8 Causatives*

SHIGERU MIYAGAWA

0 Introduction

In this chapter, I will present an analysis of the syntax and morphology of the causative construction in Japanese. Since Kuroda's 1965 MIT dissertation, much of the work on the Japanese causative has focused on the causative construction formed by a verb stem and the morphologically dependent causative morpheme *(s)ase*. By its dependent nature, *(s)ase* attaches to the verb stem, and forms a morphologically and phonologically unitary "word." The causative morpheme takes the shape *sase* if it attaches to a vowel-ending stem (*tabe-sase* "eat-cause") while the initial *s* drops if the verb stem is consonant-ending (*ik-ase* "go-cause"). The deletion of *s* in the latter is forced by the open-syllable property of Japanese. Much of the chapter will be concerned with the syntax of this *V-(s)ase* causative construction. I will, in particular, take up the issues that arise with the operation of Counter Equi, including case marking issues such as the Double-*o* Constraint. Kuroda (1965a) first proposed the operation of Counter Equi, which has the unusual property that the lower of two coreferential noun phrases deletes the higher phrase (the name "Counter Equi" was given by S.-I. Harada (1973)). After reviewing this analysis, I will present a recent analysis by Harley (1995) that captures the intuition behind Counter Equi, but in the form of an abstract NP movement at the level of Logical Form. I will show that this LF movement analysis shares a number of properties with the Counter Equi analysis, hence we can view it as the Minimalist version of Counter Equi. I will give additional evidence for Harley's analysis by showing that it allows us to avoid empirical problems that arise with the Counter Equi analysis. In the last part of this chapter, I will take up some issues having to do with the relationship between the syntactic *V-(s)ase* and lexical causatives. As a part of this discussion, I will deal with the *V-(s)as* form, which often alternates freely with *V-(s)ase*.[1]

1 Syntax of *V-(s)ase*

When we look at the surface structure of a *V-(s)ase* sentence, there is nothing extraordinary compared to sentences with a simple verb. The morphologically complex verb is phonologically a unitary word (Y. Kitagawa 1986), and the case-marking possibilities on the arguments reflect what we find in sentences with simple verbs. The three possibilities for the *V-(s)ase* are given below.

(1) intransitive stem
Hanako-ga Taroo-o ik-ase-ta.
Hanako-Nom Taro-Acc go-Cause-Past
"Hanako made Taro go."

(2) intransitive stem
Hanako-ga Taroo-ni ik-ase-ta.
Hanako-Nom Taro-Dat go-Cause-Past
"Hanako let Taro go."

(3) transitive stem
Hanako-ga Taroo-ni piza-o tabe-sase-ta.
Hanako-Nom Taro-Dat pizza-Acc eat-Cause-Past
"Hanako made/let Taro eat pizza."

Each of these case-marking arrays is found with simple verbs. The Nom–Acc sequence in (1) is found with typical transitive verbs such as *naguru* "hit" and *taberu* "eat." The Nom–Dat–Acc sequence in (3) is found with double-object verbs such as *ageru* "give" and *okuru* "send." The Nom–Dat sequence in (2) is found with simple verbs such as *noru* "get on (e.g. a bus, horse)."

The most important syntactic discovery about the *V-(s)ase* construction is that, despite the fact that it appears ordinary on the surface, it exhibits properties associated with a complex structure (Kuroda 1965a). One argument for the complex structure comes from the behavior of the reflexive *zibun* "self," which requires a subject as its antecedent. In a simplex sentence, which contains only one subject, the interpretation of the reflexive is unambiguous.

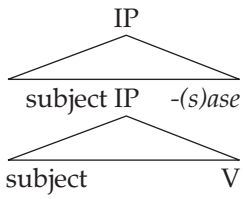
(4) Tanaka$_i$-ga Suzuki$_j$-ni zibun$_{i/*j}$-no hon-o ageta.
Tanaka$_i$-Nom Suzuki$_j$-Dat self$_{i/*j}$-Gen book-Acc gave
"Tanaka gave Suzuki self's book."

However, in a *V-(s)ase* sentence, the interpretation of *zibun* is ambiguous (Kuroda 1965a).

(5) Tanaka$_i$-ga Suzuki$_j$-ni zibun$_{i/j}$-no hon-o yom-ase-ta.
Tanaka$_i$-Nom Suzuki$_j$-Dat self$_{i/j}$-Gen book-Acc read-Cause-Past
"Tanaka made/let Suzuki read self's book."

Because *zibun* requires a subject as its antecedent, this ambiguity suggests a biclausal structure, as illustrated below.

(6)



The *V-(s)ase* in (5) above is formed from the transitive-verb stem *yom* "read." The same ambiguity arises with a *V-(s)ase* formed from an intransitive stem, regardless of whether the causee is marked with the accusative *o* or the dative *ni*.[2,3]

(7) a. Tanaka$_i$-ga Suzuki$_j$-*o* zibun$_{i/j}$-no heya-e ik-ase-ta.
Tanaka$_i$-Nom Suzuki$_j$-*Acc* self$_{i/j}$-Gen room-to go-Cause-Past
"Tanaka made Suzuki go to his room."
b. Tanaka$_i$-ga Suzuki$_j$-*ni* zibun$_{i/j}$-no heya-e ik-ase-ta.
Tanaka$_i$-Nom Suzuki$_j$-*Dat* self$_{i/j}$-Gen room-to go-Cause-Past
"Tanaka let Suzuki go to his room."

1.1 Case marking and the causee

With the biclausality analysis in place, the central issue for the syntax of *V-(s)ase* is how we account for the case marking of the causee. The causer is always marked with the nominative case marker (or the topic marker *wa*), as expected, and, if the verb stem is transitive, the object of the verb stem is marked with the accusative case marker, again, as expected. It is the analysis of the case marking on the causee that requires further analysis. If the verb stem is intransitive, the causee may be marked with the accusative case marker *o* or the dative case marker *ni*. If the stem is transitive, the causee may only be marked with the dative *ni*.[4] Marking the causee with the accusative case marker leads to a Double-*o* Constraint violation (S.-I. Harada 1973, K. Inoue 1976a, Kuroda 1965a, Poser 1981, Shibatani 1973b), which stipulates that two occurrences of the accusative *o* in a simplex clause are prohibited.

(8) *Hanako-ga Taroo-*o* piza-*o* tabe-sase-ta.
Hanako-Nom Taro-*Acc* pizza-*Acc* eat-Cause-Past
"Hanako made/let Taro eat pizza."

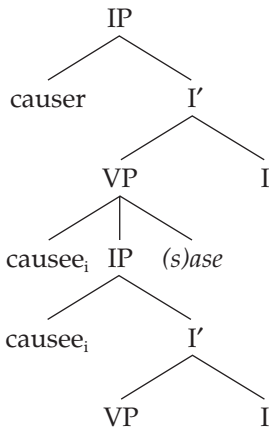
I will discuss the Double-*o* Constraint in detail in the next section.

1.2 Make vs. let

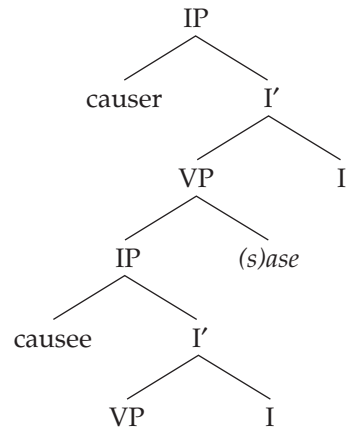
Closely tied to the issue of case marking on the causee is the interpretation of the causative sentence. This is most clearly seen in the constructions where the verb stem is intransitive, and the causee may be marked with the accusative or the dative, as in (1) and (2). As originally noted by Kuroda (1965b) and in many subsequent works (e.g. S.-I. Harada 1973, C. Kitagawa 1974, Miyagawa 1984, Shibatani 1973b, 1976, Tonoike 1978), the "accusative" causative implies some sort of direct or coercive causation, while the "dative" causative implies a much less direct or coercive causation. In the transitive-stem *V-(s)ase* construction, this difference is not reflected in the case marker between accusative and dative; the causee can only be marked by the dative case marker owing to the Double-*o* Constraint. Nevertheless, we can detect the difference in meaning between the "make" and "let" causative.

