

# Deriving Adversity

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## 1. Introduction

Japanese has two different types of adversity constructions, as defined by their morphology. One is the adversity passive, (1a), where the verb occurs with the passive morpheme (*r*)*are*. The other is the adversity causative, (1b), where the verb occurs with the causative morpheme (*s*)*ase* (e.g. Oehrle and Nishio 1981, Miyagawa 1989, Kubo 1992, Kuroda 1979, 1993, Shibatani 1994, Harley 1995). The causative in (1b) is thus ambiguous between a regular causative interpretation, (1bi), and the adversity interpretation, (1bii), where the nominative argument is not interpreted as a causer but as an adversely affected argument.

- (1) a. Taroo-ga musuko-ni sin-are-ta.  
Taro-NOM son-DAT die-PASS-PAST  
'Taro's son died on him' (adversity passive)
- b. Taroo-ga musuko-o sin-ase-ta.  
Taro-NOM son-ACC die-CAUSE-PAST  
(i) 'Taro caused his son to die'  
(ii) 'Taro's son died on him' (adversity causative)

These constructions pose a problem for the syntax-semantics mapping since the morphology we see does not in any obvious way predict the meanings we get. Passive morphology generally suppresses the external argument but in (1a) it seems to introduce an affected argument. Similarly in (1bii), the causative morpheme does not introduce a causer argument, which is what it usually does. The question then is, what is the source of the affected argument and why do these constructions carry the morphology they do?

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In this paper I argue that these adversity constructions are *applicative* constructions and that the relationship between the morphology we see and the meanings we get is, in fact, fully transparent. First I show that the adversity causative *is* causative in meaning even though it does not have a causer argument. Then I present a general theory of double object constructions into which the Japanese data fall neatly. We will see that the constructions in (1) are not in any way exceptional, but rather spell out structures that most languages have.

## 2. The adversity causative is a causative

In this section I show that the semantic similarity between the adversity passive and the adversity causative is only superficial and that the adversity causative is, in fact, causative in meaning, while the adversity passive is not. More specifically, the adversity causative asserts the existence of a causing event. Thus the meaning of (1a) is not *Taro's son died on him* but rather *Some event caused Taro's son to die on him*. There are three types of evidence pointing to this conclusion.

First, the adversity causative combines with a by-phrase naming the causing event while the adversity passive does not:<sup>1</sup>

- (2) a. Taroo-ga sensoo-ni-yotte musuko-o sin-ase-ta  
 Taroo-ga war-by son-ACC die-CAUSE-PAST  
 'Taro's son was caused to die on him by the war'  
 b. \*Taroo-ga sensoo-ni-yotte musuko-ni sin-are-ta  
 Taroo-ga war-by son-DAT die-PASS-PAST  
 'Taro's son died on him by the war'

Second, the adversity passive, but not the adversity causative, is compatible with situations where there is no cause. For example, in a context where Taro's father dies of old age, only the adversity passive is natural:

- (3) a. Taroo-ga titioya-ni sin-are-ta.  
 Taro-NOM father-DAT die-PASS-PAST  
 'Taro was affected by his father dying'  
 Context: Taro's father dies of natural causes.

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1. There is, however, one type of by-phrase, namely the *de*-phrase, which combines with adversity passives, but this is irrelevant since the *de*-phrase also combines with unaccusatives and hence does not specify an implicit argument but rather *adds* a cause.

|   |  |
|---|--|
| <p><i>Adversity Passive:</i></p> <p>(i) Taroo-ga hune-ni taihuu-de sizum-are-ta.<br/>       Taro-NOM ship-DAT typhoon-by sink-PASS-PAST<br/>       'Taro was affected by the ship sinking due to typhoon'</p> | <p><i>Unaccusative:</i></p> <p>(ii) Yasai-ga ame-de kusatta.<br/>       vegetable-NOM rain-by rotted<br/>       'The vegetable rotted due to the rain'</p> |
|---|--|

- b. #Taroo-ga titioya-o sin-ase-ta.  
 Taroo-NOM father-ACC die-CAUSE-PAST  
 ‘Taro was affected by his father dying’  
 Context: Taro’s father dies of natural causes.

