

On the Possessor Interpretation of Non-Agentive Subjects

Tomokazu Takehisa

Niigata University of Pharmacy and Applied Life Sciences
265-1 Higashijima, Akiha-ku, Niigata 956-8603, Japan

takehisa@nupals.ac.jp

Abstract

It has been observed that the relation of possession contributes to the formation of so-called adversity causatives, whose subject is understood as a possessor of an object referent. This interpretation is reflected at face value in some studies, and it is assumed there that the subject argument is introduced as a possessor in syntax. This paper addresses the question of whether the observed relation should be directly encoded as such and argues that the subject argument is introduced as merely an event participant whose manner is underspecified. Moreover, it argues that the possessor interpretation arises from inference based on both linguistic and extralinguistic contexts, such as the presence of a possessum argument. This view is implemented as an analysis making use of a kind of applicative head (Pylkkänen, 2008) in conjunction with the post-syntactic inferential strategy (Rivero, 2004).

1 Introduction

It is well known that in Japanese, some transitive subjects, in addition to the agentive reading, allow the reading where they do not instigate but rather undergo an event described by the verb phrase, thereby giving rise to an ambiguity, as in (1).¹

¹ The following abbreviations are used: ACC = accusative, CAUS, C = causative, CL = classifier, COP = copula, DAT = dative, DV = dummy verb, GEN = genitive, INCH, I = inchoative, INST = instrumental, LOC = locative, NEG = negative, NML = nominalizer, NPST = nonpast, PASS = passive, pro = null pronoun, PST = past, TOP = topic, $\sqrt{\text{verb}}$ = verbal root.

- (1) Taroo₁-ga { kare₁-no/ zibun₁-no/ \emptyset ₁ }
T.-NOM he-GEN/ self-GEN/ pro
ude-o or- \emptyset -ta (>ot-ta)
arm-ACC $\sqrt{\text{break}}$ -CAUS-PST
'Taroo broke his arm.'

That the ambiguity is real can be shown by the sentence in (2), where the second conjunct serves to ensure the subject is not an agent.

- (2) Taroo₁-ga { kare₁-no/ zibun₁-no/ \emptyset ₁ }
T.-NOM he-GEN/ self-GEN/ pro
ude-o or- \emptyset -ta (>ot-ta) kedo,
arm-ACC $\sqrt{\text{break}}$ -CAUS-PST but
zibun₁-de-wa or- \emptyset -anak-at-ta
self-INST-TOP break-CAUS-NEG-DV-PST
'Taroo broke his arm, but he didn't break it himself.'

Moreover, direct passivization, which necessarily implies the presence of an agent, renders the non-agentive reading of the subject in (1) unavailable, as shown in (3):²

- (3) *Taroo₁-niyotte { kare₁-no/ \emptyset ₁ } ude-ga
T.-by he-GEN/ pro arm-NOM
or- \emptyset -are-ta kedo,
 $\sqrt{\text{break}}$ -CAUS-PASS-PST but
kare.zisin₁-de-wa or- \emptyset -anak-at-ta
he.self-INST-TOP break-CAUS-NEG-DV-PST
'Taroo's arm was broken by him, but he didn't break it himself.'

² In what follows, the "conjunction" test will be applied only when its application is crucial to prove the point.

Thus, these examples clearly demonstrate that the ambiguity is not illusionary and that the subject can have a reading significantly distinct from the agentive reading.

Inoue (1976) has shown that there are two conditions to be met in order to obtain the non-agentive—or, in her terms, experiential—reading of the subject: (i) the subject must appear with a verb that alternates in transitivity; (ii) there must be a “proximate” relation, typically that of inalienable possession, between the subject and an object.³ These are well-established generalizations in the literature, and I do not discuss them in detail. Yet, since this paper focuses on the possessor interpretation of non-agentive subjects, I will illustrate that the possession condition does hold and it affects another dimension of interpretation: distributive and collective readings. Specifically, when plural subjects are non-agentive, only the distributive reading is available because each of the subject referents possesses a referent of the object (i.e., the possession condition). On the other hand, the collective reading is unavailable with non-agentive subjects unless some unusual context is given (e.g., subject referents share an inalienably possessed entity). Thus, under normal contexts, forcing the collective reading renders the non-agentive interpretation unavailable. Consider (4) and (5) below.