A natural way to encode this difference between "make" and "let" causative into the syntax of *V-(s)ase* is to postulate two kinds of *(s)ase*. One takes a direct object for the causee, which captures the "make" interpretation. This direct object is coreferential with the embedded subject. The other *(s)ase* does not take a direct object, reflecting the "let" causative interpretation.

(9) a. "make" causative



b. "let" causative

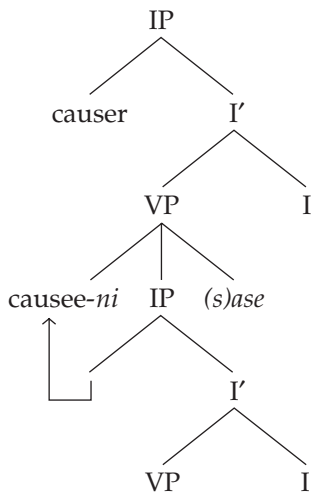


In the "make" causative in (9a) above, the object of *(s)ase* functions semantically in the same way as the object of a simple lexical causative such as *tomeru* "stop." In both, the subject/causer is interpreted to directly affect the referent of the object. In the "let" causative in (9b), *(s)ase* takes a sentential complement without also taking a direct object. The interpretation of this structure is that the causer "let" the situation referred to by the complement clause take place, without implying that there is any direct causation directed at the causee. Kuroda (1965a, 1965b) was the first to propose this bifurcation of structure for the "make" and "let" interpretations, and Kuno (1973) and many others followed his lead.

1.3 Counter Equi

The analysis above captures the intuition behind the "make" vs. "let" causative. In terms of the mechanics of case-marking assignment, it works straightforwardly for the "make" causative with an intransitive stem. The direct object, corresponding to the causee, gets the accusative case marker, and the embedded subject, which also corresponds to the causee, is deleted by Equi; in the more recent framework the latter would presumably be a PRO. To assign the dative case on the causee, Kuroda (1965a, 1978) proposes a rule that extracts the embedded subject to the matrix clause, and assigns it the dative case marker *ni*. This rule applies to both intransitive-stem and transitive-stem sentences. For the intransitive-stem sentence, this rule applies without the help of another rule.

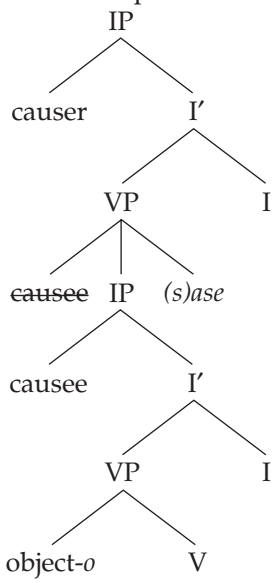
(10) intransitive-stem "let" causative



The same operation is responsible for the dative case marking on the causee in a transitive-stem "let" causative. Up to this point, the later system developed by Kuno (1973) is essentially the same, with one fundamental difference. Kuno assumes that at some point in the derivation, the biclausal structure is collapsed into a simplex one, and the original embedded verb raises and attaches to *(s)ase*. The verb-raising analysis is also adopted by Baker (1985), who analyzes a variety of head-raising phenomena cross-linguistically. Unlike Kuno (1973), Baker assumes that the biclausal structure stays intact even after verb raising. I will defend this position.

For the transitive-stem "make" causative, Kuroda (1965a) proposed an unusual rule which is now called Counter Equi (S.-I. Harada 1973). This deletion rule operates in exactly the opposite way from the regular Equi, in that the lower of the two identical phrases deletes the higher phrase.

(11) Counter Equi with transitive-stem "make" causative



This clears the way for the embedded subject to raise to the matrix VP and receive the dative *ni*. This unusual rule allows the derivation to avoid the Double-*o* Constraint. If, instead of Counter Equi, the normal Equi applies, the causee in the matrix clause would be assigned the accusative *o*. Because the embedded clause also has an object with the accusative *o*, this leads to two occurrences of *o*, in violation of the Double-*o* Constraint.[5]

In contrast, Kuno (1973) analyzes the dative *ni* on the causee of a transitive-stem "make" causative as fundamentally different from the *ni* on the causee of an intransitive-stem "let" causative. He suggests that the former *ni* is an instance of the dative marking that occurs with double-object verbs such as *ageru* "give."

(12) Taroo-ga kodomo-ni geemu-o ageta.
Taroo-Nom child-Dat game-Acc gave
"Taro gave his child a game."

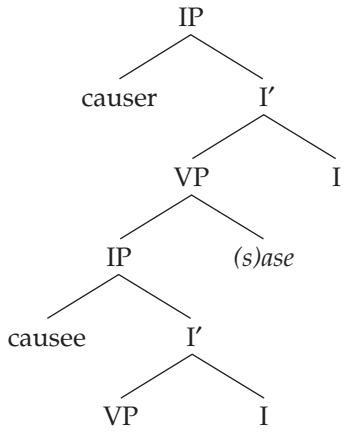
In Kuno's system, this dative marking on the causee of a transitive-stem "make" causative is made possible by the fact that after the biclausal structure is collapsed, and verb raising takes place, the complex verb, *V-(s)ase*, ends up with two internal arguments, the causer and the object of the verb stem.

I will defend the analysis that distinguishes between the two kinds of *ni* as originally proposed by Kuno (1973). We will see that the *ni* on the "let" causee in both the transitive-stem and intransitive-stem causatives is a postposition, while the *ni* on the causee of a "make" transitive-stem causative is a case marker (Harley 1995).

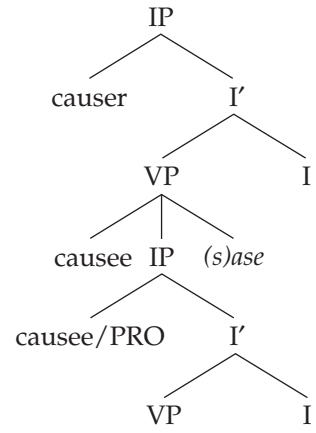
2 An Alternative Analysis

Contrary to the analysis by Kuroda (1965a, 1978), and also Kuno (1973) and Shibatani (1973b), there is evidence that the "make" causee is in the embedded subject position, while the "let" causee, or a phrase corresponding to it, is in the matrix clause alongside *V-(s)ase*. This is exactly the opposite of the structure originally proposed by Kuroda (1965a).

(13) a. "make" causative



b. "let" causative



These structures have been proposed as an alternative to Kuroda's analysis by K. Inoue (1976a, 1983), Harley (1995), Terada (1990), and Tonoike (1978). I will give arguments that these structures are correct for the two kinds of causatives under investigation. Later, I will suggest an extension to this analysis proposed by Harley (1995) that captures in an interesting way the original insight by Kuroda (1965a) that the "make" causative has a direct object, while a "let" causative does not. As we will see, with Harley's extension, the two approaches become virtually nondistinct.

I now turn to empirical evidence for the two structures above. I will begin with a discussion of the Double-*o* Constraint, and show that for the "make" causative, we must assume the structure in (a) above, in which the causee is in the embedded subject position.

2.1 Double-o Constraint and the alternative analysis

In Kuroda (1965a, 1978) (cf. also S.-I. Harada 1973, Shibatani 1973b), Counter Equi, which deletes the higher of two coindexed NPs, makes it possible to avoid the Double-*o* Constraint. This operation applies to the transitive-stem "make" causative.

(14) Hanako-ga Taroo-ni/*-o piza-o tabe-sase-ta.
Hanako-Nom Taro-Dat/*-Acc pizza-Acc eat-Cause-Past
"Hanako made Taro eat pizza."

If the Double-*o* Constraint were not to apply, the derivation with regular Equi, which would result in the causee having the accusative case, should also be grammatical, just as in the intransitive-stem "make" causative.

(15) Hanako-ga Taroo-o ik-ase-ta.
Hanako-Nom Taro-Acc go-Cause-Past
"Hanako made Taro go."