Third, the adversity passive combines with a phrase such as *katteni* ‘by itself/on one’s own’, thus patterning with unaccusatives, while the adversity causative does not:

- (4) a. Taroo-ga katteni koronda.  
 Taroo-NOM by.self fell.down  
 ‘Taro fell down all by himself’  
 b. Taroo-ga musuko-ni katteni korob-are-ta  
 Taroo-NOM son-DAT by.self fall.down-PASS-PAST  
 ‘Taro was affected by his son falling down all by himself’  
 c. ??Taroo-ga musuko-o katteni korob-ase-ta  
 Taroo-NOM son-ACC by.self fall.down-CAUSE-PAST  
 ‘Taro was affected by his son falling down all by himself’

These data show that (*s*)*ase* in the adversity causative introduces a causing event but no external argument, which Pylkkänen 1999 argues to be the universal interpretation of CAUSE on independent grounds (see also Baker and Stewart 1999). Further evidence for this comes from the fact that a by-phrase of the sort in (2a) cannot name a *participant* of the causing event, (5a), but must name the causing event itself. This means that the causative morpheme does not introduce an *implicit* external argument, either, and that hence the construction is different from passives, (5b).

- (5) a. *Adversity causative:*  
 \*Taroo-ga Hanako-ni-yotte yasai-o kusar-ase-ta  
 Taroo-ga Hanako-by vegetable-ACC rot-CAUSE-PAST  
 ‘Taroo was affected by Hanako’s causing the vegetable to rot’  
 b. *Passivized causative:*  
 Taroo-ga Hanako-ni-yotte korob-ase-rare-ta.  
 Taroo-NOM Hanako-by fall.down-CAUSE-PASS-PAST  
 ‘Taro was caused to fall down by Hanako’

We can then conclude that the reason why the adversity causative appears with causative morphology is the obvious one: it is a causative. We have also seen evidence indicating that the causative head does not introduce an external argument, but only a causing event. From this it does not, however, follow that these constructions lack an external argument: it is still possible that the nominative, affected, argument is an external argument. If this were the case, we would expect these constructions to passivize. However, when we passivize the adversity causative, the adversity interpretation disappears, (6a), and with the adversity passive, we

get ungrammaticality, (6b). Thus the affected argument is not an external argument.

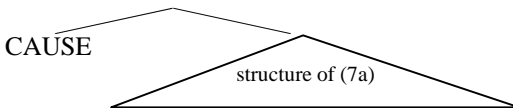
- (6) a. Musuko-ga korob-ase-rare-ta.  
 son-NOM fall.down-CAUSE-PASS-PAST  
 ‘The son was caused to fall down’  
 \*’Somebody’s son was caused to fall down on them’  
 (i.e. regular causative interpretation only)
- b. \*Musuko-ga korob-are-rare-ta.  
 son-NOM fall.down-PASS-PASS-PAST  
 ‘Somebody’s son fell down on them’

In the next section I show that adversity causatives differ from adversity passives also in ways independent of semantic causativity.

### 3. Restrictions on the causativization of adversity passives

The data presented so far suggest that an adversity causative is a causativized adversity passive. This is because the only difference we have seen between the adversity passive and the adversity causative is that the latter asserts the existence of a causing event. A structure of the sort in (7b’) captures this.

- (7) a. Adversity passive:  
 Taroo-ga musuko-ni sin-are-ta.  
 Taro-NOM son-DAT die-PASS-PAST  
 ‘Taro’s son died on him’
- b. Adversity causative:  
 Taroo-ga musuko-o sin-ase-ta.  
 Taro-NOM son-ACC die-CAUSE-PAST  
 ‘Something caused Taro’s son to die on him’
- (7b’) Adversity causative:



However, not every adversity passive has a corresponding adversity causative; i.e., not every adversity passive causativizes. An adversity passive causativizes only if it is built on an unaccusative (Harley 1995) and only if the affected argument can be interpreted as bearing some type of possessive relation to the direct object (Oehrle and Nishio 1981). Thus, from the verb *play*, we can derive an adversity passive but no adversity causative, (8). Similarly, an adversity passive which is derived from the predicate *rain fall* is fully grammatical while the corresponding adversity causative is not, (9). The reason for this is that the affected argument *Taro*

could not possibly possess the rain and such a relationship is a requirement for the adversity causative.

