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A Unified Account of the Japanese Causative, *Moraw*-Benefactive, and Passive Constructions¹

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1. INTRODUCTION. This paper provides a Construction Grammar treatment of the Japanese Causative, *Moraw*-Benefactive, and Adversative Passive Constructions. Construction Grammar (Fillmore et al. 1988, Kay 1990, Fillmore & Kay 1995) is similar to HPSG (Pollard & Sag 1994) in that feature structures integrating phonological, syntactic, and semantic information are used to make formal and precise linguistic descriptions. Attributes of linguistic description are related not by movement but by unification.

Consider the following sentence:

- (1) *Taroo ga pizza o tabe-ta.*
Taroo SUBJ pizza OBJ eat-PST
'Taroo ate the pizza.'

Sentence (1) has two arguments and the verb stem *tabe-*.² Now look at sentences (2)-(4). If one wants to express someone else's relationship to the scene evoked in (1), there are at least three ways of doing so:

- (2) causative *Akiko ga Taroo ni pizza o tabe-sase-ta.*
Akiko GA Taroo NI pizza O eat-CAUS-PST
'Akiko made/let Taroo eat the pizza.'

(2) has the derived verb stem *tabe-sase-* and has three arguments instead of two. The third argument (here, Akiko) identifies someone who *brings about* an event of the type represented in (1).

- (3) benefactive *Akiko ga Taroo ni pizza o tabete-moraw-ta.*
Akiko GA Taroo NI pizza O eat.GER-receive-PST
'Akiko received the benefit of Taroo eating the pizza.'

(3) has the derived verb stem *tabete-moraw-* and again has three arguments. The third argument identifies someone who *benefits from* an event of the type represented in (1).

- (4) adversative passive *Akiko ga Taroo ni pizza o tabe-rare-ta.*
Akiko GA Taroo NI pizza O eat-ADVPSS-PST
'Akiko was adversely affected by Taroo eating the pizza.'

¹We are grateful to Chuck Fillmore and Paul Kay for their ideas and comments. Thanks are also due to Andrew Garrett, Yoko Hasegawa and the members of the Japanese Linguistics Seminar, Yoshiko Matsumoto, David Peterson, Tony Smith, Eve Sweetser, Bill Weigel, and Naoko Yamashita.

²The subject is marked by the particle *ga* and the object is marked by the particle *o*; henceforth, we will simply gloss *ga* and *o* as GA and O. We will also gloss *ni*, which marks Taroo in sentences such as (2)-(4), as NI.

(4) has the derived verb stem *tabe-rare-* and again has three arguments. The third argument identifies someone who is *psychologically affected* by an event of the type represented in (1).³

Sentences (2), (3), and (4) can be referred to as instances of the the Causative, the *Moraw*-Benefactive, and the Adversative Passive. They all have the same structure, "A(kiko) *ga* T(aroo) *ni* VP", where T always does the eating of P(izza), and A is an *added* argument. Semantically, the main difference between these expressions is that in the causative sentence, A instigates T's action; in the benefactive example, A receives the benefit of T's action; and in the adversative passive sentence, A is adversely affected by T's action.

1.1. OUR APPROACH. Although these three constructions have the same structure, they have traditionally been treated as different phenomena within the grammar of Japanese. The Construction Grammar framework, however, allows us to recognize what is common among them by defining an Argument Adding Construction (AAC) which provides:

- an added element to the valence of the verb
- an added argument to the semantics
- a means of incorporating the semantics of the stem verb as a component of a semantic structure involving the added argument
- a place for the phonological material which is added to the original stem to give the derived form

The mechanism of *construction inheritance* (if construction C *inherits* D, C contains all the properties of D) then allows us to define three other constructions (Causative, *Moraw*-Benefactive, Adversative Passive) which inherit all of the characteristics of the AAC but which themselves provide the phonology of the verb stem's augmentation, the semantic frame by which the added argument enters into a relation with the semantics provided by the verb stem, as well as certain other construction-specific information.