2.1.1 *Evidence for the Double-*o *Constraint*

One problem associated with motivating the Double-*o* Constraint is that it is difficult to construct a minimal pair to show its effect. Thus, in the transitive-stem "make" causative, for which the effect of this Constraint was first detected (Kuroda 1965a), the accusative case marker never shows up on the causee, so that we are left to compare this with the intransitive-stem "make" causative. It is possible that these two constructions involve some independent property that gives an appearance that the Double-*o* Constraint holds. If, for example, Counter Equi is independently motivated as an operation that applies without reference to the Double-*o* Constraint, there would be no need to invoke this Constraint for the causative construction.

S.-I. Harada (1973) motivates the Double-*o* Constraint and Counter Equi using a construction that he terms the *tokoro*-complement. In this construction, a verb takes as its complement a NP headed by the word *tokoro* "occasion."

(16) Keisatu-ga [sono doroboo-ga nigeru tokoro]-o tukamaeta.
police-Nom [that burglar-Nom escape occasion]-Acc arrested
"The police arrested the burglar trying to escape."

In response to M. Nakau's (1973) analysis, which does not postulate any "extra" elements that do not show up in the surface form, S.-I. Harada (1973) argues that this construction contains a direct object in the matrix clause that is coreferential to the embedded subject.

(17) . . . sono doroboo [sono doroboo-ga . . .]-o tukamaeta
. . . that burglar [that burglar-Nom . . .]-Acc arrested

This matrix object never surfaces under normal circumstances because it would lead to a violation of the Double-*o* Constraint.

(18) *Keisatu-ga sono doroboo-o nigeru tokoro-o tukamaeta.
police-Nom that burglar-Acc escape occasion-Acc arrested
"The police arrested the burglar trying to escape."

To derive the grammatical string, Counter Equi applies, which deletes the matrix object under identity with the embedded subject.

Harada gives several arguments for the existence of this "extra" matrix object. A particularly striking piece of evidence is the cleft construction, in which we can see the direct object making its appearance.

(19) Keisatu-ga sono doroboo-o/*-ga tukamaeta nowa, nigeru
police-Nom that burglar-Acc/*-Nom arrested escape
tokoro(-o) datta.
occasion(-Acc) was
"It was the moment he tried to escape that the police arrested the burglar."

What is clefted here is the *tokoro* complement. As shown, "the burglar" must have the accusative case, which identifies the phrase as a part of the matrix clause, not the clefted complement. It is ungrammatical with the nominative Case marker because the nominative would identify the phrase as the subject of the clefted complement, hence fragmenting the structure of the clefted complement.[6] While this argument for the existence of the extra matrix object is compelling (but see particularly Kuroda 1978), we face the same problem I noted for the transitive-stem "make" causative: Counter Equi is directly tied to the Double-*o* Constraint.

Miyagawa (1986) gives evidence for the Double-*o* Constraint using the purpose expression construction. Because Counter Equi is irrelevant to the derivation of this construction, it is possible to construct a minimal pair to show the effect of the Constraint. The purpose expression (PE) is made up of a motion verb, most commonly "go" or "come," and a tenseless complement that usually immediately precedes the motion verb.

(20) Taroo-ga [PRO hon-o kai-ni] itta.
Taro-Nom [PRO book-Acc buy] went
"Taro went to buy a book."

I gave several arguments to show that, while the PE is biclausal to begin with, an optional rule of restructuring has the effect of collapsing this structure into a simplex one, very much like the restructuring construction in Romance (Rizzi 1982). This restructuring operation may apply only if the complement is adjacent to the matrix motion verb (Miyagawa 1986).

One argument for restructuring has to do with the occurrence of a phrase that must be construed with the matrix motion verb. In the following example, the instrumental phrase *zitensya-de* "by bicycle" must be construed with the matrix "go;" it is semantically anomalous with the embedded verb "buy."

(21) *Kodomo-ga [PRO hon-o zitensya-de kai-ni] Kanda-ni itta.
child-Nom [PRO book-Acc bicycle-by buy] Kanda-to went
"My child went to Kanda to buy a book by bicycle."

The instrumental "by bicycle" occurs in the complement clause, which is not adjacent to the matrix verb due to the intervention of the goal phrase "to Kanda." This leads to semantic anomaly because "by bicycle" is forced to be construed with the complement VP "buy a book." If the goal phrase "to Kanda" is removed, the complement clause is adjacent to the matrix verb, and restructuring makes it possible to appropriately construe "by bicycle" with the matrix verb "go."

(22) Kodomo-ga hon-o zitensya-de kai-ni itta.
child-Nom book-Acc bicycle-by buy went
"My child went by bicycle to buy a book."

We can see the effect of the Double-*o* Constraint if we causativize a sentence such as the above. Note that the verb, "go," is intransitive, so the causative counterpart of this is the intransitive-stem causative, which allows either the accusative ("make") or the dative ("let") causee. There is no problem if the causee is dative.

(23) Taroo-ga kodomo-ni hon-o zitensya-de kai-ni ik-ase-ta.
child-Nom child-Dat book-Acc bicycle-by buy go-Cause-Past
"Taro let his child go by bicycle to buy a book."

However, if the causee is accusative, we get a violation of the Double-*o* Constraint.

(24) *Taroo-ga kodomo-o hon-o zitensya-de kai-ni ik-ase-ta.
child-Nom child-Acc book-Acc bicycle-by buy go-Cause-Past
"Taro made his child go by bicycle to buy a book."

In contrast, if restructuring is not forced by the occurrence of a phrase such as "by bicycle" in the complement portion of the sentence, the double appearance of *o* is fine because they are in two different clauses.

(25) Taroo-ga kodomo-o [PRO hon-o kai-ni] (zitensya-de)
child-Nom child-Acc [PRO book-Acc buy] (bicycle-by)
ik-ase-ta.
go-Cause-Past
"Taro made his child go (by bicycle) to buy a book."

(24) and (25) constitute a minimal pair for motivating the Double-*o* Constraint without making reference to Counter Equi.

As a final note about the nature of the Double-*o* Constraint, Poser (1981) shows that the effect of this Constraint shows up with abstract Objective (accusative) Case. In the following transitive-stem "make" causative, the object of the verb stem has been topicalized, so that it does not take *o*. Despite this, the Double-*o* Constraint is violated.

(26) Piza$_i$-wa Hanako-ga Taroo-ni/*-o e_i tabe-sase-ta.
pizza$_i$-Top Hanako-Nom Taro-Dat/*-Acc e_i eat-Cause-Past
"Pizza, Hanako made Taro eat."

In the ungrammatical sentence, there is only one accusative *o*, which occurs on the causee. This indicates that the Double-*o* Constraint is sensitive to the Objective Case assigned to the empty category, *e*, in the direct object position. This Case, which is not pronounced, is assigned to the *structural* position of the direct object. I will continue to use the widely used name "Double-*o*" Constraint, with the understanding that *o* here may be the actual accusative case marker or the abstract Objective Case.[7]

2.1.2 Problem with the Counter Equi analysis

A problem arises with the Counter Equi analysis in regard to the Double-*o* Constraint. The Double-*o* Constraint prohibits more than one occurrence of the accusative case marker/Objective Case in a simplex clause. To prohibit the ungrammatical transitive-stem "make" causative, then, it is necessary to assume restructuring (or clause union in Relational Grammar terminology) of the causative, just as we saw for the purpose expression construction. However, there is evidence that restructuring of the type we saw for the purpose expression never applies to the causative construction (Miyagawa 1986). I will give two arguments against a restructuring analysis of the causative construction.

S.-I. Harada (1973) observed that the embedded object in a transitive-stem causative cannot be passivized.

(27) *Kodomo$_i$-ga Taroo-ni (yotte) Hanako-ni t_i yob-ase-rare-ta.
child$_i$-Nom Taro-by Hanako-Dat t_i call-Cause-Passive-Past
"The child was made to call by Taro by Hanako."

