers to the noun, we can disambiguate its animacy class, as exemplified by the following locative sentences.

- (49) a. Tokyo-ni-wa sinseki-ga ik-ken-dake ar-u/*i-ru.
 Tokyo-DAT-TOP relative-NOM one-CL-ONLY be.IN-PRES/be.AN-PRES
 ‘There is only one relative in Tokyo.’
 b. Tokyo-ni-wa sinseki-ga hito-ri-dake i-ru/*a-ru.
 Tokyo-DAT-TOP relative-NOM one-CL-ONLY be.AN-PRES/be.IN-PRES
 ‘There is only one relative in Tokyo.’

Example (49a) illustrates that when an inanimate numeral classifier like *ik-ken* (for houses) is added to the noun *sinseki*, it is interpreted as an inanimate noun, so the nominal selects only the inanimate verb *aru*. In addition, (49b) shows that if the noun occurs with an animate classifier like *hito-ri* (for human), it is understood as an animate noun, so that it can only select the animate verb *iru*.

The same pattern of distribution is obtained in the extended locative construction under consideration. First, the noun *sinseki* ‘relative’ tolerates both *aru* and *iru* if it appears as the theme phase of the extended locative construction, as shown below.

- (50) John-wa Tokyo-ni sinseki-ga ar-u/i-ru.
 John-TOP Tokyo-ni relative-NOM be.IN-PRES/be.AN-PRES
 ‘John has a relative in Tokyo.’

However, when a numeral classifier is added to the noun, its animacy class is disambiguated, and consequently, the following pattern emerges in extended locative constructions.

- (51) a. John-wa Tokyo-ni sinseki-ga ik-ken-dake
 John-TOP Tokyo-DAT relative-NOM one-CL-ONLY
 ar-u/*i-ru.
 be.IN-PRES/be.AN-PRES
 ‘John has only one relative in Tokyo.’
 b. John-wa Tokyo-ni sinseki-ga hito-ri-dake
 John-TOP Tokyo-DAT relative-NOM one-CL-ONLY
 i-ru/*ar-u.
 be.AN-PRES/be.IN-PRES
 ‘John has only one relative in Tokyo.’

The fact confirms that the verb necessarily agrees with the theme regardless of whether the theme is an animate or an inanimate noun. This pattern of agreement is exactly what we find with the locative verb, thereby suggesting that the verb in the extended locative construction retains the properties of a locative verb.

Another type of confirmation can be derived from the so-called “definiteness” effect, which is typically observed by the theme phrases of a possessive verb. In the possessive construction, the following pattern of distribution is observed, owing to the definiteness restriction imposed on the theme phrase.

- (52) a. *John-ni-wa hotondo-no/subete-no kyoodai-ga i-ru.
 John-DAT-TOP most-GEN/all-GEN brother-NOM have.AN-PRES

- ‘John has most/all brothers.’
- b. John-ni-wa takusan-no/nan-nin-ka-no kyoodai-ga i-ru.
 John-DAT-TOP many-GEN/some-CL-GEN brother-NOM have.AN-PRES
 ‘John has many/some brothers.’

The acceptability or unacceptability of the sentences in (52) is determined, depending on whether the theme phrase is associated with strong or weak quantifiers (see Barwise and Cooper 1982). The same results also obtain in possessive sentences in which the inanimate verb *aru* is used to express a possessive meaning, as exemplified below.

- (53) a. *John-ni-wa hotondo-no/subete-no okane-ga ar-u.
 John-DAT-TOP most-GEN/all-GEN money-NOM have.IN-PRES
 ‘John has most/all money.’
- b. John-ni-wa takusan-no/sukosi-no okane-ga ar-u.
 John-DAT-TOP many-GEN/little-GEN money-NOM have.IN-PRES
 ‘John has a lot of/a little money’

In the case of locative sentences, the stark contrast in acceptability between strong and weak quantifiers is absent. The sentences in (54) represent a case in which the animate verb *iru* is involved.

- (54) a. Asoko-ni hotondo-no/subete-no hito-ga i-ru.
 there-DAT most-GEN/all-GEN people-NOM be.AN-PRES
 ‘Most/All people are there.’
- b. Asoko-ni takusan-no/iku-tu-ka-no hito-ga i-ru.
 there-DAT many-GEN/some-CL-GEN people-NOM be.AN-PRES
 ‘Many/Some people are there.’

