

# Alienable-Inalienable Asymmetry in Japanese and Korean Possession

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## 1 Introduction

This paper examines the distribution of alienable and inalienable possessors (i.e. possessors of Whole-Part possession) in Japanese and Korean relativization and topicalization. The critical puzzle this paper investigates is the asymmetry between Japanese alienable and inalienable possessors shown in (1) and (2): the inalienable possessor appears to be extractable from an accusative (o-marked) DP and undergo relativization and topicalization, but the alienable possessor does not (first approximation):<sup>1</sup>

### (1) Relativization<sup>2</sup>

- a. **Inalienable possession** [apple's skin]  
[[Naomi-ga [~~ringo~~ kawa]-o mui-ta] ringo]-wa kusat-tei-ta.  
Naomi-NOM skin-ACC peel-PAST apple-TOP be.rotten-ASP-PAST  
'The apple whose skin Naomi peeled was rotten.'
- b. **Alienable possession** [boy's bike]  
\*[[Ken-ga [~~syoonen~~ zitensya]-o kowasi-ta] syoonen]-wa okot-ta.  
Ken-NOM bike-ACC break-PAST boy-TOP angry-PAST  
Int. 'The boy whose bike Ken broke got angry.'

### (2) Topicalization

- a. **Inalienable possession** [apple's skin]  
Sono ringo-wa Naomi-ga [~~sono ringo~~ kawa]-o mui-ta.  
that apple-TOP Naomi-NOM skin-ACC peel-PAST  
'As for that apple, Naomi peeled its skin.'
- b. **Alienable possession** [Naomi's bike]  
\*Naomi-wa Ken-ga [~~Naomi~~ zitensya]-o kowasi-ta.  
Naomi-TOP Ken-NOM bike-ACC break-PAST  
Int. 'As for Naomi, Ken broke her bike.'

The widely-adopted analyses of relativization and topicalization in Japanese involve base-generation of the relativized or topicalized head that is merged external to the relative or matrix clause and is resumed by *pro* (Kuroda 1986, Murasugi 2000, and Fukui and Takano 2000, *inter alia*). The relativized head is licensed in the matrix clause, and the topic argument is licensed by its relationship with the matrix clause syntactically through a predication relation and semantically through an 'aboutness' relation (e.g. Kuno 1973). However, it is difficult to see how the contrast between (1a, 2a) and (1b, 2b) can be explained under the standard base-generation approach. In addition, it is not the case that alienable possessors are never extractable nor that inalienable possessors are always extractable.

### (3) Relativization of Alienable Possessor

- a. [[~~syoonen~~ Inu-ga sin-da] syoonen]-ga oonakisi-ta.  
dog-NOM die-PAST boy-NOM heavily.cry-PAST  
'The boy whose dog died cried heavily.'

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<sup>1</sup>This paper only deals with non-contrastive topics and the grammaticality judgments given in the paper assume no supportive contexts.

<sup>2</sup>Abbreviations used in the glosses are ADN=adnominal, ASP=aspect, ACC=accusative, CAUS=causative, COP=copula, DAT= dative, GEN=genitive, IND=indicative, INDET=indeterminate, MID=middle morpheme, NEG=negation, NOM=nominative, PAST=past tense, PRES=non-past tense, PERF=perfective, TOP=topic.

- b. \*[[~~syoonen~~ Inu-ga rinzin-o kan-da] syoonen]-ga awate-ta.  
 dog-NOM neighbor-ACC bite-PAST boy-NOM panic-PAST  
*'The boy whose dog bit a person next door was panicked.'*

(4) **Relativization of Inalienable Possessor**

- a. [[~~ringo~~ Kawa-ga kusat-ta] ringo]-o mituke-ta.  
 skin-NOM rot-PAST boy-ACC find-PAST  
*'I found the apple whose skin was rotten.'*
- b. \*[[~~ringo~~ Kawa-ga (kizi-ni) hagotae-o atae-ru] ringo]-ga hituyoo-da.  
 skin-NOM dough-DAT chew-ACC give-PRES apple-NOM need-COP  
*Lit. 'The apple whose skin adds chewing texture (to the dough) is needed.'*

The possibility of the possessor relative or topic depends on the syntactic configuration in ways that strongly suggest movement. Based on this fact, I pursue an independently supported movement approach to Japanese relativization and topicalization (for more support, see, for relativization, Han and Kim 2004 and Ishizuka 2008, 2009; and, for topicalization, Kuroda 1986 and Appendix).

In addition, (3) and (4) show that DP is an island for extraction of a genitive Case-marked—*no*-marked—possessor (i.e. <sub>DP</sub>[DP-*no* NP]); otherwise, relativization and topicalization of the possessor out of a DP should always be possible. Therefore, I assume that what is extractable out of the DP is not a Case-marked possessor but a non-Case marked one. The idea is that possessors are merged in a DP internal small clause constituent (i.e. [Ken [<sub>N</sub> apple]]) and undergo A-movement to a DP-internal case position, yielding [DP-*no* [<sub>DP</sub> NP]], or to a DP-external case position, yielding 'external' possessors (i.e. possessor raising is A-movement; cf. also Landau 1999).

The goal of this paper is to provide a syntactic analysis for the distribution of alienable and inalienable possessors in Japanese and extend the analysis to Korean. The following descriptive generalizations will be established: (i) relativization and topicalization of the alienable possessor are restricted to the multiple nominative construction and the possessive passive, where the alienable possessor receives structural nominative (*ga*) Case; (ii) relativization and topicalization of the inalienable possessor are possible in the same contexts as described in (i) (section 2); and (iii) relativization and topicalization of the inalienable possessor are also possible in the contexts where Korean allows the Multiple 'Accusative' Construction (MAC, hereafter) (section 3).