S.-I. Harada (1973), who assumed restructuring, proposed a Global Constraint that prohibits an originally embedded NP from being passivized at the matrix level (after restructuring). However, as noted by K. Inoue (1978), if we simply assume that restructuring never applies to the causative construction, we can readily exclude the ungrammatical passive example by appealing to the locality condition on A-movement. One such locality is Condition A of Binding Theory (N. Chomsky 1981a), which states that an anaphor must be bound within its local domain. If NP trace is viewed as an anaphor, the ungrammatical

example would constitute a violation of Condition A, because it fails to be bound within its local domain (the embedded IP). There are other locality conditions on A-movement that would give the same result, but I will not pursue them here.

The second argument has to do with the construal of a pronoun. It is possible for a pronoun in the embedded object position to be coreferential with the causer (Oshima 1979).

(28) Taroo$_i$-ga Hanako-ni kare$_i$-o hihans-ase-ta.
Taro$_i$-Nom Hanako-Dat he$_i$-Acc criticize-Cause-Past
"Taro made Hanako criticize him."

This construal is possible because the antecedent and the pronoun are in different clauses, so that the pronoun is not bound in its local domain. It is possible that, even if restructuring applies, we can encode some relevant information into the derivation, along the lines of a Global Constraint, to make the construal still possible. However, Miyagawa (1986) gives evidence from PE to show that if restructuring does apply, the local domain that "protects" the pronoun is destroyed.

(29) Taroo-ga Hanako$_i$-to [PRO kanozyo$_i$-o syookaisi-ni]
Taro-Nom Hanako$_i$-with [PRO she$_i$-Acc introduce]
daigaku-ni itta.
university-to went
"Taro went with Hanako to the university to introduce her."

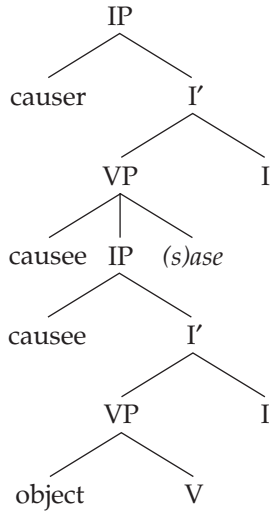
(30) ???Taroo-ga Hanako$_i$-to kanozyo$_i$-o zitensya-de syookaisi-ni itta.
Taro-Nom Hanako$_i$-with she$_i$-Acc bicycle-by introduce went
"Taro went with Hanako by bicycle to introduce her."

In (29), restructuring cannot apply because the adjacency condition for it is not met, owing to the occurrence of "to the university" between the complement clause and the matrix motion verb. In this biclausal structure, the pronoun may be construed with the antecedent in the matrix clause. In (30), the occurrence of "by bicycle" forces restructuring, making the intended construal for the pronoun impossible.

Given these arguments, we can assume that the causative construction never undergoes restructuring. On this account, the ungrammatical double-*o* occurrence in a transitive-stem "make" causative becomes a mystery if we follow the widely accepted underlying structure (see below) (S.-I. Harada 1973, Kuroda 1965a, Kuno 1973, Shibatani 1973b) instead of the one we are assuming.

(31) *Hanako-ga Taroo-o piza-o tabe-sase-ta.
Hanako-Nom Taro-Acc pizza-Acc eat-cause-Past
"Hanako made Taro eat pizza."

(32) "make" causative



Instead of Counter Equi, it is possible to apply regular Equi to this structure, which would result in the causee in the matrix clause having the accusative *o*. Without restructuring, the two accusative phrases (the second is on the embedded object) occur in different clauses throughout the derivation, thus the Double-*o* Constraint should allow this string. To get the grammatical string, Counter Equi must be forced to apply to this biclausal structure instead of the regular Equi, but that would make the nature of Double-*o* Constraint, and also the operation of Counter Equi, devoid of substance.

On the other hand, the analysis that we are pursuing, which locates the causee of the "make" causative in the embedded subject position (K. Inoue 1976a, Harley 1995, M. Nakau 1973, Terada 1990, Tonoike 1978), can easily account for this ungrammaticality without resorting to restructuring. The two occurrences of *o* are in the same, embedded clause. Below, I will give further evidence for the alternative analysis.

2.2 *Further evidence for the alternative analysis*

I will now give independent evidence that the causee of the "make" causative is in the embedded subject position while the *ni* phrase in a "let" causative is in the matrix clause with *(s)ase*.

In Miyagawa (1996, 1997a), I gave a series of arguments against movement to a VP-adjoined position.[8] We find additional evidence for this in the causative construction if we adopt the proposal that the "make" causee stays in the embedded subject position while the phrase corresponding to the "let" causee appears in the matrix clause. Let us begin with the following "make" and "let" examples.

(33) a. "make"
Taroo-ga kodomo-o kooen-e ik-ase-ta.
Taro-Nom child-Acc park-to go-Cause-Past
"Taro made his child go to the park."
b. "let"
Taroo-ga kodomo-ni kooen-e ik-ase-ta.
Taro-Nom child-Dat park-to go-Cause-Past
"Taro let his child go to the park."

Now note the contrast in grammaticality if we scramble the goal phrase "to the park" to the left of the causee.

(34) a. "make"
Taroo-ga kooen-e_i kodomo-o t_i ik-ase-ta.
Taro-Nom park-to_i child-Acc t_i go-Cause-Past
"Taro made his child go to the park."
b. "let"
???Taroo-ga kooen-e_i kodomo-ni t_i ik-ase-ta.
Taro-Nom park-to_i child-Dat t_i go-Cause-Past
"Taro let his child go to the park."

If we assume that the accusative causee in (34a) is in the embedded subject position, the scrambled element, "to the park," adjoins to the embedded IP, a legitimate adjunction site. However, in (34b), the *ni* phrase corresponding to the causee is in the matrix VP, thus, by virtue of the prohibition against the VP-adjunction landing site, "to the park" cannot move to the VP-adjoined site. I conjecture that the reason why this sentence is not completely out is due to the fact that there is a focus position above the VP (Miyagawa 1997a), which is a legitimate landing site for "to the park." One way to view the awkwardness of the example in (34b) is that, due to the prohibition against VP-adjunction, "to the park" is moving to the focus position, but pronounced in a neutral way, without focus, there is no reason for this phrase to move into this position, leading to the awkwardness. We can improve (34b) by placing focus stress on the moved element.

(35) (?)Taroo-ga **kooen-e**$_i$ kodomo-ni t_i ik-ase-ta.
Taro-Nom **park-to**$_i$ child-Dat t_i go-Cause-Past
"Taro let his child go to the park."

No such focus is needed for (34a), in which "to the park" is adjoined to the embedded IP.

This analysis predicts that a transitive-stem causative example should only have the "make" interpretation if the object is scrambled to the left of the causee. I believe that this is correct with neutral intonation.

(36) a. without scrambling
Taroo-ga kodomo-ni piza-o tabe-sase-ta.
Taro-Nom child-Dat pizza-Acc eat-Cause-Past
"Taro made/let his child eat pizza."
b. with scrambling
Taroo-ga piza-o_i kodomo-ni t_i tabe-sase-ta.
Taro-Nom pizza-Acc_i child-Dat t_i eat-Cause-Past
"Taro made/???let his child eat pizza."

In (36b), the object phrase, "pizza," has scrambled to the left of the causee, "child." For this movement to be legitimate, the scrambled object must adjoin to the embedded IP. This is only possible if the causee, "child," is in the embedded subject position. It is only in the "make" causative that the causee is positioned as such – in the embedded IP.

Terada (1990) argues for the alternative structures for the causative construction on the basis of the interpretation of agent-oriented adverbs such as *hitori-de* "alone" (cf. also Harley 1995). On the assumption that such an adverb must be clausemate with the agentive phrase that it modifies, Terada notes the following difference.

(37) a. "make"
Hanako-to Taroo-ga hitori-de kodomo-o kooen-e
Hanako-and Taro-Nom alone child-Acc park-to
ik-ase-ta.
go-Cause-Past
"Hanako and Taro made the child go alone to the park."
b. "let"
*Hanako-to Taroo-ga hitori-de kodomo-ni kooen-e
Hanako-and Taro-Nom alone child-Dat park-to
ik-ase-ta.
go-Cause-Past
"Hanako and Taro let the child go alone to the park."