The lack of the definiteness effect is also observed when the locative relation is expressed by the inanimate *aru*.

- (55) a. Asoko-ni hotondo-no/subete-no hon-ga ar-u.
 there-DAT most-GEN/all-GEN book-NOM be.IN-PRES
 ‘Most/All books are there.’
- b. Asoko-ni takusan-no/nan-nin-ka-no hon-ga ar-u.
 there-DAT many-GEN/some-CL-GEN book-NOM be.IN-PRES
 ‘Many/Some books are there.’

The important fact is that the theme phrase of a possessive sentence is susceptible to the definiteness restriction, while the theme phrase of a locative construction is not.

In the extended locative constructions, the definiteness effect is not observed, despite the fact that both possessor and theme phrases are present in the clause. Thus, the sentences in (56) are judged to be acceptable regardless of whether the theme phrase is a strong or weak quantifier expression.

- (56) a. John-wa Tokyo-ni hotondo-no/subete-no kyoodai-ga i-ru.
 John-TOP Tokyo-DAT most-GEN/all-GEN brother-NOM be.AN-PRES
 'John has most/all brothers in Tokyo.'
- b. John-wa Tokyo-ni takusan-no/nan-nin-ka-no tomodati-ga i-ru.
 John-TOP Tokyo-DAT many-GEN/some-GEN friend-NOM be.AN-PRES
 'John has many/some friends in Tokyo.'

The sentences in (56) represent a case in which possessor raising takes place out of the theme phrase. The definiteness effect is also lacking in sentences involving the raising of a possessor out of a locative phrase.

- (57) a. Kono-hikooki-ni-wa koohoo-ni hotondo-no/subete-no
 this-airplane-DAT-TOP back-DAT most-GEN/all-GEN
 kin'en-seki-ga ar-u.
 non.smoking-seat-NOM be.IN-PRES
 'This airplane has most/all non-smoking seats at the back.'
- b. Kono-hikooki-ni-wa koohoo-ni takusan-no/ikutu-ka-no
 this-airplane-DAT-TOP back-DAT many-GEN/some-GEN
 kin'en-seki-ga ar-u.
 non.smoking-seat-NOM be.IN-PRES
 'This airplane has many/some non-smoking seats at the back.'

If an extended locative construction is derived by adding a locative phrase to a possessive sentence, as assumed by Takezawa (2001), we expect that the definiteness effect should emerge on the theme phrase. But the definiteness effect is absent on the theme phrases of extended locative constructions.

Kishimoto (2000) argues, in line with Belletti (1988), that the definiteness effect arises when an unaccusative verb takes two arguments. According to Kishimoto, when the possessive verb, which counts as an unaccusative verb, takes two DPs, the theme DP cannot bear the usual structural Case, so that it is assigned partitive Case (as a strategy available with unaccusative verbs that are turned into two place predicates). A DP bearing partitive Case cannot be definite, and the theme phrase is therefore amenable to the definiteness restriction. In this analysis, the presence or absence of the definiteness effect on the theme phrase observed in locative and possessive constructions can be relegated to the fact that while the possessive verb takes two DPs, the locative verb takes one. We can assume that possessor raising is a valence-increasing operation that can furnish an independent Case to the extracted possessor, so that possessor raising does not alter the nature of arguments selected by the verb. In effect, in the extended locative construction, the theme is not assigned partitive Case, so that it does not display a definiteness effect, as with an ordinary locative verb. The facts of extended locative constructions then give us another good indication that the extended locative construction is built from the locative construction, where the verb is used as a locative verb, taking locative and theme phrases.

From the discussions above, it should be clear that the extended locative constructions pattern with the locative constructions, but not with the possessive constructions in regard to their verbal properties. The fact that the verbs used in

extended locative and possessive constructions exhibit divergent behavior shows that a clause containing both the possessor and the theme may arise from two different sources.

One way of forming a clause containing both possessor and theme is to make use of a possessive verb, which has the argument structure <possessor, theme>, and the surface configuration in (58b) is derived from (58a).

- (58) a. $[_{TP} [_{VP} \text{ possessor } [_{VP} \text{ theme } V] v] T]$
 b. $[_{TP} \text{ possessor}_i [_{VP} t_i [_{VP} \text{ theme } V] v] T]$

Recall here that the possessor here cannot be originated from the theme nominal, since the possessor can be placed to the right of the theme nominal. The fact that the possessor does not show any PBC effect shows that it must be base-generated as an argument to the verb without possessor raising. Note also that in this case, since the possessive verb cannot specify a location, the clause cannot contain a locative expression.