My analysis for these generalizations includes the following ingredients: (i) relativization or topicalization of a DP must take place from a Case position (A'-chains need Case; Chomsky 1981); (ii) DP is an island for extraction of a Case-marked possessor, thus *no*-DP can be neither relativized nor topicalized directly out of a DP; (iii) relativization or topicalization of a possessor must be preceded by a step of possessor raising, which is A-movement of a possessor to a DP-external Case position; (iv) possessor-raising is possible only in (non-active) contexts where an additional structural nominative *ga*-Case is available; (v) possessor raising of an inalienable possessor in accusative context (1a) and (2a) is possible because of the availability of multiple accusative cases that surface in Korean MAC, but which can be accessed in Japanese provided that the possessor further undergoes A'-movement (Kayne 1984, Harada 1973, *inter alia*). Alienable possessors are merged too high in the structure to feed into the extra accusative.

The paper is organized as follows. Section 2 establishes when extraction of possessors for both kinds of possessors is possible and provides a syntactic analysis in a derivational theory. Section 3 accounts for distributional differences between the two kinds of possessors (i.e. the extraction pattern from an *o*-marked DP in the active voice shown in (1) and (2)), drawing on the MAC in Korean. Section 4 concludes.

## 2 Extraction Patterns of Alienable and Inalienable Possessors

This section identifies the syntactic configurations that allow alienable and inalienable possessor extraction from a DP. Section 2.1 investigates the extraction patterns of alienable and inalienable possessors out of a *ga*-marked DP. Section 2.2 examines their patterns out of an *o*-marked DP. In what follows, it will be shown that the possessor that undergoes relativization and topicalization is restricted to the external possessor that first underwent a step of possessor-raising, since extraction

must be launched from a DP-external Case position (Chomsky 1981).

## 2.1 Extracting an Alienable and Inalienable Possessor out of a *ga*-Marked DP

(3a) shows that it is not the case that alienable possessors are inextractable. Relativization and topicalization of the alienable possessor of a *ga*-marked DP are possible but are restricted to certain configurations. The possessive DP has originated as a *ga*-marked DP of what I call ‘*be*-type’ predicates. *Be*-type predicates are predicates appearing in non-active contexts and include unaccusatives, middles, passives, and adjectival and nominal (i.e. copulative) predicates. These verbs appear with auxiliary *be* (as opposed to *have*) in Italian, and the arguments of these verbs are merged low in the vP/VP shell structure (see Ishizuka 2009).<sup>3</sup>

### (5) *Relativization of Alineable Possessors*

#### a. Unaccusative

[[Inu-ga **sin-da**] syoonen]-ga oonakisi-ta.  
dog-NOM die-PAST boy-NOM heavily.cry-PAST  
*‘The boy whose dog died cried heavily.’*

#### b. Middle

[[Kaban-ga **yog-ore-tei-ru**] syoozyo]-ga Naomi-da.  
bag-NOM soil-MID-ASP-PRES girl-NOM Naomi-COP  
*‘The girl whose bag is soiled is Naomi.’*

#### c. Passive

[[Zitensya-ga (Ken-ni) **kowas-are-ta**] syoonen]-wa oonaki.si-ta.  
bike-NOM Ken-DAT break-PASS-PAST boy-TOP heavily.cry.do-PAST  
*‘The boy whose bike was broken (by Ken) cried heavily.’*

#### d. Adjectival

[[Itumo huku-ga **kitanai**] syoonen]-o sit-tei-ru.  
always clothes-NOM be.dirty boy-ACC know-ASP-PRES  
*‘Do you know the boy whose clothes are always dirty.’*

#### e. Nominal

[[Hahaoya]-ga **zyoyuu-dat-ta**] hito-wa ano hito-da.  
mother-NOM actress-COP-PAST person-TOP that person-COP  
*‘That is the person whose mother was an actress.’*

### (6) *Topicalization of Alienable Possessors*

#### a. Unaccusative

Naomi-wa inu-ga sin-da.  
Naomi-TOP dog-NOM die-PAST  
*‘As for Naomi, her dog died.’*

<sup>3</sup>It is a well-known fact that the distribution of possessor relatives and that of possessor topics are coextensive, as exemplified in (1) and (2) (Hasegawa 1981, Kuno 1973 *inter alia*). This has motivated Kuno (1973) and Honda (2002) to propose that relativization in Japanese involves movement of a topic argument. Nevertheless, this analysis is not tenable, since a quantified DP, such as *dare.mo* ‘everyone,’ resists topic-marking, but still can serve as a relativized head as illustrated in (i):

(i) a. Dare.mo-[\*wa/ga] sono-hon-o yon-da.  
INDET.MO-[\*TOP/NOM] that-book-ACC read-PAST  
*‘Everyone reads that book.’*  
b. [[Sono-hon-o yon-da] dare-mo]-ga zessansi-ta.  
that-book-ACC read-PAST INDET.MO-NOM praise-PAST  
*‘Everyone who read that book praised (it).’*

Without a source (i.e. (i-a) with topic-marking), the relativization of ‘everyone’ is not expected to be possible, thus their analyses make a wrong prediction. In contrast, if Japanese topicalization and relativization involve A’-movement, similarities between the two phenomena are unsurprising and actually expected.

