

‘Unaccusative Transitives’ and Burzio’s Generalization: Reflexive Constructions in Japanese*

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I will examine non-agentive transitives and argue that they should be analyzed as ‘unaccusative transitives’, transitives without an external role but with the Case assigning property. Such predicates may appear to go against Burzio’s generalization and we will discuss how it is considered in grammar. The analysis presented for ‘unaccusative transitives’ may be extended to reflexive constructions in general.

1. Introduction

With the term ‘Unaccusative Transitives’, I refer to predicates that have an object without an external role. According to Burzio’s generalization (1), such predicates do not exist.

(1) *Burzio’s Generalization (B’s-G)*

A verb assigns an external role, iff it has the property of assigning Accusative Case.

In this paper, a variety of sentences will be examined that are to be best analyzed as ‘Unaccusative Transitives’. Following Hasegawa (2001), I will argue that B’s-G is not correct as a condition on possible Case and theta role properties that *predicates* are allowed to have. This does not mean that B’s-G is flatly wrong, however. B’s-G seems valid as a generalization on how *sentences* appear to be; i.e., transitive sentences (sentences with an object)

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ordinarily have a non-pleonastic subject, which may or may not be a deep subject (an external role) of the predicate itself. If the subject is a derived one, we obtain sentences where both subject and object appear but their predicates allow the Object Case assigning property without an external role. We will examine such cases in this paper.

1.1 Burzio's Generalization and the role of *v*

B's-G (1) states that there is a close correspondence between the presence or absence of an external role and the availability of the Object Case assigning property and B's-G allows the predicate types given in (2).

- (2) a. Transitives: Mary washed her car.
Jane broke the glass.
- b. Unergative intransitives: Susan laughed.
Kim ran (a track).
- c. Unaccusative intransitives: The glass broke.
The door opened.

As seen in (2), the sentences that conform to B's-G typically involve Agent and Theme and syntactic positions of these roles are determined depending on types of predicates. Agent always appears as a subject, irrespective of the presence or absence of other theta roles, while Theme shows up as an object in transitives but can be a subject if no Agent is involved. This fact is rather nicely captured, if we assume (3), in addition to B's-G, as a principle that determines how theta roles are structurally represented.¹

(3) *A stronger version of the Uniformity of Theta Assignment Hypothesis*

Particular θ -roles are generated at designated structural positions.

In particular, Agent at the subject position (i.e., an external role) and Theme at the object position (i.e., an internal role).

According to B's-G, if a predicate has an external role (Agent), it can assign Accusative Case; hence, agentive predicates give rise to transitives and unergative intransitives such as (2a) and (2b), respectively. But without an external role, a predicate cannot assign Accusative Case; thus, a Theme argument in object position must move to a position where some other Case, say Nominative, is available, which brings about unaccusatives like (2c).

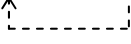

In a recent framework, Collins (1997), adopting a VP-shell structure for sentences, formalizes B's-G in terms of specifications on the functional category *v* (i.e., his TrV). See also Hale and Keyser (1993), Chomsky (1995), among others.

¹ (3) is a stronger version of Baker's Uniformity of Theta Assignment Hypotheses (UTAH), which is given in (i). See Pesetsky (1995) for relevant discussion.

(i) Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-Structure. (Baker 1988:46)

- (4) v is a realization of Burzio's Generalization (cf. Collins 1997)
- (a) v is active: assign an external role, assign Object Case \rightarrow Transitive
 - (b) v is inactive: no external role, no Case assignment \rightarrow Unaccusative

In Collins' system, the transitive-intransitive pair in (5) share the same VP but the specifications on v are different: the transitive (5a) has an active v and the unaccusative (5b) has an inactive v . The derivations are shown in (6).

- (5) a. Jane broke the glass.
b. The glass broke.
- (6) a. $[_{IP} \text{ Jane}_i [_{vP} t_i \text{ break}_v [_{VP} \text{ the glass } t_v]]]$ transitive (5a)

 b. $[_{IP} \text{ the glass}_i [_{vP} \text{ break}_v [_{VP} t_i t_v]]]$ unaccusative (5b)


As long as v is analyzed as either active or inactive, as B's-G does, it predicts that there be no predicates like the following hybrid types.