Possessor raising is invoked in the extended locative construction. In this construction, the verb takes a theme argument and a locative adjunct, and even after possessor raising, the verb's argument structure <locative, theme> remains unaffected, which means that the verb does not select a possessor argument. The surface form is therefore derived via possessor raising, as illustrated in (59a) and (59b).

- (59) a. $[_{TP} \text{ possessor}_i [_{VP} t_i [_{VP} [_{PP} t_i \text{ locative }] \text{ theme } V] v] T]$
 b. $[_{TP} \text{ possessor}_i [_{VP} t_i [_{VP} \text{ locative } [_{DP} t_i \text{ theme }] V] v] T]$

In the extended locative construction, since the verb's argument structure remains intact, the verb retains its original properties as a locative verb. In this construction, the possessor located inside a locative or a theme phrase is promoted to the subject by virtue of possessor ascension, and the theme remains in its base-generated position even in the surface.

Tsujioka (2001a, 2001b) argues, in line with Szabolczi (1983), that the possessors are always extracted from within the theme phrases irrespective of whether the sentences accompany locative phrases or not. Tsujioka holds the assumption that both ordinary possessive and extended locative constructions have the same source, and her main claim is that in what she takes to be possessive constructions, a possessor is always generated inside a theme, and is subsequently moved out of the theme. However, Tsujioka's analysis is not viable. First, the possessed (theme) phrase in an ordinary possessive construction can be moved to the left of the possessor, so it cannot be generated inside the theme. Second, in the extended locative construction, the possessed phrase cannot be moved across the possessor, due to the PBC, which indicates that the possessor is extracted from the possessed phrase. But notice that this construction is in fact a variety of locative constructions, which means that Tsujioka makes the claim on possessive constructions, based on the facts of the locative constructions. Given these considerations, it should be apparent that Tsujioka's analysis cannot be maintained.¹⁵

Finally, note that the present analysis according to which the possessor of a possessive verb is generated as a complement to the verb without possessor raising

receives further support from the fact that possessor raising does not change the verbal properties of the clause. If the possessor is always originated from a nominal (in a locational sentence), as argued by Tsujioka (2001a, 2001b) (see also Szabolcsi 1983, 1994), an ordinary possessive sentence should have a possessor extracted from the theme via possessor raising. If this is the case, the original clause must be a locative clause in which the verb selects the theme argument only. In this case, we would expect that the theme in the possessive sentence does not display a definiteness effect, and also that the verb necessarily agrees with the theme nominal even when it counts as an animate nominal like *kyoodai* ‘brother’. But this expectation is not fulfilled, as discussed above, which shows that the possessor in a possessive sentence cannot be created as a result of possessor raising.

To sum up, I have seen in this section that the verbs in the extended locative constructions retain the properties of “locative” verbs even after a possessor is added to the clause in consequence of possessor raising. The data discussed in this section also point to the conclusion that the extended locative constructions cannot be built from possessive sentences merely by adding locative phrases, and that in order for the extended locative construction to be formed, possessor raising out of the theme or the locative is necessitated. This further confirms the correctness of the view that while the possessive verb taking the possessor and theme arguments denotes a possessive meaning, the possessive meaning of the extended locative construction arises not from the verb meaning, but from a possessor-possessed relation that the possessor holds inside either the theme or locative phrase.

4. EXTENDED POSSESSIVE CONSTRUCTIONS

Thus far I have argued that a possessive sentence cannot select a locative argument, and that the extended locative construction can be formed only by way of possessor raising. While a possessive sentence does not allow the addition of a locative phrase by virtue of the possessive verb’s intrinsic incompatibility with a locative phrase, the possibility that possessor raising is induced in the possessive constructions is not excluded. In fact, as I discuss below, possessor raising is possible in ordinary possessive constructions. The possessive construction which has an extracted possessor displays properties that allow us to further ascertain the correctness of the present analysis. In the following discussion, I argue that if possessor raising takes place in a possessive sentence, the verb displays some crucial properties of ordinary possessive verbs.