**b. Middle**

Naomi-wa kaban-ga yog-ore-tei-ru.  
 Naomi-TOP bag-NOM soil-MID-ASP-PRES  
*'As for Naomi, her bag is soiled.'*

**c. Passive**

Naomi-wa zityensya-ga Ken-ni kowas-are-ta.  
 Naomi-TOP bike-NOM Ken-DAT break-PASS-PAST  
*'As for Naomi, her bike was broken by Ken.'*

**d. Adjectival**

Ken-wa itumo huku-ga kitana-i.  
 Ken-TOP always clothes-NOM dirty-PRES  
*'As for Ken, his clothes are always dirty.'*

**e. Nominal**

Naomi-wa hahaoya-ga zyoyuu-da.  
 Naomi-TOP mother-NOM actress-COP  
*'As for Nomi, her mother is an actress.'*

The sentences are not well-formed if the *ga*-marked DP originates in Spec,vP of a transitive or unergative verb, as shown in (7) and (8):

**(7) Relativization of Alienable Possessors****a. Unergative**

\*[[~~syoonen~~ Inu]-ga rinzin-ni **hoe-ta**] syoonen]-ga awate-ta.  
 dog-NOM neighbor-DAT bark-PAST boy-NOM panic-PAST  
*'The boy whose dog barked at the person next door was panicked.'*

**b. Transitive**

\*[[~~syoonen~~ Inu]-ga rinzin-o **kan-da**] syoonen]-ga awate-ta.  
 dog-NOM neighbor-ACC bite-PAST boy-NOM panic-PAST  
*'The boy whose dog bit the person next door was panicked.'*

**(8) Topicalization of Alienable Possessors****a. Unergative**

\*<sup>?</sup>Ken-wa [~~Ken~~ inu]-ga rinzin-ni hoe-ta.  
 Ken-TOP dog-NOM neighbor-DAT bark-PAST  
*'As for Ken, his dog barked at the person next door.'*

**b. Transitive**

\*<sup>?</sup>Ken-wa [~~Ken~~ inu]-ga rinzin-o kan-da.  
 Ken-TOP dog-NOM neighbor-ACC bite-PAST  
*'As for Ken, his dog bit the person next door.'*

How can we generalize the restriction on predicate type observed across these two constructions? Crucially, it is not the operations of relativization and topicalization themselves that are restricted to certain types of predicates, as shown by the well-formedness of (9):

**(9) a. Subject Relative with Unergative verbs**

[[~~inu~~-ga kinoo tonari-no hito-ni hoe-ta] inu]  
 yesterday next-GEN person-DAT bark-PAST dog  
<sub>DP</sub> 'the dog that barked at the person next door yesterday'

**b. Subject Relative with Transitive verbs**

[[~~inu~~-ga kinoo tonari-no hito-o kan-da] inu]  
 yesterday next-GEN person-ACC bite-PAST dog  
<sub>DP</sub> 'the dog that bit the person next door yesterday'

If the restriction on the predicate-type is not due to the movement operations of relativization and topicalization, it must relate to the extraction of the possessor out of a possessive DP (i.e. the process of possessor-raising). Relativization and topicalization are A'-phenomena that necessarily

build upon a possessor-raising construction—the Multiple Nominative Construction (MNC, hereafter)—and the observed restriction on the predicate-type illustrated in (5) and (6) comes from the underlying MNC, which involves A-movement of a possessor to a DP-external Case position.<sup>4</sup> This proposal is supported by the fact that the restriction to *be*-type predicates observed in (5) and (6) holds for the MNC, as shown below:

(10) **Multiple Nominative Construction**

a. **Unaccusative**

Naomi-ga inu-ga sin-da.  
Naomi-NOM dog-NOM die-PAST  
'Naomi, her dog died.'

b. **Middle**

Naomi-ga kaban-ga yog-ore-tei-ru.  
Naomi-NOM bag-NOM soil-MID -ASP-PRES  
'Naomi, her bag is soiled.'

c. **Passive**

Naomi-ga zitsensya-ga (Ken-ni) kowas-are-ta.  
Naomi-NOM bike-NOM Ken-DAT break-PASS-PAST  
'Naomi, her bike was broken (by Ken).'

d. **Adjectival**

Ken-ga itumo huku-ga kitana-i.  
Ken-NOM always clothes-NOM be.dirty-PRES  
'Ken, his clothes are always dirty.'

e. **Nominal**

Naomi-ga hahaoya-ga zyoyuu-da.  
Naomi-NOM mother-NOM actress-COP  
'Naomi, her mother is an actress.'

(11) shows that the MNC is incompatible with unergative and transitive predicates.

<sup>4</sup>The case-marking pattern in Japanese causatives provides evidence for the claim that relativization and topicalization involve A'-movement unlike passivization, which involves A-movement. In Japanese causatives, the causee takes either dative or accusative Case if the verb stem alternates its transitivity, as shown below (Miyagawa 1999, Homer and Ishizuka forthcoming). However, if the causative sentence contains an overt accusative DP, dativization takes place and the causee must be dative-marked because of the well-known 'Double-o constraint' in Japanese (a verb can assign accusative Case to at most one NP) (Harada 1973, Saito 1985, *inter alia*). What is surprising is that dativization also takes place when a relativized or topicalized DP corresponds to an accusative gap, as shown in (ii-b) and (ii-c). This suggests that the relativized or topicalized DP already receives accusative Case before undergoing movement (assuming the gap is not *pro* due to reconstruction effects; see, for relativization, Ishizuka 2009 and, for topicalization, Appendix).