- (7) a. Unaccusative Transitives:
Verbs without an external role but with an object
- b. Agentive Unaccusatives:
verbs with an external role but without the property of assigning Object Case.

However, Hasegawa (2001), arguing that predicates of these types do exist, proposes the system (8), where feature specifications on v are not just two folds, either active or inactive, but involve two features, [external role] and [Object Case], each of which takes either [+] or [-] value.

- (8) The features on v : lexical feature [+/-external role]
functional feature [+/-Object Case]

	+ external role	- external role
+Obj Case	(a) transitives, unergatives	(b) X
- Obj Case	(c) Y	(d) unaccusatives

where, (b) X = Unaccusative Transitives / Non-Agentive Transitives
(c) Y = Agentive Unaccusatives (Hasegawa 2001)

Only (a) and (d) are allowed by B's-G (also in Collins' system), while the system (8) allows the two 'unexpected' cases in (7), namely (b) and (c) of (8). We wil not deal with the (c) type in this paper.² Recaptulating some of the

² The unaccusatives with an agent role fall under the type (c). Some examples are given in (i) below. The predicates of the class (c) exhibit systematic differences from unergatives (i.e., the (a) type), with respect to the availability of an optional object (see (ii)), *-er* suffixation (see (iii)), etc.

arguments presented in Hasegawa (2001), I will show in Section 2 that non-agentive transitives, especially those with a Causer subject, are best analyzed as cases that involve the predicate type (b). In Section 3, we will extend the analysis for Causer subject transitives to what I call the reflexive construction, where the subject obligatorily binds an item inside VP. Our analysis of the reflexive construction of Japanese provides a novel way to approach the reflexive constructions of other languages.

2. Unaccusative Transitives

2.1 Causer subject transitives vs. Agent subject transitives

As seen in (2a), typical transitive sentences that conform to B's-G involve Agent and Theme. However, there are transitives where a non-agent serves as a subject. Typical of such cases are Causer subject transitives. Observe the following examples. English examples are given in (9) and (11) and Japanese examples in (10) and (12). (9) and (10) involve change of state predicates and (11) and (12) psych-predicates. For ease of comparison, the examples with a prime are Agent subject counterparts to the Causer subject examples.

- (9) a. The wind opened the door. a'. Mary opened the door.
 b. The heat dissolved the sugar. b'. The chemist dissolved the sugar.
- (10) a. Ziko-ga densya-o okur-ase-ta.
 accident-NOM train-ACC delay-tr-past
 'The accident delayed the train.'
 a'. Syasyoo-ga densya-o okur-ase-ta.
 conductor-NOM train-ACC delay-tr-past
 'The conductor delayed the train.'
- b. Kaze-ga eda-o yur-asi-ta.
 wind-NOM branches-ACC sway-tr-past
 'The wind swayed the branches.'
- b'. Kodomo-ga eda-o yur-asi-ta.
 child-NOM branches-ACC sway-tr-past
 'The child shook the branches.'
- (11) a. The news surprised everyone. a'. John surprised everyone.
 b. The rumor angered Mary. b'. John angered Mary.

Only English examples are given here but the same phenomena are observed in Japanese. See Hasegawa (2001) for discussion on 'agentive unaccusatives'.

- (i) a. Mary (intentionally) *moved*.
 b. Susan tried to *stand* straight.
- (ii) a. Mary *moved* (*a little move / *the track).
 b. Mary *fell* (*a funny fall / *the ground).
- (iii) a. She *runs* fast. She is a good *runner*.
 b. She *moves* quick. *She is a quick *mover*.

- (12) a. Sono sirase-ga minna-o odorok-ase-ta.
the news-NOM everyone-ACC be=surprised-cause-past
‘The news surprised everyone.’
a’. Tomoko-ga minna-o odorok-ase-ta.
T -NOM everyone-ACC be=surprised-cause-past
‘Tomoko surprised everyone.’
- b. Sono uwasa-ga Hanako-o kurusim-{e/ ase}-te-i-ru.
the rumor-NOM H -ACC be=tormented-{tr/cause}-prog-pres
‘The rumor tormented Hanako.’
b’. Taro-ga Hanako-o kurusim-{e/ ase}-te-i-ru.
T -Nom H -Acc be=tormented-{tr/cause}-prog-pres
‘Taro tormented Hanako.’