The advantages of our approach can be summarized as follows:

1. Using the mechanism of inheritance, we can recognize what is common among these sentence types and thereby give a unified account of the Causative, *Moraw*-Benefactive, and Adversative Passive Constructions. No previous work has proposed this.
2. Unlike some analyses (in particular Chung 1993), the morphology found in the regular and adversative passives is characterized as the same affix, rather than as distinct but coincidentally homophonous.
3. Transformational accounts of the adversative passive encounter problems with argument addition and absence of case absorption (Marantz 1984, Kang 1986, Miyagawa 1989, Kim 1990, Han 1991, Washio 1990). We avoid these problems, since our account explicitly involves an Argument Adding Construction in conjunction with the regular Passive, which, in Construction Grammar, does not rely on case absorption.

³We retain the traditional name of *Adversative Passive*, since it is certain that the added argument is psychologically affected in some way, almost always negatively. However, see Alfonso 1966, Kuroda 1965, Shibatani 1972, and Shibatani 1990 for a more detailed discussion of the semantics of *-rare*.

2. THE ARGUMENT ADDING CONSTRUCTION (AAC). Before going into the AAC, we will first examine, in Figure 1, a simplified representation of *tabe-* 'eat' (inner box) derived as a causative (*tabe-sase-*) (outer box) and, in Figure 2, a representation of *tabe-* derived as a benefactive (*tabete-moraw-*) (outer box).

Figure 1. *tabe-sase-*.

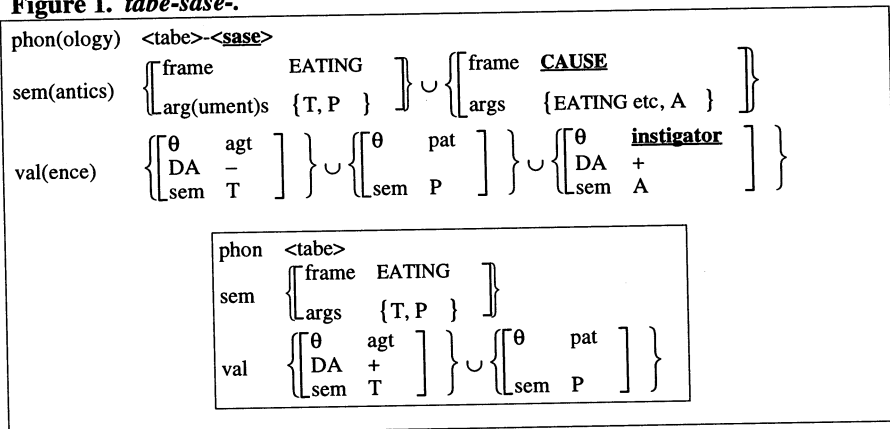
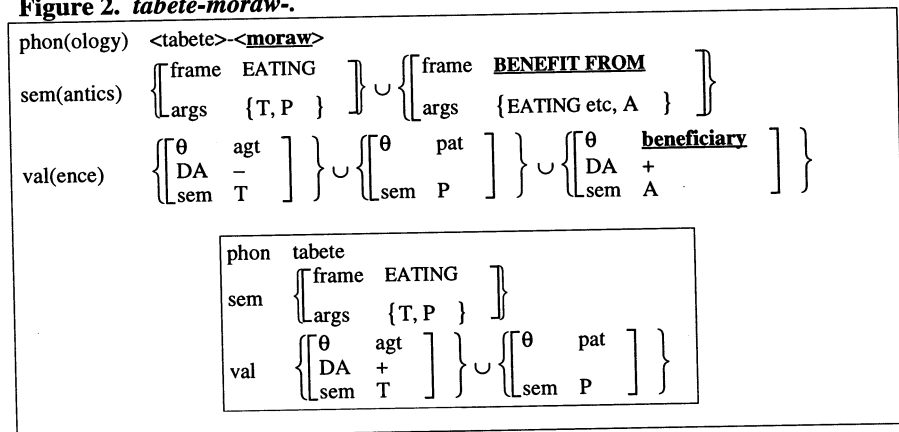


Figure 2. *tabete-moraw-*.