- (ii) a. Ken-ga Naomi-{ni/o} tabe-sase-ta.  
Ken-NOM Naomi-{DAT/ACC} eat-CAUSE-PAST  
'Ken fed Naomi./Ken caused Naomi to eat.'
- b. [[Ken-ga Naomi-{ni/\*o} t<sub>i</sub> tabe-sase-ta] sakana<sub>i</sub>]-ga kusat-tei-ta Relativization  
Ken-NOM Naomi-{DAT/\*ACC} eat-CAUSE-PAST fish-NOM be.rotten-ASP-PAST  
'The fish that Ken caused Naomi to eat was rotten.'
- c. Sakana<sub>i</sub>-wa Ken-ga Naomi-{ni/\*o} t<sub>i</sub> tabe-sase-ta. Topicalization  
fish-TOP Ken-NOM Naomi-{DAT/\*ACC} eat-CAUSE-PAST  
'The fish, Ken caused Naomi to eat.'
- d. Naomi<sub>i</sub>-ga John-{ni/o} (Tom-ni) t<sub>i</sub> sikar-are-sase-ta. Passive  
Naomi-NOM John-{DAT/ACC} Tom-DAT scold-PASS-CAUS-PAST  
'Naomi caused John to be scolded (by Tom).'
- (adapted from Saito 1982)

(ii-b) and (ii-c) contrast with the case-marking pattern in the passive (ii-d), where the causee is compatible with either dative or accusative Case (cf. Hoshi 1994:25). Therefore, passivization and relativization/topicalization involve different types of movement: the former is A and the latter is A'-movement.

(11) a. **Unergative**

\*Ken-ga inu-ga tonari-no hito-ni hoe-ta.  
 Ken-NOM dog-NOM next-GEN person-DAT bark-PAST  
*Int. 'Ken, his dog barked at the person next door.'*

b. **Transitive**

\*Ken-ga inu-ga tonari-no hito-o kan-da.  
 Ken-NOM dog-NOM next-GEN person-ACC bite-PAST  
*Int. 'Ken, his dog bit the person next door.'*

Importantly, there is no alienable-inalienable asymmetry for extraction from the *ga*-marked DP. The extraction of an inalienable possessor from a *ga*-marked DP is also subject to the same restriction on predicate type, as illustrated in (4) repeated below as (12):

(12) **Relativization of Inalienable Possessor**a. **Unaccusative**

[[~~ringo~~ Kawa-ga kusat-ta] ringo]-o mituke-ta.  
 skin-NOM rot-PAST boy-ACC find-PAST  
*'I found the apple whose skin was rotten.'*

b. **(Di)transitive**

\*[[~~ringo~~ Kawa-ga (kizi-ni) hagotae-o atae-ru] ringo-ga hituyoo-da.  
 skin-NOM dough-DAT chew-ACC give-PRES apple-NOM need-COP  
*Lit. 'The apple whose skin adds chewing texture (to the dough) is needed.'*

The analytical question is what distinguishes *be*-type predicates from unergative and transitive/ditransitive predicates. One clear difference is that the subject of the former predicates—the second *ga*-DP—is merged low as an internal argument while that of the latter predicates is merged as an external argument. This generalization invokes a well-attested condition on *ne*-cliticization (Belletti and Rizzi 1988) or possessor raising (Massam 1985:283, Baker 1988:274, Landau 1999). Then does the restriction to *be*-type predicates observed in (5) and (10) mean that possessor raising in Japanese is also subject to this condition? In fact, this is the proposal I made in Ishizuka (2009).

The following example, however, shows that ‘unaccusativity’ is not the right generalization since extraction out of a DP in Spec,vP (external argument) is possible as long as the transitive or unergative predicates are embedded under another predicate that allows additional *ga*-position to accommodate the increase in valency due to the external possessor ((13a) is modified from Nagai 2010, in this volume).

(13) a. **Transitive**

Ken-ga musuko-ga sensei-o nagut-ta \*(rashi-i).  
 Ken-NOM son-NOM teacher-ACC hit-PAST seem-PRES  
*'Ken, his son seems to have hit the teacher.'*

b. **Unergative**

Ken-ga musuko-ga Boston marason-de hasit-ta \*(rashi-i).  
 Ken-NOM son-NOM Boston marathon-LOC run-PAST seem-PRES.  
*'Ken, his son seems to have run at Boston Marathon.'*

Japanese is said to lack neither null nor overt expletives to satisfy the EPP of T (see Heycock 1993:195, Fukui 1986, Miyagawa 1989:170, Terada 1990:216 for more discussion on this issue). Therefore, I assume that *rashii* ‘to seem’ in Japanese is an adjectival raising predicate that allows raising to subject across TP, and the embedding allows an additional *ga*-position (Spec,TP) that accommodates the external possessor.<sup>5</sup> The derivation is given in (14):

<sup>5</sup>Given the centrality of the judgments in (13) for the argument, let me add a brief comment. The original example of (13a) provided by Nagai contains an adverb *dooyara* ‘apparently’ in addition to the adjectival raising predicate, *rashii* ‘to seem’ and she states that “I put adverbials in the parentheses to make the sentence sound more natural, following Mihara (1994), though these adverbials are basically optional. Thus, without

- (14) [TP DP-ga [TP [DP DP NP]-ga [VP [DP DP NP] ... V ] T] seem T]<sup>6</sup>

The sentences in (13) show that extracting a non-Case-marked DP out of an external argument is not prohibited (there is no external-internal argument asymmetry in terms of extracting a possessor). The problem in sentences like (9) is the unavailability of structural Case for the external possessor. The distribution of possessors we have seen thus far can be generalized as follows:

- (15) The MNC is only compatible with *be*-type predicates because they allow an additional structural *ga*-Case position at the edge of the predicate domain (VP, AP, or NP) in addition to the *ga*-position available in every clause (Spec,TP).