These transitive examples with a Causer subject seem to conform to B’s-G well, since they have a non-pleonastic subject and an object. Then, the only thing to be done is to relax UTAH stated in (3) a little so that not only an Agent role but a Causer role are considered as an external role and they share the same syntactic position, the Spec of *vP*.³ This approach, however, encounters difficulties in explaining the systematic differences between Causer subject transitives and Agent subject transitives.

2.2 Causer insider VP

The most obvious difference between Agent and Causer is that the Cause role that shows up as a subject of non-agentive transitives can appear as an adjunct in their unaccusative counterparts, while Agent cannot. Relevant examples are given below.⁴ Compare unaccusative (13) with transitive (10), and, as for

³ Another possibility is to postulate another shell projection above VP that hosts a Causer role as an external argument (Pesetsky 1995; Pytkkanen 2002; Tonosaki 2003, etc.). As will be seen shortly, treating Causer as a role external to VP (i.e., structurally higher than Theme) throughout the derivation would run into a problem in explaining the facts presented below.

⁴ Though (13) with a Causer adjunct is perfect in Japanese, their English counterparts are rather awkward, but much better than an Agent adjunct, which is flatly rejected.

- (i) a. The door opened {?with a gust of wind / *by Jane}.
b. The sugar dissolved {?in the heat / *by the chemist}.

This oddity or awkwardness of a Causer adjunct seems peculiar only to English. For example, Spanish (or rather Romance) counterparts to (i) with a Causer adjunct is perfect, as seen in (ii), which is due to Pascual Masullo (p.c.).

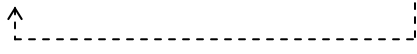

- (ii) a. La puerta se abrió {con el viento / *por María}.
the door SE opened with the wind / by M.
‘The door opened {with the wind / by Maria}.’
b. El azúcar se disolvió {con el calor / *por María}.
the sugar SE dissolved with the heat / by M
‘The sugar dissolved {with the heat / by Maria}.’

Furthermore, the following examples, given in Masullo (1997), clearly show that there is a correspondence between a Causer subject in transitives and a Causer adjunct in unaccusatives.

psych-predicates, compare intransitive (14) with transitive (12).

- (13) a. Densya-ga {ziko-de/*syasyoo-de} okur-e-ta.
train-NOM accident-by/conductor-by be=delayed-intr-past
'The train was delayed by {the accident/*by the conductor}.'
- b. Eda-ga {kaze-de/*Hanako-de} yur-e-ta.
branch-NOM wind-by/ H -by swing-intr-past
'The branches swayed {in the wind/*by Hanako}.'
- (14) a. Minna-ga {sono sirase-ni/*Hanako-ni yotte} odoroi-ta.
Everyone-NOM the news-DAT H -by be=surprised-past
'Everyone was surprised {at the news/*by Hanako}.'
- d. Hanako-ga {sono uwasa-ni/*Taro-ni yotte} kurusin-de-iru.
H -NOM that rumor-DAT/ T -by be=tormented-prog-pres
'Hanako is tormented with the rumor.'

The prohibition against the occurrence of an Agent in unaccusatives can be straightforwardly accounted for by UTAH (3). An Agent role, being an external role, cannot appear in unaccusatives, which by definition does not take an external role. Interestingly, this explanation directly provides an argument against analyzing a Causer subject of transitives as an external role. If the Causer role of (10) and (12) is an external role, its occurrence in the unaccusative counterparts should be excluded along with an Agent role. To the extent that a Causer role takes place in unaccusatives as well as in transitives, UTAH (3) suggests that a Causer role be syntactically represented as a role inside VP, rather than an external role. Then, the predicate type involved in non-agentive transitives like (9)-(12) must be of the (b) of (8): there is no external role generated under Spec of v and the Causer subject is a derived subject raised from inside VP. (15a) illustrates the derivation of (10a), which should be compared with its unaccusative counterpart (13a), whose derivation is given as (15b).