To begin with, note that when possessor raising takes place in a possessive sentence, the resulting clause (i.e. the extended possessive sentence) has two instances of possessor phrases, each of which bears a different possessive meaning.¹⁶

- (60) a. John-ni-wa okusan-ni-dake tyokin-ga ar-u.
 John-DAT-TOP wife-DAT-ONLY savings-NOM have.IN-PRES
 ‘As for John, only his wife has savings.’
 b. John-ni-wa itoko-ni-mo gaaruhurendo-ga i-ru
 John-DAT-TOP cousin-DAT-ALSO girlfriend-NOM have.AN-PRES
 ‘As for John, his cousin has a fortune.’

In both cases at hand, the leftmost possessor phrase is understood to have an inalienable possessive relation with the middle possessive phrase, and the middle possessor phrase is understood to be in possession of the theme phrase, which stands closest to the verb. Thus, (60a) has roughly the same meaning as (61).

- (61) John-no okusan-ni-dake tyokin-ga ar-u.
 John-GEN wife-DAT-ONLY savings-NOM have.IN-PRES
 ‘Only John’s wife has savings.’

This suggests that in (60a), the possessor at the left periphery is extracted from the possessor phrase located in the middle.

We can assume that the base structure of (60) is a possessive sentence, where the verb has the argument structure <possessor, theme>, and that while the possessor selected by the verb is mapped onto Spec of vP, the theme is mapped onto the complement of the verb. Given this assumption, we can postulate the following derivation for (60a).

- (62) a. [_{TP} [_{vP} [_{DP} John okusan] [_{VP} tyokin V] v] T]
 b. [_{TP} John_i [_{DP} t_i okusan]_j [_{vP} t_j [_{VP} tyokin V] v] T]

In (62b), the host possessor is raised from Spec of vP to Spec of TP, and the extracted possessor appears in TP as a result of possessor raising. The extended possessive construction is therefore formed with reference to an ordinary possessive sentence with only two phrases, i.e. the possessor and the theme, by instantiating possessor raising out of the possessor selected by the verb.

In the extended possessive construction, possessor raising applies to a clause that already contains a subject. Since possessor raising creates a subject-like expression, this means that the resultant structure arising from the possessor raising is a double (or major) subject construction (see Kuno 1973, Shibatani 1978, 1990). The double subject status of the sentences in (60) can be seen, for instance, by the fact that both of the possessor phrases can serve as the antecedent of the reflexive *zibun* ‘self’.

- (63) a. John_i-ni-wa zibun_i-no itoko-ni-mo gaaruhurendo-ga i-ru.
 John-DAT-TOP self-GEN cousin-DAT-ALSO girlfriend-NOM have.AN-PRES
 ‘As for John_i his_i own cousin also has a girlfriend.’
 b. John-ni-wa itoko_i-ni-mo zibun_i-no gaaruhurendo-ga i-ru.
 John-DAT-TOP cousin-DAT self-GEN girlfriend-NOM have.AN-PRES
 ‘As for John, a cousin_i also has his_i own girlfriend.’

In extended possessive constructions, there are two subject-like nominals, i.e. the thematic subject and the extracted possessor which functions as a major subject.¹⁷ It should be noticed here that the reflexive *zibun* ‘self’ cannot target the theme phrase in an extended possessive construction, just as in an ordinary possessive construction.

- (64) a. *John-ni-wa zibun_i-no itoko-ni-mo gaaruhurendo_i-ga i-ru.
 John-DAT-TOP self-GEN cousin-DAT-ALSO girlfriend-NOM have.AN-PRES
 ‘As for John, his cousin also has a girlfriend.’

- b. *Zibun_i-no itoko-ni-mo gaaruhurendo_i-ga iru.
 self-GEN cousin-DAT-ALSO girlfriend-NOM have.AN-PRES
 ‘His_i cousin also has a girlfriend_i.’

If the major subject is placed in the outer Spec of TP via possessor raising that extracts it from the thematic subject occupying the inner Spec of TP, both types of arguments are located in TP. If nominative-marked elements located in TP are accorded the status of subjects, they are expected to show subject properties.

In the proposed analysis, it is predicted that the order of the two possessors cannot be permuted, due to the PBC, since one possessor is extracted from the other possessor. This is in fact the case. The following examples illustrate that the extracted possessor cannot occur to the right of the possessor from which it originates.

