## 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:<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 resumpted 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) Alienable Possessor Relativization

- 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.'
- 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.'

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

<sup>&</sup>lt;sup>2</sup>Abbreviations: IND=indicative, INDET=indeterminate, MID=middle, PRES=non-past, PERF=perfective.

### (4) Inalineable Possessor Relativization

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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.'
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b. \*[[<del>ringo</del> 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).<sup>3</sup>

In addition, (3) and (4) show that DP is an island for extraction of a genitive Case-marked—no-marked—possessor (i.e. DP[DP-no NP]); otherwise, relativization and topicalization of the possessor out of a DP should always be possible. Therefore, 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 [N apple]]) and undergo A-movement to a DP-internal case position, yielding [DP-no [DP 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, and 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

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 (2b) means that the topic DP must be licensed clause-internally (i.e. has a clause-internal source), including the following oft-cited example (cited in Kuno 1973 and Kuroda 1986, *inter alia*):

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(ii) [[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.'
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(iii) [[[hito-ga Shinbun-o yomi-tai] hito]<sub>j</sub>-ga [DP 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.'
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The first wa-marked DP in (ii) 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 (ii). The possession encoded in the DP in (iii) 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.

<sup>&</sup>lt;sup>3</sup>There is further evidence for a movement analysis of non-contrastive topics, such as reconstruction effects in terms of pronominal binding, as shown below:

<sup>(</sup>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>.'

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

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. 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 Possessor

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 the 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) showed that it is not the case that alienable possessors are unextractable. 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 shell structure (see Ishizuka, 2009).

# (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 dirty 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.'

<sup>&</sup>lt;sup>4</sup>It is a well-known fact that possessor relativization and topicalization exhibit the same distribution in Japanese (see Hasegawa 1984, Kuno 1973). Due to space limitations, we will restrict the examples to relativization hereafter, but the same pattern holds for topicalization.

The sentences are not well-formed if the ga-marked DP originates in Spec,vP of a transitive or unergative verb, as shown in (6):

## (6) Unergative/Transitive

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*[[Inu-ga {rinzin-ni hoeta /rinzin-o kanda}] syoonen]-ga awate-ta.
dog-NOM {neighbor-DAT barked/neighbor-ACC bit} boy-NOM panick-PAST
'The boy whose dog {barked at/bit} the person next door was panicked.'
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How can we generalize the restriction on the 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 (7):

### (7) Subject Relative with Unergative/Transitive verbs

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[[inu ga kinoo tonari-no {hito-ni hoe-ta /hito-o kan-da}] inu]
yesterday next-GEN {person-DAT bark-PAST/person-ACC bite-PAST} dog

DP'the dog that {barked at/bit} the person next door yesterday'
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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. 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:

#### (8) 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.'

(iv) 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. Naomi,-ga John-{ni/o} Tomi-ni t, sikar-are-sase-ta. Passive
Naomi-NOM John-{DAT/ACC} Tom-DAT scold-PASS-CAUS-PAST
'Mary caused John to be scolded by Tom.' (adapted from Saito 1982)

(iv-b) contrasts with the case-marking pattern in the passive (iv-c), where the causee is compatible with either dative or accusative Case (cf. Hoshi 1994:25). Therefore, passivization and relativization involve different types of movement: the former is A and the latter is A'-movement. (Topicalization shows the same pattern as that of relativization in terms of dativization; see Hoshi, 1994:25).

<sup>&</sup>lt;sup>5</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 DP corresponds to an accusative gap, as shown in (iv-b). This suggests that the relativized DP already receives accusative Case before undergoing movement (assuming the gap is not *pro* due to reconstruction effects; see Ishizuka, 2009 and fn.3).

#### c. Passive

Naomi-ga zitensya-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.'

#### (9) Unergative/Transitive

\*Ken-ga inu-ga tonari-no {hito-ni hoe-ta /hito-o kan-da}. Ken-NOM dog-NOM next-GEN {person-DAT bark-PAST/person-ACC bite-PAST} Int. 'Ken, his dog {barked at/bit} the person next door.'

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

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 (10):

## (10) Inalienable Possessor Relativization

a. [[<del>ringo</del> 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 analytical question is what distinguishes *be*-type predicates from unergative and transitive 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 ((11a) is modified from Nagai, 2010, in this volume).

- (11) a. 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. 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 the Boston Marathon.'

I assume that *rashii* 'to seem' in Japanese is an adjectival raising predicate that allows raising to subject across TP, and *rashii* allows additional *ga*-position that accommodates the external possessor. The derivation is given in (12):

<sup>&</sup>lt;sup>6</sup>Given the centrality of the judgments in (11) for the argument, let me add a brief comment. The original example of (11a) 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,

$$(12) \quad [_{TP} \quad DP\text{-ga} \ [_{TP} \ [_{DP} \ DP\text{-NP}] \text{-ga} \ [_{vP} \ [_{DP} \ DP\text{-NP}] \dots \ V \ ] \ T] \ seem \ T]$$

The sentences in (11) 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:

(13) 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):

(14) 
$$\lceil_{TP} DP-ga \lceil_{T'} \lceil_{VP/AP} DP-ga \dots V/A \rceil T \rceil \rceil$$

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 (15) are modified from Akiyama, 2004).