This proposal is consistent with the analysis of the MNC proposed by Akiyama (2004), who argues based on VP-preposing facts that only the first *ga*-DP occupies Spec,TP, while the second *ga*-DP occupies the predicate-internal subject position, as illustrated below (see Akiyama 2004 for more information):

- (16) [TP DP-ga [T' [VP/AP DP-ga ... V/A] T]]

In Japanese, a VP (or vP) can be preposed if it is followed by a focus particle and if the light verb *su-ru* 'to do' is inserted to support T (examples in (17) are modified from Akiyama 2004).

- (17) a. Ken-ga [VP okasi-o tabe]-sae su-ru.  
Ken-NOM sweets-ACC eat-even do-PRES  
'Ken even eats sweets.'  
b. ?[VP Okasi-o tabe]-sae Ken-ga t<sub>VP</sub> su-ru.

In the MNC, VP-preposing can strand not two, but only one *ga*-marked DP.

- (18) a. [T<sub>DP</sub> Ken]-ga [T' [VP [DP imooto]-ga byooki-de nakunari]-sae si-ta]].  
Ken-NOM sister-NOM illness-by die-even do-PAST  
'Ken's sister even died of illness.'  
b. \*[Byooki-de nakunari]-sae Ken-ga imooto-ga si-ta.  
c. ??[Imooto-ga byooki-de nakunari]-sae Ken-ga si-ta.

Akiyama (2004) attributes the pattern given in (16) to the difference in the structural positions of the two *ga*-marked DPs. In (16b) the first one can be stranded since it occupies Spec,T whereas the second one cannot since it is contained within the VP. Akiyama's analysis supports the current proposal: the additional *ga*-position licensed by *be*-type predicates is located not in the TP domain but somewhat lower in the VP/AP domain.<sup>7</sup>

the adverbials, the sentence is still considered to be grammatical." (see Nagai, example (11) and fn 10 in this volume). However, I (and other speakers I consulted) disagree: I find (13a) not just awkward/unnatural but ill-formed without *rashii* (adding the adverbial *dooyara* 'apparently' to (13a) does rescue the ill-formed string). Since my analysis makes syntactic sense of the otherwise difficult to grasp/vague notion of unnaturalness, and since it is consistent with Kuroda's (1986:272) claim that the MNC is only compatible with stative predicates, which are a subset of *be*-type predicates, I assume that the difference in judgment is to be explained along the lines I pursue here.

<sup>6</sup>Precisely speaking, there are three *ga*-positions available in (14), since *rashii* 'to seem' is a *be*-type predicate: two in the matrix clause and one in the embedded clause. The following coordination in (iv) shows that the second *ga*-DP is located in the embedded clause, occupying the embedded Spec,TP.

- (iii) [Ken-ga sensei-o nagut-(\*)ta-te, Naomi-ga tomodachi-o ket-ta]-to kii-ta.  
Ken-NOM teacher-ACC hit-and, Naomi-NOM friend-ACC hit-PAST-C hear-PAST  
'(I) heard that Ken hit the teacher and Naomi kicked her friend.'  
(iv) Ken-ga [musuko-ga sensi-o nagut-te, musume-ga tomodachi-o ket-ta] *rasi-i*.  
Ken-NOM son-NOM teacher-ACC hit-and, daughter-NOM friend-ACC hit-PAST] seem-pres  
≈ 'It seems that Ken, his son hit the teacher and his daughter kicked her friend.' [MNC+rashii]

<sup>7</sup>Akiyama (2004) together with Tateishi (1994), Ura (1996) and Vermeulen (2005) divides the MNC into two kinds and posits different structures: a possessor-raising structure and a base-generation structure. In

The distribution of possessors out of a *ga*-position can be summarized as follows:

- (19) a. Relativization and topicalization of the possessor out of *ga*-marked DPs are restricted to cases where the possessor feeds into the Multiple Nominative Construction.  
 b. The Multiple Nominative Construction is restricted to *be*-type predicates. This is due to the necessity to access to an additional structural *ga*-Case.

## 2.2 Alienable and Inalienable Possessor Extraction out of an *o*-Marked DP

Let us now return to the original puzzle (1b), repeated below as (20), and examine the extraction pattern out of an *o*-marked DP. The problem with (20) is unavailability of DP-external Case for the possessor. Given that we have just established that a low *ga*-Case is available in the VP domain, one might wonder why *syoonen* ‘boy’ in (20) cannot receive a low *ga*-Case:

- (20) \*[[Ken-ga [~~syoonen~~ zitensya]-o kowasi-ta] syoonen]-wa okot-ta.  
 Ken-NOM bike-ACC break-PAST boy-TOP angry-PAST  
*Int. ‘The boy whose bike Ken broke got angry.’*

The ill-formedness of (20) means that the VP of transitive predicates does not license an additional *ga*-Case. Presumably, what licenses the additional *ga*-Case is not the VP, AP, or NP themselves, but rather the copulative functional element (or verbalizer) that takes a *be*-type predicate as its complement (but for simplicity, we will keep the term *be*-type predicates to refer to a licenser of a low *ga*-Case). This explains why the extra *ga*-position is unavailable with the VP of a transitive verb. Further, in Japanese, a verb can assign accusative Case to at most one NP, *aka* ‘Double-o constraint’ (Harada 1973, Saito 1985, *inter alia*). Thus, the possessor of an *o*-marked DP is unable to receive nominative or accusative Case.