- (15) a. [_{IP} Ziko_i-ga [_{VP} [_{VP} densya-o [_{V'} t_i [_{V'} okur]]]-ase] -ta]

- b. [_{IP} Densya_i-ga [_{VP} [_{VP} t_i [_{V'} ziko-de [_{V'} okur]]]-e] -ta]


In (15), the Causer role is generated as an adjunct inside VP, irrespective of the specification on v . In the transitive (15a), v is specified as [-external role]

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- (iii) a. {El sol / *Pedro} marchitó las flores.
the sun/ P withered the flowers.
'{The sun/*Pedro} withered the flowers.'
- b. Las flores se marchitaron {con el sol/ *por Pedro}.
the flowers SE withered with the sun/by P
'The flowers withered {with the sun/*by Pedro}.'

[+Object Case], which is a predicate of the type (b) of (8), while *v* is [-external role][-Object Case] in the unaccusative (15b). Since the *v* (-ase) of (15a) can assign Object Case to Theme, an adjunct can move to receive Nominative Case, becoming a subject. On the other hand, when the *v* (-e) does not assign Object Case as in (15b), Theme moves to a subject position and Causer appears as an adjunct.⁵ There is independent evidence that supports this derivation of Causer subject transitives. We will discuss only a couple of pieces of such evidence below (see Hasegawa (2001) for more evidence).

2.3 Backward anaphora

The first of such evidence has to do with backward anaphora. As extensively discussed in Akatsuka (1976), Belletti and Rizzi (1988), Pesetsky (1995), among others, only when the subject is non-agentive (i.e., a Causer), backward anaphora is possible, which is shown in (16) and (17).

- (16) a. The pictures of herself_i / The annoyed Mary_i.
 b. {The rumor about themselves_i/* Each other_i's parents} worried them_i.
- (17) a. {Zibun_i-ni tuite-no uwasa-ga/*Zibun_i-no koibito-ga} Hanako_i-o
 self-about-GEN rumor-NOM/self-GEN lover-NOM H -ACC
 kanasim-ase-ta.
 be=sad-cause-past
 'The rumor about herself_i/*Herself_i's lover} made Hanako_i sad.'
- b. {Zibun_i-no kako-ga/*Zibun_i-no oya-ga} Taro_i-o
 self-GEN past-NOM/self-GEN parent-NOM T -ACC
 kurusim{-e/-ase}-te-i-ru.
 be=tormented-{tr/cause}-prog-pres
 'His_i past life/*His_i parent} distresses Taro_i.'

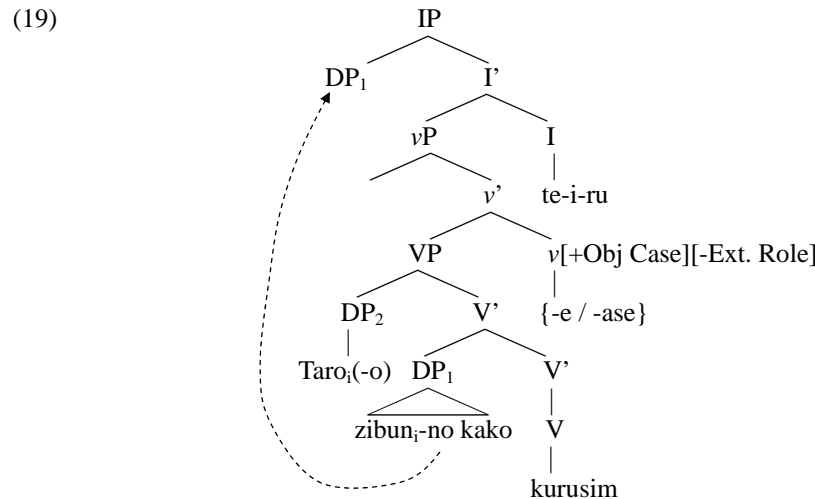
This fact can be explained, as argued by Belletti and Rizzi, if a Causer subject is derived from inside VP, where the Binding Condition (A) on anaphors is satisfied. That is, the anaphor *zibun* 'self' in the Causer subject in (17) is allowed just as that in the Causer adjunct of the unaccusative counterparts given in (18).

⁵ The assumption here is that when no external argument is given, an item inside a VP raises to receive Nominative Case. This explains not only unaccusatives but also Causer subject transitives. When no structural Case is available inside VP, Theme must be raised. But if Theme can receive structural Case internal to VP, other items such as a Causer adjunct under VP can be raised. As will be seen in Section 3, when there is another item beside a Causer adjunct under VP, either that or a Causer adjunct can be a subject, provided that there is no external role that requires Nominative Case.