(4) Unergative root:

a. ✓ Adversity Passive

Taroo-ga musuko-ni soba-de asob-are-ta  
 Taro-NOM son-DAT near-LOC play-PASS-PAST  
 ‘Taro was adversely affected by his son playing near by’

b. \* Adversity Causative (only “regular” causative interpretation):

\*Taroo-ga musuko-o soba-de asob-ase-ta  
 Taro-NOM son-ACC near-LOC play-CAUSE-PAST  
 ‘Something caused Taro to be adversely affected by his son playing near by’

(5) No relationship between the affected argument and the object:

a. ✓ Adversity Passive

Taroo-ga ame-ni hur-are-ta.  
 Taro-NOM rain-DAT fall-PASS-PAST  
 ‘Taro was rained on’

b. \* Adversity Causative (only “regular” causative interpretation):

\*Taroo-ga ame-o hur-ase-ta.  
 Taro-NOM rain-ACC fall-CAUSE-PAST  
 ‘Something caused Taro to be rained on’

If adversity causatives are, indeed, causativized adversity passives, then what these data tell us is that there are two types of adversity passives and that adversity causatives can be derived from only one of them. The observation that adversity passives split into two types is not new, see e.g. Kubo 1992, who argues that some adversity passives are possessor-raising constructions and others regular transitive structures with a Malefactive external argument. This analysis captures the fact that with some adversity passives the affected argument bears a relation to the direct object while with other it doesn’t.<sup>2</sup>

What I wish to do in this paper, however, is to show that the restrictions we observe on the causativization of adversity passives are exactly the same restrictions that hold for the derivation of double object constructions in many languages, including English. Specifically, I will argue that double object, or applicative, constructions crosslinguistically split into those in which the applicative head denotes a thematic relation between an event and an individual and those in which the applicative head

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2. To verify that two separate structures, in fact, exist, we of course need contexts that force one or the other analysis. We can always force a non-raising analysis by constructing an example where the affected argument couldn’t possibly possess the direct object (such as the *rain fall* example in (5a)). For reasons of space the only diagnostic for forcing the raising analysis that I will discuss is causativization. For others, see Kubo 1992.

denotes a directional possessive relation between two individuals, the direct object and the applied argument. I will call the former type *high applicatives*, since their applicative head occurs above the verbal root and the latter type *low applicatives*, since their applicative head occurs below the root. Low applicatives are impossible if we cannot construe a relation between the direct object and the argument introduced by the applicative head. From this it directly follows that they are also impossible from unergatives which lack a direct object. In the next section I motivate this proposal for constructions that are uncontroversially applicatives and then show how the theory makes the right predictions for Japanese adversity constructions as well.

#### 4. High and low applicatives

Example (5b) showed that Japanese adversity causatives are impossible if the affected argument cannot be interpreted as standing in a possessive-like relation to the accusative argument. In other words, adversity causatives do not have interpretations where the affected argument only stands in a Malefactive relation to the event described by the verb without also standing in a relation to the direct object.

The same fact holds of English double object constructions. The sentence in (6a), for example, does not have an interpretation where Bill simply stands in a Benefactive relation to the baking event. In other words, (6a) cannot mean that Jane did the baking for Bill so that he wouldn't have to. It has to be at least intended that Bill enters into a possessive-like relation with the cake. Since this is a requirement for the English double-object construction, examples where such a relation cannot be construed are ungrammatical. Thus the reason why (6b) is impossible is that it is not plausible that Bill enters into a possessive relation with the food as a result of Jane eating it.

- (6) a. Jane baked Bill a cake.  
 b. \*Jane ate Bill the food.

This, however, is not a universal fact about applicative constructions. For example, in Chaga, a Bantu language, (6b) is a possible double object construction.

- (7) Chaga:  
 N-ǎ-í-lyì-í-à                      n̄-kà    k-élyá  
 FOC-1s-PR-eat-APPL-FV        1-wife    7-food  
 'He is eating food for his wife'        (Bresnan and Moshi 1993: 49)

To capture the difference between the English and the Chaga type applicatives, I propose that crosslinguistically there are two different types of applicative heads: high applicatives, which relate an individual to the event described by the VP (Marantz 1993), and low applicatives which relate an individual to the direct object (cf. Pesetsky 1995). The Chaga

applicative thus receives the structure in (8a) and the English applicative the one in (8b):

- (8) a. *High Applicative* (Chaga)      b. *Low Applicative* (English)
- 

A straightforward prediction from these structures is that low applicatives should be impossible from unergatives since they do not have a direct object to which Appl could relate an applied argument. High applicatives, on the other hand, should have no problem combining with unergatives since all they need is for their complement to describe an event. This is exactly how the data pattern: in English we cannot relate a benefactive argument to an unergative while in Chaga we can:

- (9) a. English:  
\*I ran him. (i.e. I ran for him)
- b. Chaga:  
N-''-i-zrìc-í- à                      mbùyà.  
FOC-1s-PR-eat-APPL-FV      9 friend  
'He is running for a friend'      (Bresnan and Moshi 1993: 50)