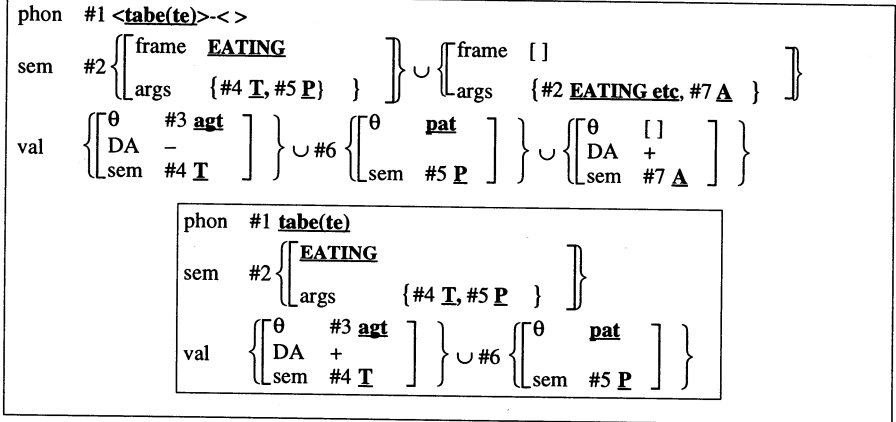


As can be seen, Figures 1 and 2 have much in common. In fact, the main differences are in those elements which are underlined, i.e.:

- the added phonological material (*sase* vs. *moraw*)
- the added semantics (the frame CAUSE vs. the frame BENEFIT FROM)
- the added argument's thematic role (instigator vs. beneficiary)

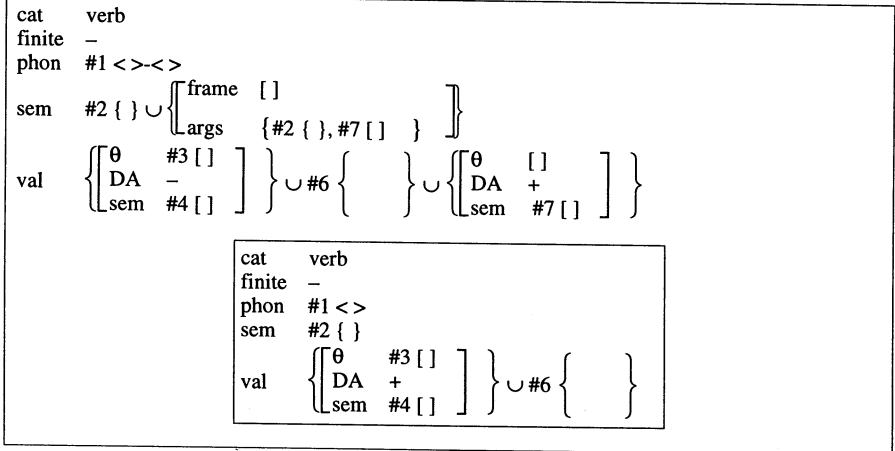
This is the information which will be added by the individual Causative, *Moraw*-Benefactive, and Adversative Passive Constructions. In the next figure, we remove this information added by the individual constructions and just show the features common to Figures 1 and 2.

Figure 3. The features common to Figures 1 and 2.



All of the underlined elements above (e.g., the phonological material of *tabe(te)*, the semantic frame of EATING, the semantics of T, P, and A) represent information which is contributed by individual lexical items (such as 'eat', 'pizza', 'Taroo', etc.). By removing this information, we end up with an abstract Argument Adding Construction. We use numerals prefixed by '#' to coindex the information which is shared between different parts of the construction. The resulting AAC (with some more details filled in) is shown below:

Figure 4. The Argument Adding Construction.