- (65) a. ?*Okusan-ni-dake_i John-ni-wa _‡ tyokin-ga ar-u.
 wife-DAT-ONLY John-DAT-TOP savings-NOM be.IN-PRES
 ‘As for John, only his wife has savings.’
 b. ?*Tyokin-ga_i okusan-ni-dake_j John-ni-wa _‡ _{t_i} ar-u.
 savings-NOM wife-DAT-ONLY John-DAT-TOP have.IN-PRES
 ‘As for John, only his wife has savings.’
 c. *Okusan-ni-dake_i tyokin-ga_j John-ni-wa _‡ _{t_j} ar-u.
 wife-DAT-ONLY savings-NOM John-DAT-TOP have.IN-PRES
 ‘As for John, only his wife has savings.’

Since the extracted possessor *John* leaves a trace inside the host possessor *okusan* ‘wife’, the host possessor cannot be moved across the extracted possessor, due to the PBC. (Note that the order of the host possessor (selected by the verb) and the theme does not matter.) The theme phrase, on the other hand, can appear to the left or right of the extracted possessor without affecting the acceptability judgments.

- (66) a. John-ni-wa tyokin-ga_i okusan-ni-dake _‡ ar-u.
 John-DAT-TOP savings-NOM wife-DAT-ONLY be.AN-PRES
 ‘As for John, only his wife has savings.’
 b. Tyokin-ga_i John(-ni)-wa okusan-ni-dake _‡ ar-u.
 savings-NOM John-DAT-TOP wife-DAT-ALSO be.AN-PRES
 ‘As for John, only his wife has savings.’

The scrambling patterns observed above in the extended possessive construction are straightforwardly accounted for if the extracted possessor originates from the possessor selected by the verb, while leaving its trace behind.

In the extended possessive construction, the verb selects a possessor and a theme, even without possessor raising, which leads to the expectation that it behaves like an ordinary possessive verb. This prediction is indeed correct. First, let us consider the agreement pattern of the verbs in the extended possessive constructions.

- (67) a. John-ni-wa itoko-ni-mo kyoodai-ga ar-u/i-ru.
 John-DAT-TOP cousin-DAT-ALSO brother-NOM have.IN-PRES/have.IN-PRES
 ‘As for John, his cousin also has a brother.’

- b. John-ni-wa itoko-ni tyokin-ga ar-u/*i-ru.
 John-DAT-TOP cousin-DAT savings-NOM have.IN-PRES/have.AN-PRES
 ‘As for John, his cousin has savings.’

As shown (67a), when the theme phrase, which counts as an agreement trigger, is an animate noun like *kyoodai* ‘brother’, agreement is not enforced, so that either *aru* or *iru* may be used. But when the theme phrase is an inanimate noun, as in (67b), the verb must agree with it. This pattern of distribution is exactly what we find in ordinary possessive sentences.

- (68) a. John-ni-wa kyoodai-ga ar-u/i-ru.
 John-DAT-TOP brother-NOM have.IN-PRES/have.IN-PRES
 ‘John has a brother.’
 b. John-ni-wa tyokin-ga ar-u/*i-ru.
 John-DAT-TOP savings-NOM have.IN-PRES/have.AN-PRES
 ‘John has savings.’

In the case of a possessive verb, agreement is not forced when the choice of the noun is an animate one like *kyoodai* ‘brother’. The agreement pattern observed in (68) is precisely what we would expect, since the verb that occurs in the extended possessive construction is a possessive verb which takes two DPs.

Next, let us check whether or not the theme phrase of an extended possessive construction displays a definiteness effect. The following examples show that the theme phrase of an extended possessive construction does not tolerate a strong quantifier expression, but it admits a weak quantifier expression.

- (69) a. *John-ni-wa itoko-ni hotondo-no/subete-no gaaruhurendo-ga
 John-DAT-TOP cousin-DAT most-GEN/all-GEN girlfriend-NOM
 i-ru.
 be.AN-PRES
 ‘As for John, his cousins have most/all girlfriends.’
 b. John-ni-wa itoko-ni takusan-no/nan-nin-ka-no gaaruhurendo-ga
 John-DAT-TOP cousin-DAT many-GEN/some-CL-GEN girlfriend-NOM
 i-ru.
 be.AN-PRES
 ‘As for John, his brother has many/some girlfriends.’

The theme phrase of the verb in (69) is susceptible to the definiteness restriction. Again, this pattern of distribution is exactly the same as that of an ordinary possessive which does not implement possessor raising.