Thus the properties of English double constructions parallel those of Japanese adversity causatives: both are impossible from unergatives and require a relationship between the direct object and the applied object. The properties of the Chaga benefactives, on the other hand, parallel those of Japanese adversity passives: both occur with unergatives and neither requires a relationship between the affected argument and the direct object. The proposal I wish to make then is that Japanese has both high and low adversity constructions and that the adversity causative is simply the causativized version of the low adversity construction. To explain the appearance of the morphology (*r*)are on non-causative adversity constructions, I propose it to be the default spell-out of any verbal functional head that does not introduce an external argument into the syntax.<sup>3</sup> This means that both low and high applicative heads are spelled out

3. Here I adopt the Distributed Morphology view that verbs and nouns are structures rather than entities we insert in terminal nodes from the lexicon (Halle and Marantz 1993 and subsequent work).

as (*r*)are, as well as passive Voice heads (Kratzer 1994, Embick 1997).<sup>4</sup> In other words, in this analysis, adversity passives share nothing with “real” passives except the category feature of a functional head. The structures in (10) summarize the proposal:

- (10) a. Low adversity construction (adversity “passive”)
- ```

      /  \
     /    \
    die    /  \
          /    \
         Taro  /  \
              /    \
             APPL  son
  
```
- b. High adversity construction (adversity “passive”)
- ```

      /  \
     /    \
    Taro  /  \
         /    \
        APPL  /  \
             /    \
            fall  rain
  
```
- c. Adversity causative
- ```

      /  \
     /    \
    CAUSE /  \
         /    \
        die  /  \
            /    \
           Taro  /  \
                /    \
               APPL  son
  
```

However, while the Japanese adversity causative and the English double object construction both seem to involve a relation between the applied argument and the direct object, we cannot maintain that it is the *same* relation. This is because in English the applied argument always gets something while in the Japanese adversity constructions quite the reverse seems to hold: if Taro’s son dies on him, he loses rather than gets the son. In the final section, I argue that, in fact, there are two different types of low applicative relations: a possessive *to* and a possessive *from*.

#### 4. Two types of low applicatives

The English double object construction, which I have so far used as the paradigm case of a low applicative, actually only illustrates one type of low applicative. Crosslinguistically, we find not only the *to-the-possession-of* relation but also a *from-the-possession-of* relation. These two possibilities receive different spell-outs in Finnish, where the case of the applied argument depends on the directionality of the applicative relation. Furthermore, Finnish transparently shows that the low applicative relation is *both* directional *and* possessive since the cases assigned to low applied arguments come from the locative-possessive paradigm. In the Finnish locative case system, the adessive, ablative and allative cases are interpreted

4. The lack of (*r*)are inside (*s*)ase in the adversity causative is here left unaccounted for but I would take this to parallel cases where reflexive morphology, which can also be taken to spell out a nonactive *v*, is deleted under CAUSE. See Marantz 1984, Pesetsky 1995 and Lidz 1999.

as possessive when combined with a potential possessor (generally [+human]), as shown in the table below:

(11) *The Finnish locative cases*

|                                  |                                               |
|----------------------------------|-----------------------------------------------|
| Purely locative                  | Possessive when noun is human                 |
| Inessive:                        | Adessive:                                     |
| <i>talo-ssa</i> ‘in the house’   | <i>pöydä-llä</i> ‘on the table’               |
|                                  | <i>Mari-lla</i> ‘in the possession of Mari’   |
| Elative:                         | Ablative:                                     |
| <i>talo-sta</i> ‘from the house’ | <i>pöydä-ltä</i> ‘from the table’             |
|                                  | <i>Mari-lta</i> ‘from the possession of Mari’ |
| Illative:                        | Allative:                                     |
| <i>talo-on</i> ‘into the house’  | <i>pöydä-lle</i> ‘onto the table’             |
|                                  | <i>Mari-lle</i> ‘to the possession of Mari’   |

The adessive case is purely possessive without directionality, as is shown in (12a). The ablative and allative cases, on the other hand, imply transfer of possession and appear in double object constructions such as the ones in (12b) and (c).<sup>5</sup> Since both are low applicatives, they cannot be derived from unergatives.<sup>6</sup>

- (12) a. *Minu-lla on koira.*  
 I-ADE is dog  
 ‘I have a dog’
- b. *Liisa kirjoitti Matti-lle kirjee-n.*  
 Liisa.NOM wrote Matti-ALL letter-ACC  
 ‘Liisa wrote Matti a letter’
- c. *Liisa myi Matti-lta talo-n.*  
 Liisa.NOM sold Matti-ABL house-ACC  
 ‘Liisa sold a house from Matti’
- (13) a. \**Minä juoksin Peka-lle.*  
 I.NOM ran Pekka-ALL
- b. \**Minä juoksin Peka-lta.*  
 I.NOM ran Pekka-ABL

5. For tests showing that the constructions illustrated in (12b) and (c) in fact have the c-command and scopal properties of canonical double object constructions, i.e. the applied object both c-commands and necessarily scopes over the direct object (e.g. Barss and Lasnik 1986, Larson 1988, Aoun and Li 1989, Bruening 1999), see Pylkkänen 2000 and especially Kaiser 2000.