WHAT THIS MEANS:

	INSIDE	OUTSIDE
cat	Can only unify with a verb.	Also has the syntactic category of verb.
fin –	Cannot unify with a tensed verb.	Also tenseless.
phon	The verb supplies this (#1).	New phonology (e.g., <i>sase</i> , <i>moraw</i>) is added to #1.
sem	There are some semantics associated with the verb.	A union (\cup) of the semantics associated with the inner verb (#2) and the added semantics contributed by <i>-rare</i> , <i>-sase</i> , or <i>moraw-</i> .
val	The valence of every verb consists of a union of the distinguished argument/ logical subject and zero or more additional arguments.	Basically a union of the verbal valence of the inner verb and the added argument; however, the distinguished argument (DA +) of the inner verb is no longer DA, and it is the <i>added</i> argument that takes over this role.

In sections 3, 4, and 5, we examine in detail the three lexical constructions (Causative, *Moraw*-Benefactive⁴, Adversative Passive) which inherit all of the characteristics of the AAC.

3. THE CAUSATIVE CONSTRUCTIONS. The canonical morphological Causative Construction involves the suffix *-sase*. With transitive verbs, the causee must be marked with *ni*; however, with intransitive verbs, there is an alternation whereby the causee can be marked by either *o* or *ni*, with a slight semantic difference:

- (5) *Watasi ga Ken o ik-ase-ta.*
 I GA Ken O go-CAUS-PST
 'I made Ken go.'
- (6) *Watasi ga Ken ni ik-ase-ta.*
 I GA Ken NI go-CAUS-PST
 'I let Ken go.'

There has been a great deal of discussion about the semantic difference between sentences of the type shown in (5) and (6) (Kuroda 1965, Kuno 1973, Shibatani 1973, Tonoike 1978, Takahashi 1981, Nagai 1985). Typically, however, the *O*-Causative implies that the intention of the causee is ignored by the instigator (the *coercion* reading), while the *Ni*-Causative implies that the instigator appeals to the causee's intention to go (the *permission* reading). (The *Ni*-Causative with transitive verbs can have either the permission or the coercion reading.) For

⁴The reasons for treating the *Moraw*-Benefactive as a lexical (rather than phrasal) construction are: (1) [V-*te moraw-*] seems to be one constituent, in that *moraw-* can never be separated from the preceding verb by what is called *scrambling* in other frameworks (e.g., **Piza o tabe-te Akiko ga Taroo ni morat-ta*); (2) V-*te moraw-* is treated as a single word for purposes of accent assignment; (3) if we compare the three argument-adding morphemes, we see that they are at different points on the grammaticization continuum: with *-rare*, nothing can come between the verb and *-rare*, and, in addition, there is no lexical verb **rareru*; with *-sase* (which is somewhere in between *-rare* and *moraw-*), contrastive focus *wa* can occasionally come between it and the verb (as in *tabe wa saseta ga...* 'I made [him] eat but [not] ...'), and, in addition, there is a lexical verb *saseru* 'make, cause, let, allow'; finally, with *moraw-*, the particles and negation can intervene, and there is also a lexical verb *morau* 'receive'. Our treating the three morphemes as inheriting the same construction predicts that *moraw-* will become more like *-sase* and *-rare* in the future.

purposes of this paper, we will simply say that the instigator causes—with “*ni-*” or “*o-*semantics”—some state of affairs.

3.1. THE *Ni*-CAUSATIVE CONSTRUCTION. Figure 5 shows the *Ni*-Causative Construction:

Figure 5. *Ni*-Causative Construction.

inherit	Argument Adding Construction
cat	verb
finite	-
phon	#1 <>-<sase>
sem	#2 { } ∪ $\left[\begin{array}{l} \text{frame CAUSE-NI} \\ \text{args } \{ \#7 [], \#2 \{ \} \} \end{array} \right]$
val	$\left\{ \begin{array}{l} \theta \quad \#3 [] \\ \text{DA} \quad - \\ \text{sem} \quad \#4 [] \end{array} \right\} \cup \#6 \left\{ \quad \right\} \cup \left\{ \begin{array}{l} \theta \quad \text{instigator} \\ \text{DA} \quad + \\ \text{sem} \quad \#7 [] \end{array} \right\}$

cat	verb
trans(itivity)	¬ unacc(usative)
finite	-
phon	#1 <>
sem	#2 { }
val	$\left\{ \begin{array}{l} \theta \quad \#3 [] \\ \text{DA} \quad + \\ \text{sem} \quad \#4 [] \end{array} \right\} \cup \#6 \left\{ \quad \right\}$