As shown, the adverb "alone" may occur to the left of the causee only in the "make" causative example. Terada accounts for this difference by hypothesizing that the accusative causee in the "make" causative is generated in the embedded subject position, and the adverb "alone" to its left may occur in the same IP, possibly by adjunction.

(38) "make" $[_{IP}$ . . . $[_{IP}$ *hitori-de* "alone" causee . . .] *(s)ase* . . .]

On the other hand, in the "let" causative, the *ni* phrase occurs in the matrix clause, and it binds a PRO in the embedded subject position. Because it is PRO that receives the agentive thematic role, by occurring to the left of the *ni* phrase, the adverb cannot be in the same clause with the phrase (PRO) that receives the agentive role.

(39) "let" *[$_{IP}$ . . . *hitori-de* "alone" causee$_i$-*ni*. [$_{IP}$ PRO$_i$ . . .] *(s)ase* . . .]

If the adverb occurs to the right of the *ni* phrase, the sentence is perfect, as predicted.

(40) Hanako-to Taroo-ga kodomo-ni hitori-de kooen-e ik-ase-ta.
Hanako-and Taro-Nom child-Dat alone park-to go-Cause-Past
"Hanako and Taro let the child go alone to the park."

This analysis predicts, correctly, that a transitive-stem *V-(s)ase* sentence only has the "make" interpretation if the adverb occurs to the left of the causee.

(41) Hanako-to Taroo-ga hitori-de kodomo-ni terebi-o mi-sase-ta.
Hanako-and Taro-Nom alone child-Dat TV-Acc watch-Cause-Past
"Hanako and Taro made/*let the child watch TV alone."

This analysis of the "make" causative straightforwardly accounts for the Double-*o* Constraint violation if *o* appears on the transitive-stem "make" causee.

(42) *Hanako-ga Taroo-*o* piza-*o* tabe-sase-ta.
Hanako-Nom Taro-*Acc* pizza-*Acc* eat-Cause-Past
"Hanako made/let Taro eat pizza."

This is bad because both accusative phrases are in the same, embedded clause. In the next section, I will show that this structure for the "make" causative is, in fact, the only way to account for the Double-*o* violation, thus giving further credence to the analysis we are pursuing.

3 Status of *Ni* on the Causee

Sadakane and Koizumi (1995) note that a "floated" numeral quantifier can only occur with the accusative causee, leading them to categorize *ni* on the causee as a postposition.

(43) Taroo-ga kodomo-o/*-ni futa-ri kooen-e ik-ase-ta.
Taro-Nom kids-Acc/*-Dat 2-Cl park-to go-Cause-Past
"Taro made two kids go to the park."

However, Harley (1995) observes that the dative causee can support a floated numeral quantifier in the transitive-stem "make" causative.

(44) Taroo-ga kodomo-ni futa-ri yasai-o tabe-sase-ta.
Taro-Nom kids-Dat 2-Cl vegetables-Acc eat-Cause-Past
"Taro made two kids eat the vegetables."

Following the analysis of "floated" numeral quantifiers (cf. Miyagawa 1989b and references therein), Harley concludes that the *ni* in the "let" causative in both intransitive- and transitive-stem *V-(s)ase* constructions is a postposition, which prohibits a "floated" numeral quantifier, as observed by Sadakane and Koizumi (1995). However, the *ni* in the transitive-stem "make" causative is a case marker. This reflects Kuno's (1973) analysis, in which the *ni* in the transitive-stem "make" causative is a dative marker equivalent to the dative marking on the goal phrase of a double-object verb such as *watasu* "hand." In Miyagawa (1989b, 1996, 1997a), I give evidence that the dative marker on the goal phrase in a double-object construction is a case marker, not a postposition. Thus, for example, it is able to support a floated numeral quantifier.

(45) Taroo-ga kodomo-ni futa-ri tyokoreeto-o watasita.
Taro-Nom kids-Dat 2-Cl chocolate-Acc handed
"Taro handed two kids chocolate."

The postpositional *ni* phrase in the "let" causative is assigned a thematic role independent of the coreferential embedded subject (Harley 1995).[9] Harley notes that this postposition is invariant, in that the "let" *(s)ase* always selects this postposition, and she equates this with "quirky case" found in languages such as Icelandic, in which a certain case/preposition (often dative) is selected by the verb, and the verb assigns a theta role along with the case/preposition.[10] This theta role assigned by a "let" *(s)ase* indicates the recipient/beneficiary of the act of "let" or "permit." This is reflected in the fact that the causee of the "let" causative must be such that the act being undertaken must be clearly "self-controllable" (S.-I. Harada 1973, Tonoike 1978), or, similarly, that the act must be interpretable in such a way as to allow the intention of the causee to come through (e.g. K. Inoue 1976a), which is not the case with the "make" causative. Thus, for example, S.-I. Harada (1973) notes that the following intransitive-stem causative is natural with the accusative *o* but not with *ni*.

(46) Taroo-ga tomodati-o/#-ni komar-ase-ta.
Taro-Nom friend-Acc/#-Dat be: bothered-Cause-Past
"Taro caused his friend to be bothered."

Ni in this example is semantically anomalous on the assumption that the psychological state of being bothered is not something that one naturally obtains intentionally, but is caused by some external force, hence not "self-controllable."[11] Finally, as a postpositional phrase, we would not expect a "let" causee to undergo passivization. As Kuroda (1965a) originally noted, a causative-passive sentence such as the example below only has the "make" interpretation.

(47) Taroo-ga hahaoya-ni yasai-o tabe-sase-rare-ta.
child-Nom mother-by vegetable-Acc eat-Cause-Pass.-Past
"Taro was made to eat vegetable by his mother."

For expository purposes, I will continue to call all instances of *ni* "dative," regardless of whether it is the case marker in the "make" causative or the postposition in the "let" causative.

4 LF Movement of the "Make" Causee: A Minimalist Version of Counter Equi[12]

We have seen that there is evidence to support the alternative analysis of the causative construction, in which the causee in the "make" causative resides in the embedded subject position. However, as it stands, there is one glaring disadvantage to this approach. It makes mysterious the distinction between the "make" and "let" interpretations. On this approach, *(s)ase* does not take a matrix object, hence there is no natural way to capture the "make" interpretation that parallels ordinary lexical causatives. Related to this issue is the question of how the "make" causee in an intransitive-stem causative receives accusative case marking, which is normally assigned to a direct object.

Harley (1995) proposes an addition to the alternative analysis that responds to these two, and other, issues. Harley's analysis, which is cast in the Minimalist Program (e.g. N. Chomsky 1993, 1995a), in effect establishes an object position for the "make" causee in the matrix clause associated with *(s)ase*. This appears incompatible with the observation that the "make" causee is in the embedded subject position, an analysis that Harley (1995) herself promotes on the basis of Terada's (1990) work. There are two components to Harley's analysis that get around this problem. First, we can identify an object position in terms of the theta role that it has, and Case. In most sentences, theta role and Case are assigned from the same source. However, in exceptional circumstances, the two diverge. This is the Exceptional Case Marking construction.

(48) Everyone considers him to be a fool.

The theta role on *him* identifies it to be the embedded subject, but the accusative case identifies it to be the object of the matrix verb *consider*. Even though it is a subject of the embedded clause, identification of it as the matrix object by Case is sufficient for it to undergo passivization.

(49) He is considered by everyone to be a fool.

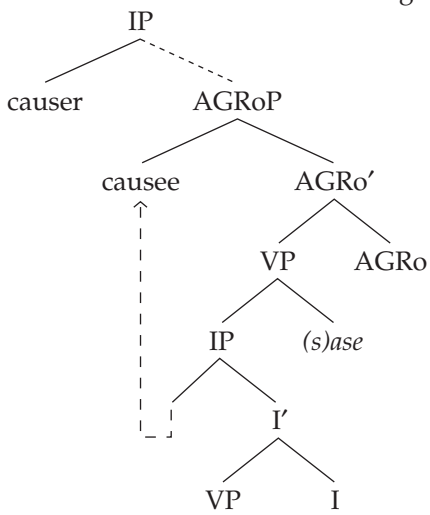
What Harley argues is that the "make" *(s)ase* is identified with an object Case position, very much like the ECM verbs. Thus, for all instances of "make" *(s)ase*, the transitive nature of *(s)ase* is characterized by the fact that it assigns Case to the object position. Second, Harley suggests that while the "make" causee is in the embedded subject position at overt syntax, as we have seen, at LF, it moves into the matrix object Case position. In the Minimalist

Program (N. Chomsky 1993), this "object" position is a general position of object–verb agreement. The agreement may be in the form of Case, or it may be another sort of agreement such as gender, as in the Hindi example below (Mahajan 1990).