6. The sentences in (13) only have the irrelevant readings ‘I ran over to Pekka’s place’, (13a), or ‘I ran (somewhere) from Pekka’s place’.

Thus Finnish overtly shows that the directionality of the low applicative relation can be either *to* or *from*. For some reason English does not have the *from* variety but Japanese does. In other words, I propose that Japanese low adversity constructions involve the same applicative structure as Finnish low from-applicatives. Indeed, if we derive a low from-applicative from an unaccusative in Finnish, we get a construction with a raised affected argument and a similar interpretation to the Japanese adversity construction (for clarity, I gloss ablative case as FROM<sub>p</sub>, for ‘possessive from’):

- (14) a. Eetu-lta kuoli poika.  
Eetu-FROM<sub>p</sub>died son  
'Eetu's son died on him'
- b. Taroo-ga musuko-ni sin-are-ta.  
Taro-NOM son-DAT die-Appl<sub>from</sub>-PST  
'Taro's son died on him'
- 

The differences between the Japanese and the Finnish constructions are superficial only. For example, in Finnish Appl assigns ablative case to the applied argument and hence the applied argument raises to subject only for EPP reasons, while in Japanese it must raise for Case. Also, in Japanese Appl bears a verbal category feature and is, therefore, spelled out as a verbal affix while in Finnish it is a phonologically null P. But the structures and meanings are the same.

Thus the explanation for the difference between the English double object construction and the Japanese low adversity construction is that the former is a *to*-applicative while the latter is a *from*-applicative. From this it also follows that the Japanese adversity construction entails possessiveness while the English double object construction does not. For a *from*-applicative to be true, the applied argument has to have been the possessor of the direct object prior to the event described by the verb. Otherwise the direct object cannot be ‘from the possession of’ the applied argument. For example, for the Finnish *from*-applicative in (15) to be true, Liisa had to have had the keys prior to the taking-event.

- (15) Eetu otti Liisa-lta avaimet.  
Eetu.NOM took Liisa- FROM<sub>p</sub> keys.ACC  
'Eetu took the keys from Liisa'

In other words, the possessiveness entailment holds not because of structure but because of our world knowledge. Thus the present proposal derives this entailment also for the Japanese adversity constructions without a possessor-raising analysis, which is argued for by Kubo (1992). In fact, in Japanese adversity constructions, the possessor position of the direct object can be filled, which shows that the nominative argument did not originate there:

- (16) Taroo-ga **zibun-no** musuko-o sin-ase-ta  
 Taro-NOM **self-GEN** son-ACC die-CAUSE-PAST  
 ‘Something caused Taro’s son to die on him’

To-applicatives, on the other hand, do not entail possession. For example, the sentence in (17) entails that there is a sending event that Bill is an agent of and that the theme of the sending event is a letter that is to John’s possession, but it does not entail that John gets the letter, which is the correct result. The letter can be ‘to John’s possession’ without actually ever reaching John.

- (17) Bill sent John a letter.

The analysis argued for here also explains why low applicative constructions imply that the applied argument is somehow “affected”. Since low applicative relations are directional, the applied argument always loses or is intended to get the individual expressed by the direct object. This, I argue, is the source of the affectedness interpretation. No theta-role to this effect is assigned; affectedness is simply a by-product of the directionality of the low applicative relation.

## 5. Conclusion

In this paper I have derived the properties of Japanese adversity constructions in terms of a general theory of high and low applicatives. I have argued that constructions that have previously been called adversity “passives” are in fact, spell-outs of high and low applicative structures and that the only reason why these applicatives share the verbal morphology of passives, is that (*r*)are is the default pronunciation of the verbal category head. I have also argued that adversity causatives are simply causativized low applicatives, which demystifies the appearance of causative morphology in these structures. A question I did not discuss here is why causativization should be limited to low adversity passives only. Initial investigations of this question, however, suggest that the impossibility of causativizing high applicatives is not specific to Japanese but also characterizes many Bantu languages.

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