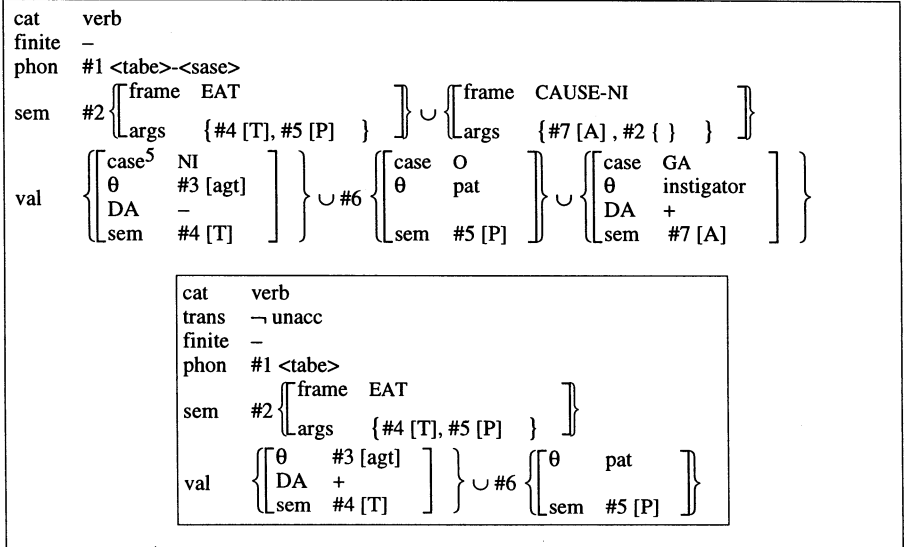
WHAT THIS MEANS:

	INSIDE	OUTSIDE
inherit		Inherits all the properties of the AAC.
transitivity	The verb may not be unaccusative (see Appendix II).	
phon	Supplied by the verb (#1).	#1 plus <i>sase</i> (see Appendix I).
sem		The added argument (#7) CAUSES (with <i>Ni</i> -Causative semantics) the state of affairs represented in #2 { }.
val		The added argument is linked to the thematic role of instigator.

To make things clearer, in Figure 6 we show what a *construct* licensed in part by the *Ni*-Causative Construction would look like. (Although it is not strictly necessary to include instances of coindexation and union in constructs, we include them for clarity.) The figure shows a detailed representation of the verb in (7):

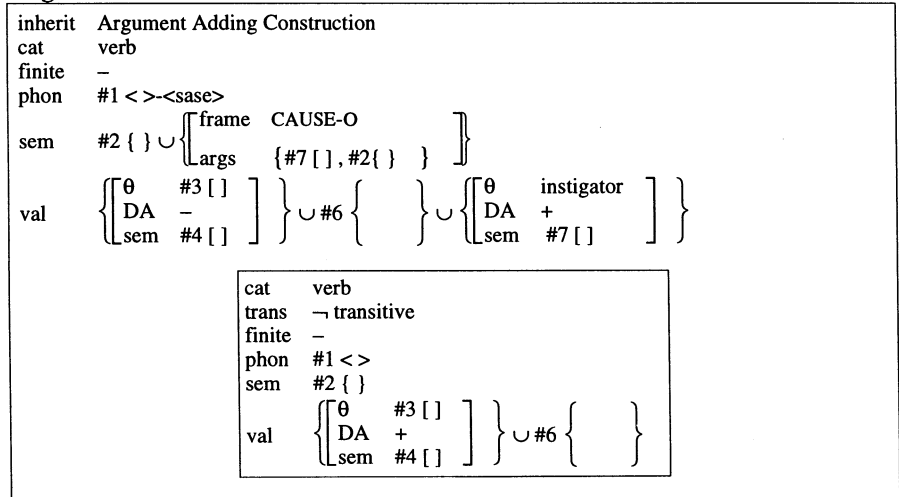
- (7) Akiko ga Taroo ni pizza o tabe-sase-ta.
 Akiko GA Taroo NI pizza O eat-CAUS-PST
 'Akiko made/let Taroo eat the pizza.'