In (15) and other examples below, I tentatively assume that transitivity and intransitivity morphemes of Japanese, such as -ase in (15a) and -e in (15b), are lexical realizations of (the relevant features of) the category *v*.

- (18) a. Hanako_i-ga zibun_i-ni tuite-no uwasa-ni kanasim-da.
 H -NOM self-about-GEN rumor-DAT be=grieved-past
 ‘Hanako_i was grieved at the rumor about self_i.’
 b. Taro_i-ga zibun_i-no kako-ni kurusin-de-i-ru.
 T -NOM self-GEN past-DAT be=tormented-prog-pres
 ‘Taro is distressed with his own past life.’

The derivation of (17b) is illustrated below.



2.4 Scopal ambiguity

Another piece of evidence that suggests that a Causer subject be not an external role but derived from inside VP has to do with scopal ambiguity between the subject and the object observed in the (a) examples below, which should be compared with the examples with an agentive subject, the (b)/(c) examples, which do not exhibit scopal ambiguity.

- (20) a. [Kaze ka yuki]-ga subete-no densya-o okur-ase-ta.
 wind-or snow-or-NOM all-train-ACC delay-tr-past
 ‘Wind or snow delayed all the trains.’
Ambiguous [OR>ALL or ALL>OR]
 b. [Syasyoo ka untensyu]-ga subete-no densya-o okur-ase-ta..
 ‘The conductor or the motorman delayed all the trains.’
Not ambiguous [OR>ALL]
 c. [Taro ka Hanako]-ga subete-no zassi-o yon-da.
 ‘Taro or Hanako read all the books.’
Not ambiguous [OR>ALL]

- (21) a. *Dono kamoku-mo [Taro ka Hanako]-o kurusim-e-te-i-ru.*
 every subject T or H -ACC be=tormented-tr-prog-pres
 ‘Every subject distressed Taro or Hanako.’
Ambiguous [ALL>OR or OR>ALL]
- b. *[Taro ka Hanako]-ga dono kamoku-ni-mo kurusin-de-i-ru.*
 T or H -NOM every subject-DAT be=tormented-prog-pres
 ‘Taro or Hanako was distressed with every subject’
Not ambiguous [OR>ALL]
- c. *Dono sensei-mo [Taro ka Hanako]-o kurusim-e-te-i-ru.*
 every teacher T or H -ACC be=tormented-tr-prog-pres
 ‘Every teacher distressed Taro or Hanako.’
Not ambiguous [ALL>OR]

It is well known that Japanese is a scopally rigid language and only when movement (such as Scrambling) is involved, which alters the structural hierarchy of the relevant constituents, scope ambiguity results. The contrast between a Causer subject and an Agent subject in the above examples clearly indicates that the Causer subject, but not the Agent subject, is positioned below the object at some point of derivation. If the Causer subject has started out at an adjunct position inside VP, being c-commanded by the object, as shown in (19), the ambiguity in the (a) examples is explained. This in turn requires predicates of the type (b) of (8); predicates that give rise to a Causer subject do not have an external role at base, but they assign Object Case to Theme.

3. Reflexive Constructions

3.1 The psych reflexive construction

In this section, we will extend the analysis presented in the above to what I call the Reflexive Construction--the construction where the subject of the transitive predicate binds an item inside VP, the possessor position of an object in particular. We saw in the above that the Causer subject of transitives is a derived subject that is raised from inside VP. The sentences examined are psych-predicates and change of state transitives with a Causer (surface) subject and they crucially involve the *v* whose specification is [-external role][Object Case], the (b) type of (8). Similar in meaning and structure to psych-predicates such as (12) and (17), Japanese has a variety of expressions exemplified in (22), where a body part expression that has to do with a mental state serves as a subject of unaccusatives and as an object of corresponding transitives.⁶

⁶ See Hatori (1997) for more examples and discussion in the context of lexical conceptual structure.