(50) Sitaa-ne laRkaa dekhaa.
Sita-erg boy-*masc* saw-*masc*
"Sita saw the boy."

I will use the label AGRo (e.g. N. Chomsky 1993, Mahajan 1990) to indicate the position of this object-agreement position. Thus, Harley's proposal is that at LF, the "make" causee moves into the specifier of AGRoP in the matrix clause.

(51) LF A-movement for Case checking: "make" causative



In many ways, this LF-movement analysis captures the intuition of the Counter Equi analysis originally proposed by Kuroda (1965a). In both approaches, there is an object position in the matrix clause containing *(s)ase*, thus characterizing this *(s)ase* as a transitive verb. Furthermore, the "make" causee moves from the embedded subject position to this matrix object position, thus identifying the theta role of this causee with the subject of the embedded verb. In this way, we can view this LF movement analysis as the Minimalist version of Counter Equi.

Evidence that the "make" causative is associated with an Objective Case position comes from the fact that we see the accusative *o* on the intransitive-stem "make" causee. Without an object (Case) position, the appearance of this case marker is completely mysterious. Furthermore, as Harley (1995) notes, we know that the "make" causee can be passivized in the transitive-stem causative as well as in the intransitive-stem causative (Kuroda 1965a).

(52) Taroo-ga Hanako-ni piza-o tabe-sase-rare-ta.
Taro-Nom Hanako-by pizza-Acc eat-Cause-Pass.-Past
"Taro was made to eat pizza by Hanako."

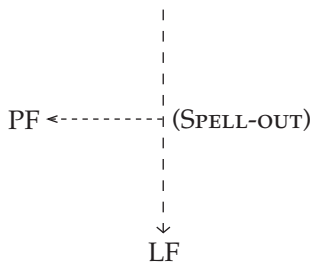
This is direct passive, as indicated by the fact that a numeral quantifier associated with the derived subject may be stranded, indicating that movement has taken place that leaves a trace which supports the stranded numeral quantifier (cf. Miyagawa 1996).

(53) Kodomo$_i$-ga Hanako-ni t_i futa-ri piza-o tabe-sase-rare-ta.
kids$_i$-Nom Hanako-by t_i 2-Cl pizza-Acc eat-Cause-Pass.-Past
"Three kids were made to eat pizza by Hanako."

This kind of direct passive is possible with verbs associated with the object Case position. Because the "make" causee is in the embedded subject position at overt syntax, which is not an object Case position, Harley is led to the analysis that this causee phrase raises to the object Case position (specifier of AGRoP) at LF.[13]

The LF-movement analysis has a number of advantages over the Counter Equi analysis. First, it unifies the derivation of all "make" causatives. The "make" causee undergoes this LF movement regardless of whether the verb stem of *V-(s)ase* is intransitive or transitive. In the Counter Equi analysis, Counter Equi applies to the transitive-stem "make" causative, while regular Equi applies to the intransitive-stem "make" causative. Second, the LF-movement analysis correctly locates the "make" causee in the embedded subject position at overt syntax. This is made possible by the architecture of the GB/Minimalist model.

(54)



What this design says is that at some point in the derivation of a string prior to reaching LF, the string is also sent to PF. This is the point called Spell-out. The string heading for LF may continue to undergo derivation, but once past the Spell-out, any derivational operation that changes the shape of the string does not get reflected in the pronunciation (P(honological) F(orm)) of the string. Thus, under the LF-movement analysis, the "make" causee is in the embedded subject position at Spell-out, and this is the form that is sent to PF for pronunciation. We have seen evidence that for the overt form, the "make" causee indeed resides in the embedded subject position.

*4.1 Double-***o** *Constraint at PF*

The LF-movement analysis makes it possible for us to be precise about where the Double-*o* Constraint applies in the grammar. On the basis of the Minimalist assumption that constraints and principles apply at the two interface levels of PF and LF (N. Chomsky 1995a), we are led to conclude that the Double-*o* Constraint applies at PF. Recall that we detect a violation of this Constraint if the "make" causee in a transitive-stem causative has the accusative *o*.

(55) *Hanako-ga Taroo-o piza-o tabe-sase-ta.
Hanako-Nom Taro-Acc pizza-Acc eat-Cause-Past
"Hanako made Taro eat pizza."

If the Double-*o* Constraint applies at PF, the two accusative phrases are in the same clause – the embedded clause – thus the Constraint correctly rules this string out. However, if the Constraint were to apply at LF, the two accusative phrases are in two different clauses owing to the LF movement of the causee, and the Constraint would incorrectly allow this string to go through. The idea that the Constraint applies at PF reflects the intuition that some linguists have had that it is a "fairly surface" one (e.g. K. Inoue 1976a, Shibatani 1973b).

The LF-movement analysis also helps to reveal the PF status of those phrases that are licensed ultimately by Objective Case. In the grammatical transitive-stem "make" causee, the causee is marked with the dative *ni*.

(56) Hanako-ga Taroo-ni piza-o tabe-sase-ta.
Hanako-Nom Taro-Dat pizza-Acc eat-Cause-Past
"Hanako made Taro eat pizza."

Setting aside for the moment the status of this *ni*, I assume, following Harley (1995), that this causee is licensed by Objective Case. Recall that Poser (1981) gave a convincing argument that the Double-*o* Constraint applies to Objective Case as well as to the case marker *o*. So, why isn't this example in (56) flagged by the Constraint at PF? One way to view the Case status of the causee here is that the Objective Case is not licensed until it resides in an object position, which, for this causee, is the specifier of AGRo, to which it moves at LF. At Spell-out, and in PF, the Objective Case is unlicensed, thus somehow "inert" for the purposes of the Double-*o* Constraint.[14]

What is the status of the *ni* on the transitive-stem "make" causee? It does not have a function to assign Case because that burden is taken up by Objective Case. It appears to have no function at all in the syntactic (i.e. non-PF) component. One possibility is that it does not exist in the syntactic component, but appears for the first time in PF, to meet some unknown requirement that PF imposes for pronunciation of the phrase.[15] This captures the fact that the "make" causee in the transitive-stem causative functions as a case marker relative to a floated numeral quantifier (Harley 1995). If this *ni* only exists at

PF, there is nothing in the syntactic component to block the association of the causee with a floated numeral quantifier, unlike the postposition *ni* on the "let" causee.[16]

In the remainder of this chapter, I will turn to issues surrounding lexical causatives and their relationship to the syntactic *V-(s)ase*.

5 Multiple Causatives

Given that the causative morpheme *(s)ase* is inserted in syntax, there is, in principle, nothing to block a multiple occurrence of *(s)ase*. However, Kuroda (1993a), following S. Martin (1975), notes that two occurrences of *(s)ase* is only possible if the first instance of *(s)ase* is a part of a lexical causative. If both are "syntactic" *(s)ase*, only one *(s)ase* can appear, although the sentence is interpreted as a double causative. In the following example, *aw-ase* "cause to meet" may function as a lexical causative (Kuroda 1993a, Miyagawa 1980), while *suw-ase* "smoke-cause" can only be a syntactic causative (Kuroda 1993a).[17]

(57) Taroo-ga Hanako-ni Ziroo-o Mitiko-ni aw-ase-sase-ru.
Taro-Nom Hanako-Dat Jiro-Acc Mickiko-Dat meet-cause-Cause-Pres
"Taro will cause (make/let) Hanako to cause Jiro to meet Michiko."