Figure 6. Ni-Causative Construct (tabesase-).



3.2. THE O-CAUSATIVE CONSTRUCTION. Figure 7 represents the O-Causative Construction.

Figure 7. O-Causative Construction.



⁵Supplied by various Linking Constructions.

WHAT THIS MEANS:

	INSIDE	OUTSIDE
inherit		Inherits the AAC.
transitivity	Only intransitive verbs are permitted (see Appendix II).	
phon	Supplied by the verb (#1).	#1 plus <i>sase</i> (see Appendix I).
sem		The added argument (#7) CAUSES (with <i>O</i> -Causative semantics) the state of affairs represented in #2 { }.
val		The added argument is linked to the thematic role of instigator.

4. THE *MORAW*-CONSTRUCTION. Figure 8 shows the *Moraw*-Construction.**Figure 8. The *Moraw*-Construction.**

inherit	Argument Adding Construction
cat	verb
finite	-
phon	#1 <><moraw>
sem	#2 { } ∪ $\left[\begin{array}{l} \text{frame} \text{ BENEFIT FROM} \\ \text{args} \{ \#7 [], \#2 \{ \} \} \end{array} \right]$
val	$\left[\begin{array}{l} \theta \text{ } \#3 [] \\ \text{DA} - \\ \text{sem} \#4 [] \end{array} \right] \cup \#6 \left\{ \right\} \cup \left[\begin{array}{l} \theta \text{ beneficiary} \\ \text{DA} + \\ \text{sem} \#7 [] \end{array} \right]$

cat	verb
trans	¬ unacc
finite	-
verbal inflectional form	-te
phon	#1 <>
sem	#2 { }
val	$\left[\begin{array}{l} \theta \text{ } \#3 [] \\ \text{DA} + \\ \text{sem} \#4 [] \end{array} \right] \cup \#6 \left\{ \right\}$

WHAT THIS MEANS:

	INSIDE	OUTSIDE
inherit		Inherits the AAC.
transitivity	The verb may not be unaccusative (see Appendix II).	
v.i.f.	The <i>-te</i> form of the verb is required.	
phon	Supplied by the verb (#1).	#1 plus <i>moraw</i> .
sem		Argument #7 BENEFITS FROM the state of affairs represented in #2 { }.
val		The added argument is linked to the thematic role of beneficiary.

5. THE PASSIVE. For the treatment of the Adversative Passive Construction, we must first illustrate the ordinary passive in Japanese. We will use the verb *nagur-* 'hit' as an example. The minimal valence for *nagur-* is shown below:

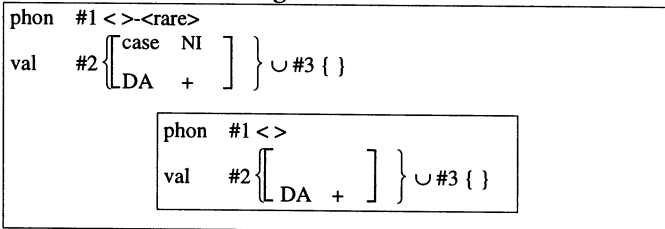
Figure 9. The minimal valence for *nagur-* 'hit':

$$\left\{ \begin{array}{cc} [] & [] \\ \text{agt} & \text{pat} \\ \text{DA} + & \end{array} \right\}$$

nagur-

The Passive Linking Construction, which links the Distinguished Argument to case NI is shown next:

Figure 10. The Passive Linking Construction.