- (4) Huta-ri-no kodomo₁-ga [Ø₁ ude]-o
 2-CL-GEN child-NOM pro arm-ACC
 or-Ø-ta (>ot-ta)
 √break-CAUS-PST
 ‘Two children broke their arms.’
 [distributive: agentive or non-agentive]
 [collective: agentive]

³ Two terminological notes are in order: One is that Inoue (1976) calls the interpretation under discussion Experiencer, while other researchers call it different names such as Affectee, Possessor, Undergoer, etc. What we are concerned here is the fact that the argument bears the possessor interpretation. Moreover, although they involve lexical causatives and not syntactic causatives, the examples in the text should be regarded as cases of so-called adversity causative. This is because the causative morpheme *-(s)ase-* in adversity causatives, as in (i), can be regarded as the default realization of a lexical causative morpheme (Miyagawa, 1998).

- (i) Taroo-ga tamago-o kusar-ase-ta
 T.-NOM egg-ACC rot-CAUS-PST
 ‘(His) eggs rotted on Taroo.’

- (5) Huta-ri-no kodomo₁-ga hito-kumi-de
 2-CL-GEN child-NOM 1-group-COP
 [Ø₁ ude]-o or-Ø-ta (>ot-ta)
 pro arm-ACC √break-CAUS-PST
 ‘A pair of two children broke their arms.’
 [collective: agentive]

Hence, despite the fact that the non-agentive subject in question has been called different names in the literature, it seems plausible to consider the property of being a possessor as its defining characteristic.

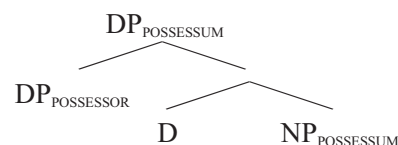
However, although it is clear that the non-agentive subject is understood as a possessor, the fact does not guarantee that the subject is linguistically encoded as such. Thus, this paper addresses the question of whether the relation of possession should be directly reflected in syntax when non-agentive subjects are available. Specifically, the paper argues against the view that the possessor interpretation is directly encoded in syntax by showing that approaches encoding the non-agentive subject as a possessor face insuperable difficulties. Instead, I argue that the subject is encoded as an event participant whose manner of participation is underspecified, and that the possessor interpretation results from inference based on linguistic and extralinguistic contexts, along with many interpretations that are possible with the subject in question.

The organization of the paper is as follows: in the next section, we will discuss problems with two major approaches under the subject-as-encoded-possessor view. In section 3, we will see how the subject-as-underspecified-argument view deals with the possessor interpretation and avoids the problems discussed in section 2. Section 4 concludes the paper.

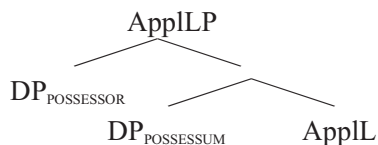
2 Subject As Encoded Possessor

Two approaches are immediately conceivable as to the way possession is encoded in syntax, namely, DP-internal possession, as in (6), and predicative possession, represented by a low applicative phrase (ApplLP; Pylkkänen, 2008), as in (7).

- (6) DP-internal, nominal possession



(7) DP-external, predicative possession



Both structures are inside the verbal domain, i.e., vP, and the possessor argument raises out of it into the subject position, i.e., SpecTP, as depicted in (8).