- (70) a. *John-ni-wa hotondo-no/subete-no gaaruhurendo-ga i-ru
 John-DAT-TOP most-GEN/all-GEN girlfriend-NOM be.AN-PRES
 ‘John has most/all girlfriends.’
 b. John-ni-wa takusan-no/nan-nin-no gaaruhurendo-ga i-ru.
 John-DAT-TOP many-GEN/some-CL-GEN girlfriend-NOM be.AN-PRES
 ‘As for John, his brother has many/some girlfriends.’

The fact that verbs in the extended possessive constructions display exactly the same behavior as ordinary possessive verbs is naturally expected, since they are formed by applying possessor raising to possessive constructions.

The facts concerning the extended possessive constructions confirm that when possessor raising takes place in the possessive clause, the verb shows a behavior that is expected of a possessive verb which selects two DPs, i.e. the possessor and the theme. In the possessive construction, the locative phrase cannot be added, since the possessive verb can only take possessor and theme arguments. Importantly, however, although the possessive verb cannot specify a locative meaning, possessor raising is possible. The impossibility of deriving an extended sentence where the possessor, locative and theme phrases co-occur in a clause from a possessive construction is naturally expected if a locative phrase cannot be created via any raising operation.

4. CONCLUSION

In this paper, I have argued that in extended locative constructions, possessor raising takes place out of either a theme or a locative phrase, and that this operation generates a structure where both locative and possessive relations are expressed in a single clause. At first sight, the extended locative construction looks like a variety of possessive constructions, which takes an optional locative adjunct, as assumed by Takezawa (2001). But I have shown that the relevant configuration arises not as a result of adding a locative PP to a possessive sentence, but is derived from a locative sentence with the locative *aru* and *iru* via possessor raising (without affecting the argument structure of the base verb). I have also argued that the possessor of an ordinary possessive verb cannot be generated via possessor extraction, but that it must be argument selected by the verb, on the ground that the PBC effects are lacking in the ordinary possessive construction, having only two arguments. The discussion leads to the conclusion that while some instances of possessors are regarded as originating from nominals via possessor raising, as in the possessors that appear in the extended locative constructions, there are also possessors that must be base-generated as arguments to the verb, as in the possessors of verbs, and that the analysis of locational constructions which views the possessor as being uniformly derived via raising it out of a nominal cannot be maintained.

NOTES

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¹ Abbreviations used in the present paper are: ACC(usative), AN(imate), COP(ula), DAT(ive) GEN(itive), IN(animate), NOM(inative), PRES(ent), and TOP(ic).

² The possessor phrase of the verbs *aru* and *iru* can switch its case marking between nominative and dative case. I assume that this type of alternation arises from the grammatical operation of ‘*ni-ga*’ conversion. See Kuno (1973) and Shibatani (1978).

³ Muromatsu (1996) judges that the locative phrase cannot be marked with nominative case, but some speakers (including the author) accept nominative case marking on the locative phrase on the ‘exhaustive-listing’ interpretation.

⁴ In Japanese, the dative phrase and the locative adjunct receive the same morphological marking, but in some other languages (like Sinhala), these two types of phrases receive distinct markings.

⁵ For some speakers, the use of the dative phrase which designates a possessor is awkward without an accompanying topic marker *wa* even if it is embedded in a subordinate clause. This kind of awkwardness does not obtain when the possessor is in the nominative case. This fact has been called into my attention by Koichi Takezawa (personal communication).

⁶ Takezawa (2001) assumes, following Ura (2000), that stative verbs accompany light verbs, and that in the case of *aru* (and *iru*), it can select a possessor as its specifier. In this paper, I adopt this theoretical assumption. See also Kishimoto (2000).

⁷ Freeze (1992) and Kayne (1993) analyze a possessive predication as involving P-incorporation into the verb. In this paper, I do not address the question of whether this analysis is plausible; instead, I am concerned with the question of whether or not a possessor should be generated within a nominal constituent, i.e. the theme.

⁸ Even if the reflexive *zibun* ‘self’ is followed by the antecedent, reflexive binding is possible as long as the antecedent counts as the subject, as shown in (i).

- (i) *Zibun_i-no kenkyuu-situ-ni John_i-ga i-ru.*
 self-GEN office-DAT John-NOM be.AN-PRES
 ‘John is in his office.’

The reflexive, however, cannot be controlled by a nominal located inside the theme phrase, as shown in (ii).