The following possessive passive examples provide further support for the claim that the availability of the DP-external structural Case for the possessor determines the possibility of pos-

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one structure, the *ga*-marked DPs stand in a core possessive relation, while in the other, they do not. However, if base-generation is an option, the ill-formedness of (9) is difficult to explain. In addition, my idea of possessive relation is syntactic (i.e. whether it can be encoded in the [DP-no NP] frame) and not restricted to ‘core’ alienable and inalienable possession (cf. see fn.3).

Ura (1996:103), for example, assumes that the first *ga*-marked DP is base-generated in sentences like (v) because the *no*-marked counterpart (vi) is ungrammatical to him. Nevertheless, (vi) is totally well-formed to me (*pace* Ura) and I, in fact, argue that (vi) must be the source for (v).

- (v) Oranda-no sakana-ga nisin-ga yo-i.  
 Holland-GEN fish-NOM herring-NOM good-PRES  
*Lit. ‘Dutch fish, herring is the best.’*  
 (vi) Oranda-no sakana-no nisin-ga yo-i.  
 Holland-GEN fish-GEN herring-NOM good-PRES  
*‘Herring, which is Dutch fish, is the best.’*

Japanese *no*-phrases can serve not only as a restrictive but also as a non-restrictive modifier, and *sakana-no nisin* is one such example. Non-restrictive *no*-phrase feeds into the MNC (but not into relativization).

Another example which leads Vermeulen (2005) to posit two MNC structures is given below (reported as well-formed in Vermeulen, but clearly \* for me):

- (vii) \*Ano-mise-ga gakusee-ga yoku hon-o ka-u.  
 that-shop-NOM student-NOM often book-ACC buy-PRES  
*Lit. ‘That shop is (the place where) students often buy books.’*

Since the two *ga*-marked DPs do not stand in the possessor relation in (vii) (i.e. \**ano-mise-no gakusee* ‘that shop’s students’), she argues that (vii) cannot be derived via possessor-raising. Nevertheless, this sentence is ungrammatical to the native speakers I consulted (*pace* Vermeulen), and the only way they can accept this sentence is to add a head noun, as exemplified below:

- (viii) Ano-mise-ga [[gakusee-ga <sub>i</sub> yoku hon-o kau] mise]<sub>i</sub>-da.  
 that-shop-NOM student-NOM often book-ACC buy shop-COP  
*‘That shop is the shop where students often buy books.’*

Presumably, some speakers can drop the head noun and license it as a *pro*. However, what is important here is that this is not the MNC but a copula construction. Therefore, I assume that there is only one kind of MNC in Japanese, which is necessarily derived through possessor-raising.



essor relativization and topicalization:

(21) *Extraction of the Alienable Possessor out of an o-Marked DP*

a. **Relativization**

[[ (Ken-ni) [t<sub>i</sub> zitensya]-o kowas-**are**-ta] syoonen]-wa oonakisi-ta.  
 Ken-DAT bike-ACC break-PASS-PAST boy-TOP cry.heavily-PAST  
*'The boy whose bike was broken (by Ken) cried heavily.'*

b. **Topicalization**

Naomi<sub>i</sub>-wa (Ken-ni) [t<sub>i</sub> zitensya]-o kowas-**are**-ta.  
 Naomi-TOP Ken-DAT bike-ACC break-PASS-PAST  
*'As for Naomi, her bike was broken (by Ken).'*

c. **Possessive Passive**

{Syoonen/Naomi}<sub>i</sub>-ga (Ken-ni) [t<sub>i</sub> zitensya]-o kowas-**are**-ta.  
 {boy/Naomi}-NOM Ken-DAT bike-ACC break-PASS-PAST  
*Int. 'The Boy/Naomi<sub>i</sub> had Ken break his<sub>i</sub> bike on {him/her}<sub>i</sub>.'*

The well-formedness of (21a) and (21b) is contingent on the fact that the relative DP stands in a possessive relation with the *o*-marked DP, *zitensya* 'bike'.<sup>8</sup> Given that (21a) and (21b) both contain a passive morpheme *-(r)are*, a plausible source for the relativized and topicalized DPs is the *ga*-marked DP in the possessive passive (19c). Why is extraction out of an *o*-marked DP impossible in the active context (20) but possible in the passive (21a)? The difference between the two sentences is the availability of a corresponding possessor-raising construction that has an extra case position for the external possessor—(21c). In (21c), the external argument of the verb stem receives the dative Case from the passive morpheme *-rare*, freeing up the structural *ga*-position (Spec,T) for the external possessor. The possessor gets around the dative DP in the same way a theme DP gets around it and moves to the *ga*-position in the (direct) passive. Likewise, the inalienable possessor of an *o*-marked DP feeds into the possessive passive and further undergoes relativization and topicalization.

To sum up, in Japanese A'-movement must be launched from a DP-external Case position and not from the DP internal *no*-position. This requires the possessor to first undergo possessor raising and receive nominative Case in the MNC or the possessive passive. Crucially, possessor-raising is restricted to cases where additional Case for the external possessor is available (cf. Landau 1999). Extraction out of a *ga*-marked DP—the MNC—is restricted to *be*-type predicates because only they license additional low *ga*-Case. The possessor of *o*-marked DP can feed into the possessive passive, since *ga*-Case is available for the possessor by providing dative Case to the original external argument of the predicate to which the passive morpheme *-(r)are* attaches. Lastly, the alienable possessor of an *o*-marked DP cannot be related or topicalized because it cannot receive DP-external Case.