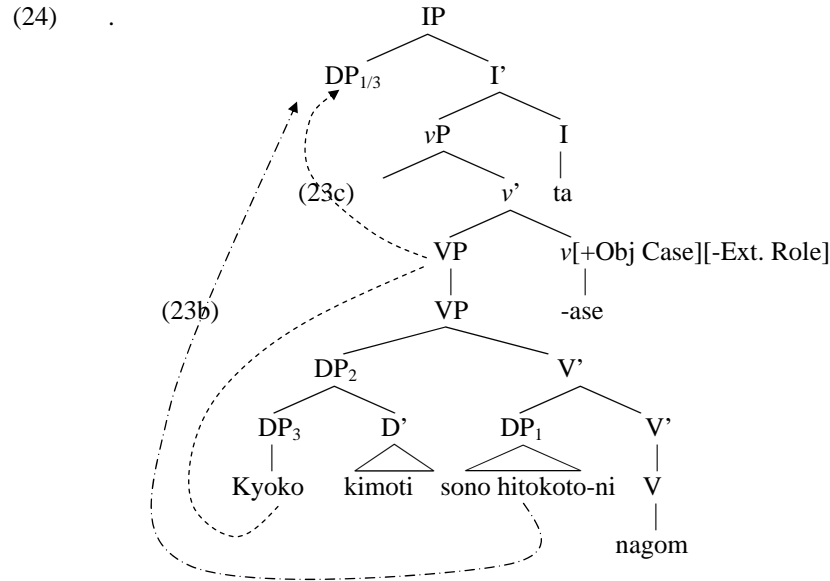
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|------|---------------------|------------------------|---------------------------|
| (22) | <i>unaccusative</i> | <i>transitive</i> | <i>gloss</i> |
| a. | kokoro-ga nagom-u | kokoro-o nagoma-ase-ru | 'heart soothe' |
| b. | sesuzi-ga koor-u | sesuzi-o koor-ase-ru | 'spine chill' |
| c. | hara-ga tat-u | hara-o tat-e-ru | 'stomach rise'(get angry) |
| d. | mune-ga hukuram-u | mune-o hukuram-as-u | 'heart swell' |

These expressions, expressing psychological states, take a Causer role, which shows up as an adjunct in unaccusatives, just like ordinary psych-predicates. This is seen in (23a). What is interesting about these expressions is that when they appear in transitive contexts, not only a Causer role but also a possessor of a body part can be a subject. Observe (23).

- (23) a. Kyoko-no kimoti-ga sono hitokoto-ni nagon-da.
 K -GEN feeling-NOM that one=word-DAT calm-past
 'Hanako's feelings calmed with that word.'
- b. Sono hitokoto-ga Kyoko-no kimoti-o nagon-ase-ta.
 that one=word-NOM K -GEN feeling-ACC calm-cause-past
 'That one word soothed Kyoko's feelings.'
- c. Kyoko-ga sono hitokoto-ni kimoti-o nagon-ase-ta.
 K -NOM that one=word-DAT feeling-ACC calm-cause-past
 'Kyoko got her feelings calmed by that word.'

The derivation of (23b) is essentially the same as Causer subject transitives discussed above. That is, the Causer role is raised to the position where Nominative Case is available when the *v* is specified as [-external role][+Object Case], cf. (19). What is at issue is (23c), in which the same transitive predicate as (23b) is involved but the possessor of the object, instead of the Causer adjunct, is raised to the subject position. This can be naturally accounted for if we assume that the possessor is detached from the object via possessor ascension and it, instead of the Causer, is raised to the subject position for Nominative Case. In other words, both (23b) and (23c) involve the same *v* specification, i.e., [-external role][+Object Case], and the subject is derived from inside VP. The difference is what is raised from inside VP. Among the items inside VP, Theme, which becomes an object, cannot be raised as long as *v* is transitive (i.e., with the [+Object Case] feature). When no other items require structural Case, a Causer role can be raised to Spec of IP to receive Nominative, bringing about (23b). This is the same derivation as what is observed in (19). When a possessor is ascended, however, it requires Case and must be raised instead. In this case, a Causer role remains as an adjunct just as in accusatives (23a) (cf. fn. 5). (24) illustrates the derivations of (23b) and (23c), where only the difference between these two examples is whether the process of possessor ascension is involved or not.⁷

⁷ Due to space limitation, we cannot get into the discussion on mechanisms and structure involved possessor ascension in Japanese. In (24), I assume that an ascended possessor first adjoins at VP. See Hasegawa (2001) and Tada (1992) for evidence for such movement.