(8) [TP \bar{X} T [VP v [\bar{X} \checkmark [XP DP_{POSS'R} X]]]] (where X is D or ApplL)

Hence, in both cases, possession is syntactically encoded and the subject argument is introduced as a possessor. In what follows, we will see problems with these approaches.

2.1 DP-internal Possession

As has been discussed in Deal (2014) recently, possessor raising does exist in natural languages. However, it is a controversial issue whether the process is available in Japanese. For instance, to argue for a possessor-raising analysis of non-agentive subjects, Hasegawa (2001) presents the following example.

(9) Hanako₁-ga { *kanozyo₁-no/*?zibun₁-no/ \emptyset ₁ }
 H.-NOM her-GEN self-GEN pro
 ude-o or- \emptyset -ta (>ot-ta)
 arm-ACC \checkmark break-CAUS-PST
 ‘Hanako broke her arm.’
 (Hasegawa, 2001: 19; her judgments)

In (9), pronouns or self-anaphors correferential with the subject cannot appear inside the possessum nominal. As she argues, this is parallel to the pattern observed in multiple nominative constructions, as given in (10), which are independently proposed to involve possessor raising (Ura, 2000).

(10) Hanako₁-ga { *kanozyo₁-no/*zibun₁-no/ \emptyset ₁ }
 H.-NOM her-GEN self-GEN pro
 asi-ga naga-k- \emptyset (>naga-i)
 leg-NOM long-COP-NPST
 ‘Hanako, her legs are long.’
 (Hasegawa, 2001: 19; with minor changes)

If the non-agentive subject in (9) undergoes possessor raising, leaving a trace inside the possessum object, the unacceptable cases of (9) can be immediately explained.

However, in Takehisa (2003) I argue against the possessor-raising approach based on the same logic as Hasegawa invokes. Specifically, it is pointed out that, once pragmatically controlled, a sentence like (9) becomes acceptable.

(11) Koohun-no amari Hanako₁-wa
 excitement-GEN excess H.-TOP
 {kanozyo₁-no/zibun₁-no/ \emptyset ₁} asi-o
 her-GEN self-GEN pro leg-ACC
 or- \emptyset -ta (>ot-ta) koto-ni
 \checkmark break-CAUS-PST NML-DAT
 kizuk-anak-ar-ta (>-at-ta)
 notice-NEG-COP-PST
 ‘Due to too much excitement, Hanako didn’t notice that she broke her leg.’

Another problem concerns the relation of proximity. While nouns of inalienable possession, which are predicates in their own right (Barker, 1995), are typical sources of possessor arguments, this is not always the case. Consider (12):

(12) Context: Taroo wore a long-sleeved shirt.
 Taroo₁-ga \emptyset ₁sode-o yabuk- \emptyset -ta (>yabui-ta)
 T.-NOM pro sleeve-ACC \checkmark rip-CAUS-PST
 ‘Taroo ripped his sleeve.’

For the non-agentive reading to be possible in (12), Taroo should be in a proximate relation with the shirt in such a way that he wore it at the time of ripping. Note that the shirt could be someone else’s.

Even in cases where an inalienably possessed body-part is involved, an unusual context renders an unambiguous sentence acceptable with the non-agentive reading as well. For example, the English sentence in (13) is possible with the non-agentive, possessor reading of the subject under the context where John has Bill’s arm transplanted. The same holds true for the Japanese counterpart. Again, the proximity condition must be satisfied and, as it seems, it can be satisfied extralinguistically.

(13) John broke Bill’s arm.

Advocates for the possessor-raising approach might argue that it is still technically possible to

assume the possessor argument generated inside the possessum nominal to account for (12) and (13). This is indeed true. However, if we entertain this possibility, the same analysis should be applicable to the sentence in (11) and any other example, and thus it would lose its predictive power in the end.