Section 3 investigates the remaining puzzle given in (1a) and (2a): why can the inalienable possessor be relativized or topicalized from an *o*-marked DP in the active voice, even if it seems not to have a corresponding possessor-raising construction in Japanese?

### 3 Distribution of the Inalienable Possessors

The distribution of inalienable possessors (see (1a) and (2a)) is unexpected given the proposal developed here. How can inalienable possessors satisfy the DP-external Case requirement before undergoing A'-movement? Korean data provide us with new insight into this issue.

<sup>8</sup>One might argue that the passives in (21) do not constitute counter-evidence to the second hypothesis, since the possessor *boy* in (21c) is merged as the external argument of the passive morpheme *-(r)are*, but not the possessor of the accusative argument. Following Kubo (1992), Ishizuka (2007), among many others, however, I assume that the derivation of possessive passive involves possessor raising. See Ishizuka (in prep) for more information about this issue.

### 3.1 Korean Possessors

Korean alienable and inalienable possessors exhibit the same distribution as that of Japanese.

#### (22) *Relativization*

##### a. **Inalienable Possessor**

[[Nay-ka  $t_i$  kkepcil-ul kkan-n] panana $_i$ ]-ka ssek-ess-ta.  
I-NOM skin-ACC peel-ADN banana-NOM rotten-PAST-IND  
'The banana whose skin I peeled was rotten.'

##### b. **Alienable Possessor**

\*[[Suni-ka  $t_i$  kayak-ul meku-n] ay $_i$ ]-nun ul-ess-ta.  
Suni-NOM cake-ACC eat-ADN boy-TOP cry-PAST-IND  
*Lit.* 'The boy whose cake Suni ate cried.'

##### c. **Alienable Possessor (out of a MNC containing unaccusative verb)**

[[ $t_i$  Cacenke-ka pwus-eci-n] ai $_i$ ]-nun ul-ess-ta.  
bike-NOM break-MID-ADN boy-TOP cry-PAST-IND  
'The boy whose bike broke cried.'

#### (23) *Topicalization*

##### a. **Inalienable Possessor**

Ku panana $_i$ -nun ecey nay-ka [ $t_i$  kkepcil]-ul kka-ass-ta.  
the banana-TOP yesterday I-NOM skin-ACC peel-PAST-IND  
'As for the banana, I peeled the skin yesterday.'

##### b. **Alienable Possessor**

\*Suni $_i$ -nun ecey Chelsoo-ka [ $t_i$  kayak]-ul mek-ess-ta.  
Suni-TOP yesterday Chelsoo-NOM cake-ACC eat-PAST-IND  
*Lit.* 'As for Suni, Chelsoo ate her cake yesterday.'

##### c. **Alienable Possessor (out of a MNC containing an adjectival predicate)**

Suni $_i$ -nun  $t_i$  os-i hangsang delep-ta.  
Suni-TOP clothes-NOM always dirty-IND  
'As for Suni, his clothes are always dirty.'

A critical difference between Japanese and Korean is that Korean allows the MAC (Maling and Kim 1992, Cho, Dong-In 1993, references therein). Similar to the MNC, the two accusative-marked nouns can be expressed as a genitive relation. Significantly, the use of the MAC is restricted to inalienable possessors (see also Tomioka and Sim 2007, Yoon 2004). This is the same asymmetry observed with A'-constructions in Japanese and Korean.

#### (24) *Multiple Accusative Constructions*

##### a. **Inalienable Possessor**

Nay-ka panana $_i$ -lul [~~panana~~ kkepcil]-ul kka-ass-ta.  
I-NOM banana-ACC skin-ACC peel-PAST-IND  
'I peeled the banana skin.'

##### b. **Alienable Possessor**

Chelsoo-ka [Suni-{\*ul/uy} kayak]-ul mek-ess-ta.  
Chelsoo-NOM Suni-{\*ACC/GEN} cake-ACC eat-PAST-IND  
'Chelsoo ate Suni's cake.'

The received view is that the MAC involves Case-agreement between the inalienable DP and the possessed NP, and how this agreement takes place depends on the analysis (see Maling and Kim 1992). Setting aside the validity of this analysis, what is relevant for us is that in Korean the inalienable possessor can satisfy Case requirement low but an alienable possessor cannot. The well-formedness of (22a) and (23a) in Korean is no longer a puzzle since (24) serves as the underlying possessor-raising construction for (22a) and (23a). If Japanese has additional accusative positions for the inalienable possessor like Korean, (1a) and (2a) are no longer a puzzle in Japanese. Thus, the Korean data motivate the following proposal regarding Japanese (cf. Harada 1973):

- (25) In Japanese, there is a *covert* accusative Case position, which the inalienable possessor can access only if followed by further A'-movement.

This Case position can only yield convergent derivations if followed by a step of A'-movement. This, in fact, is a well-documented property of English (Postal 1974) and French (Kayne 1984):

(26) **English**

- a. \*He alleged Melvin to be a thief.
- b. Who did they allege to be a thief?
- c. the Parisian who they alleged to be a thief (modified from Postal 1974:304-5)

(27) **French**

- a. \*Je crois Jean être parti.  
I believe John be left  
'I believe John to have left.'
- b. Qui crois-tu être parti?  
Who believe-you be left  
'Who do you believe to have left?'