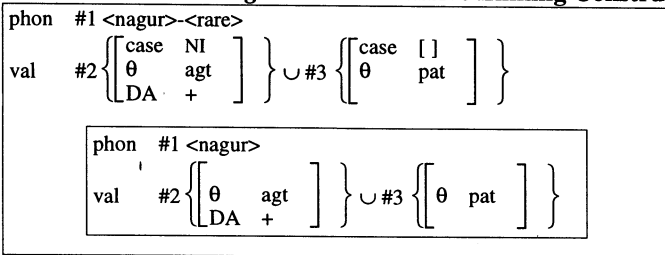


WHAT THIS MEANS:

	INSIDE	OUTSIDE
phon	Supplied by the verb (#1).	#1 plus <i>rare</i> ; see Appendix I.
val	There is a distinguished argument and zero or more other arguments.	Case NI is assigned to the DA.

In the next figure, we show the unification of *nagur-* and the Passive Linking Construction.

Figure 11. Unification of *nagur-* and the Passive Linking Construction.



The Japanese equivalent of the Subject Principle says that every fully specified verbal valence has at least one argument linked to case GA. By this principle, the patient argument is linked to case GA. This Passive Linking Construction, together with the Subject Principle, is what licenses sentences such as:

- (8) *Taroo ga Akiko ni nagur-are-ta.*
 Taroo GA Akiko NI hit-PSS-PST
 'Taroo was hit by Akiko.'

Figure 12 is a detailed representation of the verb in (8).

Figure 12. Passive Linking Construct (*nagurare-*).

phon	#1 <nagur>-<rare>				
val	#2 $\left\{ \begin{array}{l} \text{case NI} \\ \theta \\ \text{DA} \end{array} \right\} \cup \#3 \left\{ \begin{array}{l} \text{case GA} \\ \theta \\ \text{pat} \end{array} \right\}$				
<table border="1"> <tr> <td>phon</td> <td>#1 <nagur></td> </tr> <tr> <td>val</td> <td>#2 $\left\{ \begin{array}{l} \theta \\ \text{DA} \end{array} \right\} \cup \#3 \left\{ \begin{array}{l} \theta \\ \text{pat} \end{array} \right\}$</td> </tr> </table>		phon	#1 <nagur>	val	#2 $\left\{ \begin{array}{l} \theta \\ \text{DA} \end{array} \right\} \cup \#3 \left\{ \begin{array}{l} \theta \\ \text{pat} \end{array} \right\}$
phon	#1 <nagur>				
val	#2 $\left\{ \begin{array}{l} \theta \\ \text{DA} \end{array} \right\} \cup \#3 \left\{ \begin{array}{l} \theta \\ \text{pat} \end{array} \right\}$				

5.1. THE ADVERSATIVE PASSIVE CONSTRUCTION. Figure 13 represents the Adversative Passive Construction. In addition to inheriting the AAC—like the Causative and *Moraw*-Benefactive Constructions—this construction also inherits (in the inner box) the Passive Linking Construction from Figure 10.

Figure 13. The Adversative Passive Construction.

inherit	Argument Adding Construction														
cat	verb														
finite	-														
phon	#1 <>														
sem	#2 { } \cup $\left\{ \begin{array}{l} \text{frame PSYCH AFFECTED} \\ \text{args } \{ \#7 [], \#2 \} \end{array} \right\}$														
val	$\left\{ \begin{array}{l} \text{case NI} \\ \theta \\ \text{DA} \\ \text{sem } \#4 [] \end{array} \right\} \cup \#6 \left\{ \begin{array}{l} \theta \\ \text{DA} \\ \text{sem } \#7 [] \end{array} \right\} \cup \left\{ \begin{array}{l} \theta \\ \text{DA} \\ \text{sem } \#7 [] \end{array} \right\} \cup \left\{ \begin{array}{l} \theta \\ \text{DA} \\ \text{sem } \#7 [] \end{array} \right\}$														
<table border="1"> <tr> <td>inherit</td> <td>Passive</td> </tr> <tr> <td>cat</td> <td>verb</td> </tr> <tr> <td>trans</td> <td>- unacc</td> </tr> <tr> <td>finite</td> <td>-</td> </tr> <tr> <td>phon</td> <td>#1 <></td> </tr> <tr> <td>sem</td> <td>#2 { }</td> </tr> <tr> <td>val</td> <td>$\left\{ \begin{array}{l} \text{case NI} \\ \theta \\ \text{DA} \\ \text{sem } \#4 [] \end{array} \right\} \cup \#6 \left\{ \begin{array}{l} \theta \\ \text{DA} \\ \text{sem } \#7 [] \end{array} \right\}$</td> </tr> </table>		inherit	Passive	cat	verb	trans	- unacc	finite	-	phon	#1 <>	sem	#2 { }	val	$\left\{ \begin{array}{l} \text{case NI} \\ \theta \\ \text{DA} \\ \text{sem } \#4 [] \end{array} \right\} \cup \#6 \left\{ \begin{array}{l} \theta \\ \text{DA} \\ \text{sem } \#7 [] \end{array} \right\}$
inherit	Passive														
cat	verb														
trans	- unacc														
finite	-														
phon	#1 <>														
sem	#2 { }														
val	$\left\{ \begin{array}{l} \text{case NI} \\ \theta \\ \text{DA} \\ \text{sem } \#4 [] \end{array} \right\} \cup \#6 \left\{ \begin{array}{l} \theta \\ \text{DA} \\ \text{sem } \#7 [] \end{array} \right\}$														