Moreover, even though it is technically possible to maintain the possessor-raising approach by assuming “stacked” possessors inside the possessum DP, the analysis has nothing to say about why the proximity condition holds. In particular, consider again the sentence in (12), where the possessum nominal is not relational. In this case, the possession relation involved can be contextually determined (Barker, 1995). However, as we have seen above, the relation imposed on the subject and the object in (12) is more restricted than that: they should be proximate.

2.2 DP-external Possession: Low Applicative

The possessor and the possessum arguments are mediated by a predicative element in DP-external possession, as represented in (7) above. In this paper, I follow Pylkkänen (2008) and assume that a low applicative head (ApplL) is responsible for a relation between individuals.

It is hard to distinguish between the possessor-raising approach and the low-applicative approach on the empirical ground. This is because, when one is possible, the other is also possible, sometimes with fancy tricks to explain away counterexamples. To the best of my knowledge, no knockdown arguments have been provided in this debate.

However, the example in (14) below, taken from Inoue (1976), cannot be accounted for under the low applicative approach. The verb involved is a change-of-location verb and it alternates in transitivity, as shown in (15) below.

(14) Hanako-ga te-ni toge-o
 H-NOM hand-LOC needle-ACC
 sas-Ø-ta (>sas-i-ta)
 √stick-CAUS-PST
 ‘Hanako had a needle stuck into her hand.’

(15) Hanako-no te-ni toge-ga
 H-GEN hand-LOC needle-NOM
 sas-ar-ta (>sas-at-ta)
 √stick-INCH-PAST
 ‘A needle stuck into Hanako’s hand.’
 (Inoue, 1976: 93ff., w/ minor changes)

Note that *ni* in these examples is a locative postposition. This is supported by the fact that the *ni*-marked phrase in (14) resists passivization even under the agentive interpretation of the subject.

(16) *Hanako-niyotte te-ga toge-o
 H.-by hand-NOM needle-ACC
 sas-Ø-are-ta
 √stick-CAUS-PASS-PST
 ‘A hand got a needle stuck into by Hanako.’

This clearly shows that the possessum argument in (14) is inside a PP. While a possessor-raising analysis can deal with this case easily because DP can be a postpositional object, analyses under the low applicative approach have no way to deal with a possessor argument related to PP-internal DPs.⁴

Another piece of evidence against the low applicative approach comes from interaction with resultative secondary predicates. Specifically, Pylkkänen (2008) discusses that a resultative predicate, which forms a small clause structure, serves to detect a low applicative structure. For instance, the verb *paint* can take double objects or form resultatives, as shown in (17)a and (17)b, respectively, but it cannot do both at the same time, as shown in (17)c.

(17) a. He painted me this flower.
 b. He painted this flower blue.
 c.* He painted me this flower blue.

According to Pylkkänen (2008), “[w]hile resultatives fail to cooccur with low applicatives, they easily combine with high applicatives” (Pylkkänen, 2008: 40). To explain this observation, she attributes the incompatibility of resultatives with low applicatives to the aspectual mismatch between the selectional restrictions of ApplLP, which selects for events, and the stative nature of the resultative phrase.

Applying this test to the English counterpart of adversity causatives yields (18) below, suggesting that non-agentive subjects are not introduced by ApplL.⁵

⁴ Pylkkänen (2008: 59ff.) points out this problem in relation to Hebrew possessor datives and concludes that possessors related to PP-internal DPs must be distinct from those that are introduced by ApplL.

⁵ Pylkkänen (1999, 2008) claims that English has no adversity causatives. Yet, (18) is a case of adversity causative.

(18) John broke his arm into two pieces, but he didn't break it himself.

When we turn to Japanese, we get the same result as in English. See (19).

(19) Taroo-ga ziko-de ude-o
 T.-NOM accident-LOC arm-ACC
 mapputatu-ni or-Ø-ta (>ot-ta)
 two-COP √break-CAUS-PST
 'Taroo broke his arm in two in the accident.'

Thus, it is safe to conclude that ApplL is not responsible for introducing non-agentive possessor subjects and they should receive a different treatment.