Why this covert accusative position is only available for inalienable possessors needs to be accounted for. It is the logic of this paper to attribute the asymmetry to a difference in merge position of inalienable and alienable possessors. The inalienable possessor enters the derivation low enough to feed into the lower accusative, whereas the alienable possessor is merged into the derivation too high to feed into the lower accusative, as illustrated below:

- (28) [<sub>VP</sub> \_\_\_\_ACC(high)<sub>alienable</sub>[DP NP] \_\_\_\_ACC(low)<sub>inalienable</sub>[DP NP]]

I leave open how to derive (28) in a principled way. Due to the lack of access to low Accusative Case, only the higher Case—Nominative—can satisfy Case features of alienable possessors.

## 4 Conclusion

This paper has established and analyzed the structural conditions under which relativization and topicalization of two kinds of possessors—alienable and inalienable—in Japanese are possible. I have shown that in contexts where only a single structural *ga*-Case is available, possessor extraction from the *ga*-marked DP fails for both types of possessors; when an additional *ga* is local to the DP containing the possessor, relativization and topicalization of both kinds of possessors are possible. Finally only inalienable possessors, which feed into multiple accusative in Korean, can be extracted in the active accusative context in Japanese and in Korean.

I have argued that this constellation of facts follows from well-supported theoretical assumptions. First, an A'-extraction of a Case-marked possessor out of the DP is prohibited; this is a classical island or ECP effect. This explains all cases in which relativization and topicalization of a possessor fails. Second, possessor relativization and topicalization must be launched from a Case position. Thus possessor relativization/topicalization must be preceded by a step of possessor raising to a DP external Case position. I have argued that the well-known and extensively studied MNC provides one such case. In particular, I have proposed that only certain configurations, which I called *be*-type contexts, provide an additional *ga*, which appears quite low in the structure. Possessor raising is possible when the DP containing the possessor is local to the lower *ga*. This explains the cases in which both kinds of possessors can be relativized or topicalized. Finally, I have shown that the possibility of relativization/topicalization of an inalienable (inanimate) possessor in active accusative contexts is coextensive with the availability of multiple accusative cases in Korean, which otherwise shows exactly the same behavior as Japanese. I have interpreted this as showing that Japanese also allows two accusative cases, though for unclear reasons, two overt *o*-marked DPs are prohibited from surfacing. This contrast between inalienable and alienable possession comes from the fact that DPs containing an alienable possessor cannot access the lower accusative. Thus, the island effect follows from the unavailability of an extra case.

What constitutes inalienable or alienable possession and why these behave differently in the multiple accusative constructions remains a topic for future inquiry. An important claim of this paper is that possessor raising/external possessor plays a major role in the derivation of the MNC which itself underlies relativization and topicalization in Japanese. This revisits Kuno's (1973) proposal that relativization is derived through topicalization.

## Appendix: Arguments for the Movement Analysis of Non-contrastive topics

There is further evidence for a movement analysis of non-contrastive topics, such as reconstruction effects in terms of pronominal binding, as shown below:

- (i) [Zibun<sub>i</sub>-no kekkonaite]<sub>j</sub>-wa dare.mo<sub>i</sub>-ga t<sub>j</sub> zibun<sub>i</sub>-de erabi-tai.  
 self-GEN spouse-TOP INDET.MO-NOM self-by choose-want  
*'As for self<sub>i</sub>'s spouse, everyone<sub>i</sub> wants to choose by self<sub>i</sub>.'*

The bound reading of *zibun* 'self' in (i) requires it to be c-commanded by the quantified antecedent within the matrix clause, thus we conclude that the derivation of (i) must involve movement.

Now the question is whether there are base-generated non-contrastive topics as well: the ill-formedness of (ii) and (2b) suggests that the answer is *no*.

- (ii) \*Zoo-wa Naomi-ga doobutuen-ni it-ta.  
 elephant-TOP Naomi-NOM zoo-DAT go-PAST  
*Int. 'Speaking of the elephant, Naomi went to the zoo.'*

The *wa*-marked DP *zoo* 'elephant' relates to the rest of the sentence, but (ii) is unacceptable. The ill-formedness of (ii) coupled with (2b) means that the non-contrastive topic must be licensed clause-internally (i.e. has clause-internal source), including the following well-cited example (cited in Kuno 1973 and Kuroda 1986, *inter alia*):

- (iii) [[Sinbun-o yomi-tai] hito]-wa (shinbun-wa) koko-ni arimas-u.  
 paper-ACC read-want person-TOP (paper-TOP) here-LOC exist-PRES  
*'For those who want to read newspaper, the paper is here.'*

(iii) is used as a representative case where the *wa*-marked DP has no clause-internal source. Nevertheless, I argue that there actually is. First, note that (iii) is marginal (?) to me without an overt subject *sinbun-wa* 'newspaper-TOP' (or *-ga* 'NOM'). I analyze (iii) as having the underlying structure presented in (iv):

- (iv) [[[~~hito-ga~~ Shinbun-o yomi-tai] hito]<sub>j</sub>-ga [<sub>DP</sub> t<sub>j</sub> shinbun]-ga koko-ni arimas-u.  
 paper-ACC read-want person-NOM paper-NOM here-LOC exist-PRES  
*'The newspaper for those who want to read it is here.'*

The first *wa*-marked DP in (iii) is merged as a possessor of the matrix subject 'newspaper' and undergoes possessor raising to get *ga*-Case. The two *ga*-DPs undergo topicalization (and some speakers can further drop the second topic DP, *shinbun-wa*), yielding (iii). The possession encoded in the DP in (iv) is a 'purpose' relation, as in *neko-no sara* 'a dish for the cat.' The assumption is that irrespective of the kind of relationship encoded, the DP that is merged as a DP internal small clause constituent can either receive DP-external *ga*-Case (if available) or DP-internal *no*-Case.

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