3.2 Self-change transitives

We have observed in the psych expressions in (23) that two different types of non-agentive subjects can be brought about from the same predicate (with the same *v* specification), depending on what is available insider VP as a candidate for a derived subject; either a Causer adjunct or an ascended possessor of the object. This phenomenon is observed not only in psych expressions but also in ordinary change of state predicates, regarding which we already saw that Causer can be a subject. They also exhibit cases where an inalienable possessor can be a subject. Observe the following examples.

- (25) a. Doru-no ne-ga sensoo-de agat-ta.
dollar-GEN value-NOM war-by rise-past
'The value of the dollar rose due to the war'
- b. Sensoo-ga doru-no ne-o age-ta.
war-NOM dollar-GEN value-ACC raise-past
'The war raised the value of the dollar.'
- c. Doru-ga sensoo-de ne-o age-ta.
dollar-NOM war-by value-ACC raise-past
'The dollar raised its value due to the war.'

These three examples, irrespective of the differences in transitivity and what serves as a subject, mean basically the same, just as in the psych case of (23). Structurally, the subject of the unaccusative shows up as an object of the transitive counterpart and either the Causer or the possessor of the object can be the subject of the transitive. When the possessor is a subject, just as in the

psych-reflexive case, it does not have any particular control over the occurrence of the event itself but it merely is the main entity that undergoes the change expressed by the predicate. Thus, I dub it ‘self-change transitive’ as one type of the reflexive construction. Just as the case of psych-expressions, Japanese exhibits a variety of ‘self-change reflexives’. A few more examples follow.⁸

- (26) a. Kaze(-no ikioi)-ga yowam-at-ta.
 wind-GEN momentum-NOM weaken-intr-past
 ‘The wind(’s momentum) weakened.’
 b. Kaze-ga {ikioi-o/* ϕ } yowam-e-ta.
 wind-NOM momentum-ACC weaken-intr-past
 ‘The wind weakened its momentum.’ (Sugioka (2002))
- (27) a. Taiyoo-no kagayaki-ga masi-ta.
 sun-GEN brightness-NOM increase-past
 ‘The brightness of the sun increased.’
 b. Taiyoo-ga kagayaki-o masi-ta.
 sun-NOM brightness-ACC increase-past
 ‘The sun increased its brightness.’

4. Consequences

In this paper, I have argued that agentive transitives and non-agentive transitives are to be analyzed differently and the difference has to do with how v is specified. Non-agentive transitives constitute a class of what I call ‘unaccusative transitives’. They are ‘unaccusative’ in the sense that the v of this class involves [-external role], which in effect brings about a subject derived from inside VP.⁹ They are ‘transitive’ to the extent that they have the Object Case marking property. Two types of unaccusative transitives have been examined, one with a Causer subject and the other with an inalienable possessor of an internal argument as a subject. In terms of the meaning, they express basically the same thing as pure unaccusatives, which indicates that they all involve the same number and types of participants of the eventuality (i.e., the same argument structure). The difference is due to the syntactic specification on v , whether or not it allows Object Case assignment.

This analysis of unaccusative transitives opens up a novel way to analyze the reflexive construction or reflexive predicates in general, if the reflexive itself is taken to be a lexical trace (or a copy with a phonological

⁸ See Kageyama (2002) and Sugioka (2002) for relevant discussion in the context of lexical conceptual structure. Sugioka, while accepting that a transitive with a possessor as its subject and its unaccusative counterpart express basically the same thing, notes that there is some difference in nuance between the two by stating that the transitive version seems to put more stress on the process, rather than the result, of the change.

⁹ The specification [-external role] [+Object Case] on v does allow sentences with a pleonastic subject and an object, which is a straightforward realization of this type of v . See fn. 11 below for such examples.

matrix) of the raised subject that satisfies the feature [+Object Case] of the predicate. That is, the reflexive construction of Japanese involves an object that is inalienably possessed by the subject, giving rise to the obligatory anaphoric relation between the subject and the possessor position of the object. If the possessed itself (not the possessor) is raised to the subject and the *v* itself needs Object Case to be discharged, we obtain the construction where the subject necessarily binds the object and the object is not a mere trace but a lexical reflexive that is marked Object Case. This seems to be what we observe in reflexive constructions in general. Some typical examples are given from Romance.