- (ii) **John_i-no sinyuu-ga zibun_i-no kenkyuu-situ-ni i-ru.*
 John-GEN friend-NOM self-GEN office-DAT be.AN-PRES
 ‘John_i’s close friend is in his_i office.’

⁹ In the examples involving scrambling, some focus particles are added to ensure the naturalness of the semantic interpretations.

¹⁰ When the possessor phrase is marked with nominative phrase, the scrambling of the theme nominal across it is ruled out by an independent grammatical constraint, as shown in (i).

- (i) **Sono-hon-ga_i John-ga _{ti} suki-da.*
 that-book-NOM John-NOM like-PRES
 ‘John likes that book.’

When it is topicalized, this constraint is not in force, so (ii) is acceptable on the intended interpretation.

- (ii) *Sono-hon-wa_i John-ga _{ti} suki-da.*
 That-book-TOP John-NOM like-PRES
 ‘John likes that book.’

In the case of extended locative constructions, the theme phrase cannot be fronted across the possessor phrase even if it is topicalized.

- (iii) a. **Zaisan-wa_i John-ga inaka-ni _{ti} ar-u.*
 property-TOP John-NOM hometown-DAT have.IN-PRES
 ‘John has property in his hometown.’
 b. **Ootoo-wa_i John-ga Kobe-ni _{ti} i-ru.*
 brother-TOP John-NOM Kobe-DAT have.AN-PRES
 ‘John has a younger brother in Kobe.’

The fact suggests that in (iii), the possessor is extracted from the theme phrase by possessor raising.

¹¹ In the literature, there is an issue over whether the Proper Binding Condition (PBC) is a valid structural constraint. The issue is, in part, contingent upon the question of whether or not the so-called ‘remnant movement’ exists (see Müller 1998). For the present purposes, however, it is sufficient to note that it can provide us with an apparatus to assess whether or not possessor raising takes place, and I will not go into this issue in the present paper.

¹² If the locative phrase is marked with *ni* 'to' rather than *e* 'to', it is possible to interpret it to be an argument of the verb. In this case, the sentence is understood to be an elliptical clause, where the theme is omitted.

¹³ Alternatively, we may assume that a DP that is associated with Spec of vP qualifies as subject (by base-generation or movement). I do not adopt this assumption here, since an argument which does not selected by the verb comes to count as subject.

¹⁴ Kishimoto (2000) argues that the obligatory nature of agreement in the locative construction comes from the nominative theme phrase's raising into Spec of TP by way of its agreement position. According to Kishimoto (2000), the verb *aru* does not have a strong formal feature to induce the object shift of the nominative phrase to Spec, vP, so that the verb does not agree with the nominative phrase in a transitive possessive clause. Kishimoto (2000) assumes that *aru* always does not have a strong feature to induce object shift, but in view of the fact that the verb *aru* in the extended locative sentence must agree with the theme phrase, this analysis cannot be maintained. The fact that the theme phrase in the extended locative construction remains as an object on the surface, but that agreement is still mandatory points to the conclusion that the intransitive *aru* does have a strong feature to induce an overt object shift, while the transitive *aru* does not.

¹⁵ Tsujioka's (2001a, 2001b) argument is motivated by a different set of data from those presented here. Tsujioka's analysis crucially relies on the data suggesting that reordering of constituents of the verbs *aru* and *iru* by scrambling is prohibited when no focus or contrast is given. But the judgments differ from one speaker to another, as noted by Tsujioka, and in particular, the sentences become acceptable when focus particles are added to some phrases, which suggests that the facts may be constrained by some pragmatic constraints, contrary to Tsujioka's syntactic analysis. Notice that judgments on the data reported in the present paper do not vary with these factors; that is, their judgments are constant even in the presence of focus particles. In view of this fact, it is safe to conclude that the constraint on the ordering of constituents discussed in the present paper is a grammatical constraint, rather than a pragmatic constraint. For an alternative account for the data which Tsujioka is concerned with, see Tomioka (2000).

¹⁶ To my knowledge, there is no instance of possessor raising taking place out of the theme phrase in the possessive construction. I conjecture that this type of possessor raising is impossible owing to the fact that the original possessor bears a possessive relation with the theme phrase.

¹⁷ To be more precise, the major subject is construed as a nominative-marked adjunct, but it acquires some subject properties. I assume here that a nominative adjunct (i.e. the major subject) is realized as a DP, as with the thematic subject, so that the major subject can acquire some subject properties.

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