(58) a. *Taroo-ga Hanako-ni Ziroo-ni tabako-o
Taro-Nom Hanako-Dat Jiro-Dat cigarette-Acc
suw-ase-sase-ru.
smoke-cause-Cause-Pres
"Taro will cause Hanako to cause Jiro to smoke."

b. Taroo-ga Hanako-ni Ziroo-ni tabako-o suw-ase-ru.
Taro-Nom Hanako-Dat Jiro-Dat cigarette-Acc smoke-Cause-Pres
"Taro will cause Hanako to cause Jiro to smoke."

For the syntactic double causative exemplified in (58b), the question I wish to ask is which of the two syntactic *(s)ase*s is dropped to make it possible for the sentence with the double-causative meaning to form a grammatical sentence. A related question is whether the absence of the second *(s)ase* is some surface morphological phenomenon, or its absence has a syntactic or morphological consequence.

First, note that the passive of the "lexical causative-causative" in (57) is fine, though, admittedly, it is awkward because of the complexity of the structure.

(59) Hanako-ga Taroo-ni Ziroo-o Mitiko-ni
Hanako-Nom Taro-by Jiro-Acc Michiko-Dat
aw-ase-sase-rare-ru.
meet-cause-Cause-Pass.-Pres
"Hanako will be made by Taro to cause Jiro to meet Michiko."

Turning to the double syntactic causative, note that the higher causee may host a floated numeral quantifier, indicating that it may function as a "make" causee.

(60) Taroo-ga oya-ni futa-ri kodomo-ni tabako-o
Taro-Nom parents-Dat 2-Cl kids-Dat cigarette-Acc
suw-ase-ru.
smoke-Cause-Pres
"Taro will make two parents cause their kids to smoke."

Despite this, the passive of this double syntactic causative is quite bad, in sharp contrast to the passive of lexical causative-causative combination in (59).

(61) *Hanako-ga Taroo-ni Ziroo-ni tabako-o suw-ase-rare-ru.
Hanako-Nom Taro-by Jiro-Dat cigarette-Acc smoke-Cause-Pass.-Pres
"Hanako will be made to cause Jiro to smoke by Taro."

One way to interpret this example is that it is the higher *(s)ase* that is dropped, so that the passive morpheme is unable to attach to it and carry out the necessary operations. There is obviously enough of the "empty" *(s)ase* to support a "make" causative interpretation (or, possibly, also "let"), but by virtue of being empty, it is not accessible to any syntactic or morphological alterations that are required by the passive morpheme. On this view, the absent *(s)ase* does not have a full status as a verb, because it does not admit to passivization. Consequently, it is not just a matter of blocking the pronunciation of this *(s)ase* to make the sentence grammatical, but its absence in the overt form has tangible syntactic consequences.[18]

6 *V-(s)ase* and *V-(s)as*

Up to now we have only dealt with *(s)ase*, and have ignored a related productive morpheme, *(s)as*. For the most part, the two are interchangeable, as shown below (the vowel *i* is inserted after *sas* to conform to the open-syllable structure of Japanese), although for some speakers, the *(s)as* form has a stronger "direct causative" interpretation (Shibatani 1973b).

(62) Hanako-ga Taroo-ni piza-o tabe-sase-ta/tabe-sasi-ta.
Hanako-Nom Taro-Dat pizza-Acc eat-Cause-Past
"Taro made/let Hanako eat pizza."

As shown below, it is possible for the accusative and dative case markers to alternate in an intransitive-stem *V-(s)as* sentence, just as we saw for *V-(s)ase*.[19]

(63) Hanako-ga Taroo-o/-ni ik-asi-ta.
Hanako-Nom Taro-Acc/Dat go-Cause-Past
"Hanako made/let Taro go."

Shibatani (1973b: 345–9) made an important observation, that a *V-(s)as* may be used interchangeably with the corresponding *V-(s)ase* if there is a corresponding verb stem. For example, the intransitive verb stem *agar-u* "rise" has the transitive lexical-causative counterpart *age-ru* "raise." This lexical causative corresponds (in the number of arguments) to the *V-ase/as* verb *agar-ase/as* "cause to rise." In this situation, *(s)as* alternates freely with *(s)ase*.

(64) Taroo-ga Hanako-o butai-ni agar-(s)ase-ta/agar-(s)asi-ta.
Taro-Nom Hanako-Acc stage-on rise-Cause-Past
"Taro made Hanako rise onto the stage."

However, if there is no lexical-causative counterpart of *V-(s)as*, *V-(s)as* may "be equated" with a lexical causative (Shibatani 1973b). The following is taken from Shibatani (1973b), in which the verb *odorok-u* "surprise," which lacks a lexical causative counterpart, is the *V* in *V-ase/-as*.[20]

(65) a. Eiga kantoku-ga zyoyuu-o odorok-ase-ta.
movie director-Nom actress-Acc surprise-Cause-Past
"The movie director made the actress be surprised."
b. Eiga kantoku-ga zyoyuu-o odorok-asi-ta.
movie director-Nom actress-Acc surprise-Cause-Past
"The movie director surprised the actress."

In (65b), *as* in *odorok-as* is a part of the lexical causative on a par with "monomorphemic" lexical causatives such as *age-ru* "raise" we saw earlier.

In Miyagawa (1980), I gave additional evidence for this analysis. Based on the assumption that only lexical causatives may participate in idiomatization, the following example shows that only the *V-(s)as* form, *nar-asu*, has lexical-causative status. *Nar-u* "ring" does not have a "monomorphemic" lexical causative counterpart.

(66) *nar* "ring"
a. Taroo-ga fuhei-o nar-asi-ta/*nar-ase-ta.
Taro-Nom complaint-Acc ring-Cause-Past
"Taro complained."
b. *Fuhei-ga natta.
complaint-Nom rang

As shown in (66b), the verb *nar-u* "ring" alone does not participate in this idiomatization, hence the entire lexical causative *nar-as-u* must noncompositionally be construed (along with "complaint") to constitute the idiom. Note that the

alternative form with *(s)ase*, *nar-ase*, is ungrammatical with the idiomatic reading, indicating that in this idiom, *(s)as* alone functions as the lexical causativizer. Thus, there are two kinds of *(s)as*, one that alternates with *(s)ase*, and the other a lexical causativizer.

In Miyagawa (1980, 1984, 1989b), I gave evidence that *(s)ase* may also function as a lexical causativizer, precisely in the same environment as when *(s)as* appears as a lexical causativizer – in the absence of a "monomorphemic" lexical causative counterpart. The following idioms from Miyagawa (1989b) are taken from Zenno (1985). In (67a–c), *V-(s)ase* participates in idiomatization because of a lack of a transitive-stem counterpart; in (67d–f) *V-(s)ase* is "blocked" from appearing in an idiom due to the presence of a transitive-stem counterpart.

(67)

	Intransitive stem	*Transitive stem*	*Causative*
a.	**heru** "lessen"	—	**her-ase**
	hara-ga heru		hara-o her-ase-ru
	stomach-Nom lesson		stomach-Acc lesson-Cause
	"get hungry"		"wait for a meal"
b.	**hikaru** "shine"	—	**hikar-ase**
	me-ga hikaru		me-o hikar-ase-ru
	eye-Nom shine		eye-Acc shine-Cause
	"be under a watchful eye"		"keep a watchful eye"
c.	**kiku** "be effective"	—	**kik-ase**
	haba-ga kiku		haba-o kik-ase-ru
	width-Nom be effective		width-Acc be effective-Cause
	"have influence with"		"influence"
d.	**hairu** "come in"	**ireru** "put in"	**hair-ase**
	kiai-ga hairu	kiai-o ireru	*kiai-o hair-ase-ru
	spirit-Nom come in	spirit-Acc put in	
	"be full of spirit"	"put spirit into"	
e.	**itamu** "ache"	**itameru** "hurt"	**itam-ase**
	mune-ga itamu	mune-o itameru	*mune-o itam-ase-ru
	heart-Nom ache	heart-Acc hurt	
	"be worried"	"worry oneself"	
f.	**oreru** "break"	**oru** "break"	**ore-sase**
	hone-ga oreru	hone-o oru	*hone-o ore-sase-ru
	bone-Nom break	bone-Acc break	
	"require hardwork"	"exert oneself"	

What is striking about the "lexical" *V-(s)ase* in (67a–c) is that these are interchangeable with *V-(s)as* in the idiomatic reading: *hara-o her-as-u* "wait for a meal;" *me-o hikar-as-u* "keep a watchful eye;" *haba-o kik-as-u* "influence." We thus have an asymmetry between the lexical causativizers *(s)as* and *(s)ase*. A lexical causative formed with *(s)as* may not alternate with *(s)ase* and maintain

the lexical-causative status, while a lexical causative formed with *(s)ase* may alternate with *(s)as* freely. Given this asymmetry, the most general statement we can make about *V-(s)ase*/*V-(s)as* is the following (Miyagawa in press).