- | | | | |
|---------|---|----|--|
| (28) a. | Il se lave.
he SE wash
'He washes himself.' | b. | Marie s'est vue.
SE-be seen
'Marie saw herself.' |
|---------|---|----|--|

It is a controversial issue how the reflexive clitic *se* is analyzed (cf. Grimshaw 1990; Marantz 1984; Pesetsky 1995; Reinhart 2000; Rizzi 1986, etc.). It may be an internal role, if it is taken as an object incorporated into a verb. Then, reflexive predicates are the same as ordinary transitives except that an object is cliticized onto a verb. Alternatively a reflexive clitic may be analyzed as an external role that absorbs Object Case. If so, the subject is an internal role and raised to the subject position due to Case. This mimics the derivation of passives and reflexive predicates are considered to be unaccusatives in nature. The fact that the *be*-type auxiliary is used in this construction as seen in (28b) may support the latter analysis. Furthermore, the latter analysis may account for the existence of *se* in ordinary unaccusatives such as (29) along with the agentive reflexive cases in (30).

- | | | | |
|---------|--|----|--|
| (29) a. | La puerta se abrió.
the door SE opened.
'The door opened.' | b. | El azúcar se disolvió.
the sugar SE dissolved
'The sugar dissolved.' |
|---------|--|----|--|

It is beyond the scope of this paper to closely examine how the reflexive *se* is analyzed. However, as just briefly outlined, the analysis proposed for the reflexive constructions in Japanese suggests yet another way to analyze the reflexive *se*, which is somewhat between the above two approaches. That is, reflexive predicates are neither pure transitives nor pure unaccusatives but 'unaccusative transitives' and the reflexive clitic *se*, though it is assigned Object Case, is not an independent Theme argument but a phonological realization of a subject trace itself. These predicates are transitives in the sense that they assign Object Case to a clitic but they are like unaccusatives since the subject is raised from inside VP. If the auxiliary selection is sensitive to the movement from inside VP, as widely assumed, this analysis is compatible with the fact in (28b). Though much more careful examination is called for before determining how the phenomena of reflexive clitics are to be dealt with, the direction suggested here seems worth pursuing.¹⁰

¹⁰ For example, it is not clear if the reflexive in (28) and that in (29) are to be analyzed on the same grounds. The crucial difference between the two, in terms of our analysis, is whether agentivity is

Before closing, let us once again consider what B's-G is in grammar. The system proposed in (8) allows four predicate types in terms of how *v* is specified. We have seen that Collins's system (4), where B's-G is taken to be a condition on how *v* is specified, cannot be maintained once the phenomena of non-agentive transitives are to be accounted for. Such transitives must be analyzed as predicates that do not have an external argument at base but can assign Object Case; the type (b) of (8). The predicates of this type, in terms of their specification on *v*, may appear to go against B's-G; however, to the extent that they have a non-pleonastic subject, they observe B's-G as a surface generalization of how *sentences* appear to be. Thus, the conclusion is that it is wrong to take B's-G as a principle or condition that dictates possible predicate types in grammar but it is all right to take it as a mere surface generalization on what kinds of sentences are given rise to in language.¹¹

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involved; (28) may be agentive but (29) is not. The problem here is not just confined to the *se* reflexive but is to be considered in a wider context; reflexive or obligatory anaphoric constructions in general. It seems to me that the issue is relevant to the ambiguity seen in (i), where the subject may or may not be agentive.

- (i) a. Mary_i broke her_i arm.
b. Mary_i absorbed herself_i in computer games.

See Hasegawa (2001) for an analysis of agentive reflexive (or anaphoric) constructions within the proposed framework. See also Cambell and Martin (1989) and Kageyama (1996).

¹¹ Even so, B's-G is not a true generalization, since sentences that have a pleonastic subject and an object do exist as shown in (i). I owe (ib) to Joseph Emonds (p.c.)

- (i) a. It made me happy that Mary showed up
b. It behooves public officials to do their duty.

The specifications of the (b) of (8), namely [-external role] [+Object Case], are straightforwardly materialized in these sentences and the existence of this type of sentence alone is enough to show that B's-G is not correct even as a surface generalization. See Reinhart (2000) for relevant discussion.

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