Lastly, the low applicative approach has one drawback on the conceptual ground: in cases where inalienably possessed nouns are involved, possession is doubly encoded by means of an ApplL head, which introduces a possessor argument in syntax, and an inalienably possessed noun, which is relational and takes a possessor argument. It is unclear why such double encoding is necessary. As it stands, this treatment is simply redundant.

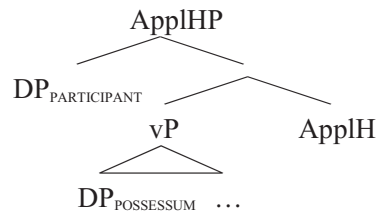
Summarizing, the two approaches we have seen in this section face insuperable problems, and it can be concluded that neither possessor raising nor base generation by ApplL is involved in the possessor interpretation of non-agentive subjects.

3 Subject As Underspecified Argument

We have seen that approaches under the subject-as-encoded-possessor view, i.e., possessor raising and base generation by ApplL, fail to account for the distribution of non-agentive subjects. Moreover, we know that these non-agentive subjects bear the possessor interpretation, as demonstrated in (4). Given these, it seems plausible to pursue the possibility that possession is not directly encoded and the possessor interpretation of non-agentive subjects is derived by some other means.

Since non-agentive possessor subjects do not seem to bear any distinct interpretation other than that of possessor, I assume that they are mere event participant arguments, and also that they are introduced by the most underspecified version of argument-introducing head, which I take to be a version of high applicative (ApplH), as in (20).

(20) $[[\text{ApplH}]] = \lambda x.\lambda e. \text{Participant}(e,x)$



The high applicative head in (20) is different from those introducing arguments such as benefactives, malefactives, locatives, instrumentals, and the like, and its participant argument is underspecified with respect to the manner it participates in the event described by vP.

The underspecified argument is subject to enrichment by means of the post-syntactic inferential procedure, which Rivero (2004) calls the Ethical Strategy, at the C-I interface. Given that the C-I systems are the concept/context/inference systems (Reinhart 2006), I assume that inferences are made based on linguistic and extralinguistic contexts and the conceptual knowledge of higher-order generalizations about events.⁶

I further assume that, given the proto-agent/proto-patient dichotomy (Dowty, 1991), the underspecified event participant can be assumed to cause an event (i.e. a proto-agent property) or be affected in the event (a proto-patient property) as a starting point for inference and further inference derives the argument's readings. Thus, if the argument is assumed to cause the event, readings such as involuntary/accidental agent or (in)direct cause are derived depending on the context.⁷ On the other hand, if it is assumed to be affected in the event, then readings such as benefactive, malefactive, undergoer, and the like are derived.

The possessor interpretation of non-agentive subjects, as in (2), can receive the same analysis. In this case, the presence of an inalienably possessed noun as an object argument contributes to the underspecified argument's construal as a possessor,

⁶ The present analysis is in the same spirit of Ritter and Rosen's (1993) analysis of *have*, but it is different from theirs in that it adopts Dowty's (1990) proto-role theory in its implementation, instead of invoking complex predicate formation and its effect on the temporal dimension of the event.

⁷ Note that the involuntary/accidental agent reading associated with an argument introduced by ApplH is distinct from the (volitional) agent reading, which is associated with an argument introduced by Voice (Kratzer, 1996).

on the condition that the possession relation is encoded linguistically, through binding, as in (11), or understood under the sufficiently rich extralinguistic context, as in (13).

Moreover, the underspecification approach in conjunction with the post-syntactic inferential strategy can give a natural account of the proximity condition as evidenced by (12), repeated below:

- (21) Context: Taroo wore a long-sleeved shirt.
 Taroo₁-ga Ø₁sode-o yabuk-Ø-ta (>yabui-ta)
 T.-NOM pro sleeve-ACC √rip-CAUS-PST
 ‘Taroo ripped his sleeve.’