WHAT THIS MEANS:

	INSIDE	OUTSIDE
inh	Inherits the Passive Linking Construction.	Inherits the AAC.
phon	<V-rare> (#1). (-rare is from the inherited Passive Linking Construction.)	<V-rare> (#1) is copied.
unacc	The verb cannot be unaccusative (see Appendix II).	
sem		The added argument (#7) is PSYCHOLOGICALLY AFFECTED by the state of affairs represented in #2 { }.
val		The added argument is linked to the thematic role of affectee.

8. APPENDIX II: TRANSITIVITY. As shown in the following examples, the Adversative Passive and the *Ni*-Causative may not be used with unaccusative verbs (at least not without giving them an unergative interpretation, as in fairy tales where flowers can bloom to please you, etc.). The *O*-Causative may only be used with intransitive verbs. Consider the following sentences:

transitive

- (10) *Watasi ga ani ni nikki o yom-are-ta.*
 I GA brother NI diary O read-ADVPSS-PST
 'I was adversely affected by my brother's reading my diary.'
- (11) *Watasi ga ani ni nikki o yom-ase-ta.*
 I GA brother NI diary O read-CAUS-PST
 'I made/let my brother read my diary.'
- (12) **Watasi ga ani o nikki o yom-ase-ta.*
 I GA brother O diary O read-CAUS-PST
 *'I made my brother read my diary.'

intransitive, unergative

- (13) *Watasi ga ani ni gakkoo e ik-are-ta.*
 I GA brother NI school E go-ADVPSS-PST
 'I was adversely affected by my brother's going to school.'
- (14) *Watasi ga ani ni gakkoo e ik-ase-ta.*
 I GA brother NI school E go-CAUS-PST
 'I let my brother go to school.'
- (15) *Watasi ga ani o gakkoo e ik-ase-ta.*
 I GA brother O school E go-CAUS-PST
 'I made my brother go to school.'

intransitive, unaccusative

- (16) **Watasi ga hana ni sak-are-ta.*
 I GA flowers NI bloom-ADVPSS-PST
 *'I was adversely affected by the flowers' blooming.'
- (17) **Watasi ga hana ni sak-ase-ta.*
 I GA flowers NI bloom-CAUS-PST
 *'I let the flowers bloom.'
- (18) *Watasi ga hana o sak-ase-ta.*
 I GA flowers O bloom-CAUS-PST
 'I made the flowers bloom.'

(For lack of space, we did not give any example sentences using the *Moraw*-Benefactive; however, it behaves like the Adversative Passive and the *Ni*-Causative.) These data are summarized below.

verbs	<i>O</i> -CAUSATIVE	<i>NI</i> -CAUSATIVE	ADVERSATIVE PASSIVE	<i>MORAW</i> -BENEFACTIVE
transitive ('read')	*	√	√	√
unergative ('go')	√	√	√	√
unaccusative ('bloom')	√	*	*	*

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