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(15) a. Ken-ga [VP okasi-o tabe]-sae su-ru.

Ken-NOM sweets-ACC eat-even do-PRES 'Ken even eats sweets.'

b. <sup>?</sup>[VP Okasi-o tabe]-sae Ken-ga tVP su-ru.
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In the MNC, VP-preposing can strand not two, but only one ga-marked DP.

- (16) a.  $[T_{DP}] = [T_{VP}] = [$ 
  - b. \*[Byooki-de nakunari]-sae Ken-ga imooto-ga si-ta.
  - c. <sup>??</sup>[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 distribution of possessors out of a ga-position can be summarized as follows:

- (17) 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 an additional structural *ga*-Case.

without 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 (11a) not just awkward/unnatural but ill-formed without *rashii* (adding the adverbial *dooyara* 'apparently' to (11a) 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 will assume that the difference in judgment is to be explained along the lines I pursue here.

<sup>7</sup>Akiyama (2004), among others, divides the MNC into two kinds and posits different structures: a possessor-raising structure and a base-generated structure. In one structure, the *ga*-marked DPs stand in a core possessive relation, while in the other, they do not. However, 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 (see fn.3 for a possessor of non-core possession). In addition, if base-generation is an option, the ill-formedness of (9) is difficult to explain. Thus, I assume only one kind.

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

Let us now return to the original puzzle (1b), repeated below as (18), and examine the pattern of extraction out of an *o*-marked DP. The problem with (18) is the 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 (18) cannot receive a low *ga*-Case:

(18) \*[[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 (18) means that the VP of transitive predicates does not license an additional ga-Case. Instead, what licenses the additional ga-Case is not the VP, AP, 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 is why the extra ga-position is unavailable with the VP of a transitive verb. Furthermore, in Japanese, a verb can assign accusative Case to at most one NP (the '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 possessor relativization and topicalization:

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

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

The well-formedness of (19a) is contingent on the fact that the relative DP stands in a possessive relation with the *o*-marked DP, *zitensya* 'bike.' Given that (19a) contains a passive morpheme '(r)are', a plausible source for the relativized DP is the *ga*-marked DP in the possessive passive (19b). Why is extraction out of an *o*-marked DP impossible in the active context (18) but possible in the passive (19a)? 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—(19b). In (19b), 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 *-(r)are* attaches. Lastly, the alienable possessor of an *o*-marked DP cannot be relativized or topicalized because it cannot receive DP-external Case.

<sup>&</sup>lt;sup>8</sup>One might argue that the passives in (19) do not constitute counter-evidence to the second hypothesis, since the possessor *boy* in (19b) is merged as the external argument of the passive morpheme *-(r)are*, but not the possessor of the accusative argument. Following Kubo (1992) and 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.

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 under 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.

#### 3.1 Korean Possessors

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

## (20) Relativization

- b. \*[[Suni-ka t<sub>i</sub> kayik-ul meku-n] ay]-nun ul-ess-ta. Alienable
  Suni-NOM cake-ACC eat-ADN boy-TOP cry-PAST-IND
  Lit. 'The boy whose cake Suni ate cried.'
- c. [[t<sub>i</sub> Cacenke-ka pwus-eci-n] ai<sub>i</sub>-nun ul-ess-ta. Alienable:MNC w/unacc. bike-NOM break-MID-ADN boy-TOP cry-PAST-IND 'The boy whose bike broke cried.'

### (21) Topicalization

- a. Ku panana<sub>i</sub>-nun ecey nay-ka [t<sub>i</sub> kkepcil]-ul kka-ass-ta. Inalienable the banana-TOP yesterday I-NOM skin-ACC peel-PAST-IND 'As for the banana, I peeled the skin yesterday.'
- b. \*Suni<sub>i</sub>-nun ecey Chelsoo-ka [t<sub>i</sub> kayik]-ul mek-ess-ta. Alienable
  Suni-TOP yesterday Chelsoo-NOM cake-ACC eat-PAST-IND
  Lit. 'As for Suni, Chelsoo ate her cake yesterday.'
- c. Suni-nun os-i hangsang delep-ta. Alienable: MNC w/ Adj Suni-TOP clothes-NOM always dirty-IND 'As for Suni, his clothes are always dirty.'

A crucial 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, as shown in (22). 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.

(22) a. Nay-ka panana<sub>i</sub>-lul [t<sub>i</sub> kkepcil]-ul kka-ass-ta.

I-NOM banana-ACC skin-ACC peel-PAST-IND

'I peeled the banana skin.'

b. Chelsoo-ka Suni-{\*ul/uy} [t<sub>i</sub> kayik]-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 (20a) and (21a) in Korean is no longer a puzzle, since (22) serves as the underlying possessor-raising construction for (20a) and (21a). If Japanese has the 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):

(23) 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):

(24) a. \*He alleged Melvin to be a thief.

English

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)

(25) a. \*Je crois Jean être parti.

French

I believe John be left

eft '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:

I leave open how to derive (26) 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—are possible in Japanese. 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 underlies relativization and topicalization in Japanese. This revisits Kuno's (1973) proposal that relativization is derived through topicalization.

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