Recall that, for the non-agentive reading to be possible in (21), Taroo should be in a proximate relation with the shirt in such a way that he wore it at the time of ripping, and moreover, that the shirt could be someone else’s.

Under the present approach, the subject argument in (21) is asserted to be a participant of the event of ripping the shirt, and it can be assumed to cause the event or be affected in the event, as a starting point of inference. If the latter path is chosen, then the only way that the argument was affected is that it had some relation to another affected entity in the event. This is what explains the proximity condition.

Furthermore, the problems with low applicatives pointed out in section 2.2 dissolve, once you recognize ApplH is responsible for introducing the non-agentive subjects in (14), (18) and (19).

Therefore, the present approach solves all the problems reviewed in section 2, and hence it fares better than the possessor-raising approach and the low-applicative approach.

Further evidence for the subject-as-underspecified-argument view and against the subject-as-encoded-possessor view comes from the fact that the possessor interpretation is not restricted to examples like (2). It can be observed in examples as in (22).

- (22) Indirect Cause and Possessor
 Taroo₁-ga [Ø₁ kami]-o kir-Ø-ta (>kit-ta)
 T.-NOM pro hair-ACC √cut-C-PST
 (kedo zibun-de-wa kir-Ø-anak-ar-ta (>-at-ta))
 but self-INST-TOP √cut-C-NEG-DV-PST
 ‘Taroo had his hair cut.’
 Lit.: ‘Taroo cut his hair, but he didn’t cut it himself.’

In (22), the subject argument is not an agent of the event, as evidenced by the second conjunct. Instead, it is construed as an indirect causer, or a higher cause in command of an unidentified direct cause of the event. More importantly, it is also a possessor.

Note that sentences like (22) cannot be equated with those like (2) above. They behave differently with respect to the Japanese version of *do so* replacement test, which serves to single out verbs which select a volitional subject, as shown by the following examples.

- (23) Taroo₁-ga [Ø₁ kami]-o kir-Ø-ta (>kit-ta)
 T.-NOM pro hair-ACC √cut-C-PST
 Zi-roo-mo soo si-ta
 Z.-also so do-PST
 ‘Taroo had his hair cut. Zi-roo did so, too.’
 [Zi-roo as Indirect Cause/Possessor]

- (24) Taroo₁-ga [Ø₁ ude]-o or-Ø-ta (>ot-ta).
 T.-NOM pro arm-ACC √break-C-PST
 Zi-roo-mo soo si-ta.
 Z.-also so do-PST
 ‘Taroo broke his arm. Zi-roo did so, too.’
 [*Zi-roo as Possessor]

As shown above, the indirect cause/possessor subject can be volitional, while the pure possessor subject cannot.

What (22) and (23) show is that non-agentive subjects can have readings such as indirect cause, possessor and volition at the same time. This in turn suggests that the subject-as-encoded-possessor view is hard to maintain. Specifically, it appears impossible to encode possession in syntax in the case of non-agentive subjects with the indirect cause reading without introducing unlikely assumptions about indirect cause.

On the other hand, the underspecification approach, with the help of the post-syntactic inferential strategy, has a way to account for cases like (22), since it invokes the inferential procedure to derive various readings associated with the non-agentive subjects, which are event participants underspecified with respect to their manner of participation.⁸

⁸ See Takehisa (2014) for more details.

4 Summary

This paper has compared the two views concerning the possessor interpretation of non-agentive subjects in Japanese lexical causatives: the subject-as-encoded-possessor view and the subject-as-underspecified-argument view. We have seen that the latter does not suffer from the problems the former does and hence is superior to the former. Specifically, the latter view is implemented as an analysis employing a particular type of high applicative (AppIH), which introduces an event participant whose manner is underspecified, in conjunction with the post-syntactic inferential strategy, originally proposed by Rivero (2004), which serves to enrich the interpretation of the underspecified argument.

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