(68) *(s)ase* has as its allomorph *(s)as*.

This statement is true regardless of whether *(s)ase* is a part of a "syntactic" or a "lexical" causative. Along with this allomorph *(s)as*, there is the lexical causativizer *(s)as*, which does not have an allomorph, hence it cannot be interchangeable with *(s)ase*. This *(s)as*, when attached to a verb to form a lexical causative, blocks *(s)ase* from functioning as a lexical causative for the same verb.

6.1 The double-causative test

The double-causative test (Kuroda 1993a, S. Martin 1975) confirms the distribution of *(s)ase* and *(s)as*. Take the two intransitive verb stems *ugok-u* "move" and *hatarak-u* "work." Neither has a "monomorphemic" transitive counterpart. Thus, the *V-(s)as* (or *V-(s)ase*) counterpart should be a candidate for lexical-causative status. However, as Kuroda (1993a), on the basis of S. Martin (1975), notes, only *ugok-as-u* "move" functions as a lexical causative.[21]

(69) Taroo-ga Hanako-ni kodomo-tati-o heya-no mae-ni
Taro-Nom Hanako-Dat kids-Acc room-Gen front-to
ugok-as-ase-ta.
move-cause-Cause-Past
"Taro made Hanako cause the kids to move to the front of the room."

(70) *Taroo-ga Hanako-ni kodomo-tati-o hatarak-as-ase-ta.
Taro-Nom Hanako-Dat kids-Acc work-cause-Cause-Past
"Taro made Hanako cause the kids to work."

The fact that *ugok-as-u* cannot alternate with *ugok-ase* in the double-causative construction, as shown below, indicates that *(s)as* here is the lexical causativizer, not the allomorph of *(s)ase*.

(71) *Taroo-ga Hanako-ni kodomo-tati-o heya-no mae-ni
Taro-Nom Hanako-Dat kids-Acc room-Gen front-to
ugok-ase-sase-ta.
move-cause-Cause-Past
"Taro made Hanako cause the kids to move to the front of the room."

The fact that *ugok-u* "move," but not *hatarak-u* "work," can be lexically causativized is compatible with the observation (e.g. Harley 1995, Levin and Rappaport Hovav 1995, Pustejovsky 1995) that in an intransitive–lexical

causative pairing, the intransitive verb is unaccusative. The subject of the intransitive verb "move" is a theme, not an agent, hence semantically, it is an unaccusative verb. In contrast, the subject of "work" is an agent, hence it is an unergative verb. The latter requires an IP with an external subject position, which, in turn, makes it impossible for this *V-(s)as* to form a lexical causative (Miyagawa 1997b).

We saw in the previous section that the *V-(s)ase* verb *aw-ase* "meet-cause" may function as a lexical causative, since it can participate in a double-causative construction. On our characterization of the *(s)ase~(s)as* allomorphy, we predict that it should be possible for the corresponding *(s)as* form to also be allowed in a double-causative sentence. This prediction is borne out.

(72) Taroo-ga Hanako-ni Ziroo-o Mitiko-ni aw-as-ase-ru.
Taro-Nom Hanako-Dat Jiro-Acc Michiko-Dat meet-cause-Cause-Pres
"Taro will cause (make/let) Hanako to cause Jiro to meet Michiko."

7 Concluding Remarks

In this chapter, I gave evidence for the LF-movement analysis of the syntax of the *V-(s)ase* causative construction as proposed by Harley (1995). The LF-movement analysis captures the intuition behind the Counter Equi analysis originally proposed by Kuroda (1965a), while avoiding certain empirical problems that the latter analysis faces, particularly with regard to the Double-*o* Constraint. I also treated the lexical/syntactic causative distinction, in particular, showing that in the double syntactic causative construction, in which the causative morpheme *(s)ase* may only appear once, it is the higher *(s)ase* that is suppressed from appearing. Finally, we observed that the morphological alternant of *(s)ase*, *(s)as*, has two forms, one that is a lexical causativizer, and the other an allomorph of *(s)ase*.

There are a number of issues that remain unresolved. I will mention a few of these topics for future research.

*7.1 The nature of the Double-***o** *Constraint*

I have argued in this chapter that the Double-*o* Constraint applies at PF. But what, exactly, is the nature of this constraint? It cannot simply be a constraint against any multiple occurrence of *o* in a single clause, since it is well known that "path/locative" type of *o*-phrases may cooccur with the accusative *o* (e.g. Kuroda 1978, Poser 1981).

(73) Taroo-ga Hanako-o hamabe-o aruk-ase-ta.
Taro-Nom Hanako-Acc shore-Acc walk-Cause-Past
"Taro made Hanako walk along the shore."

Clearly, the type of *o* that gets flagged by the Double-*o* Constraint is associated with Objective Case (Poser 1981). Why should a PF constraint be sensitive to the type of underlying Case type? Related to this problem is the question why this Constraint should occur in Japanese. In some of the Romance languages (e.g. French), we see a similar phenomenon with "make." Thus, while the causee may be marked in the accusative case if the lower verb is intransitive, it may only be marked in the dative if the verb is transitive.

(74) Je la fais manger.
I her(Acc) make eat
"I make her eat."

(75) Je lui fais manger la tarte.
I to-her(Dat) make eat the pie
"I make her eat the pie."

Is this also a PF constraint? In contrast to "make," the "let" verb allows the double-accusative sequence, showing that the "Double-*o*" Constraint does not apply to "let," in contrast to Japanese.

(76) Je la laisse manger la tarte.
I her(Acc) let eat the pie
"I let her eat the pie."

Comparative research may yield a very different picture of the Double-*o* Constraint from the view given in this chapter.

7.2 Lexical causatives

I touched only briefly on the lexical causatives. As noted, lexical causatives in Japanese are always morphologically distinct from the unaccusative counterpart (e.g. *ak-u* "open$_{intr}$," *ake-ru* "open$_{tr}$"). There are a large number of morphologically distinct alternations, many seemingly quite arbitrary (cf. Jacobsen 1992). For example, the morpheme *-e-* appears in the lexical causative in a number of classes (e.g. *sim-e-ru* "close$_{tr}$"), but it also appears in some unaccusative members of an unaccusative–lexical causative pair (e.g. *nuk-e-ru* "come off"/ *nuk-u* "pull out"). Is the *-e-* in these lexical causative and unaccusative forms the same morpheme? Related to this issue is the direction of derivation. Is the unaccusative basic, and its lexical causative counterpart derived from it? Looking at the unaccusative–lexical causative pairs in Jacobsen's list, it is often not clear which way the derivation goes. If we look only at the *V-(s)ase* causative verb, it is clear that the *V* is basic, and the causative form is derived by adding *-(s)ase* to it. But there are other instances in which the opposite appears to hold. We have already seen the pair *nuk-e-ru* "come off"/*nuk-u* "pull out," in which *-e-* appears to be added to the lexical causative member of

the pair to derive the unaccusative. Another example is the pair *husag-ar-u* "become obstructed"/*husag-u* "obstruct," in which the morpheme *-ar-* appears to be added to the lexical causative *husag* to derive the unaccusative form (cf. Levin and Rappaport Hovav 1995 for arguments that the lexical causative may function as the basic form). Chierchia (1989) suggests that CAUSE underlies both the unaccusative and the lexical causative (cf. also Levin and Rappaport Hovav 1995, Pustejovsky 1995), which suggests that it does not make sense to talk about one being derived from the other. A close examination of the various morphological classes of unaccusative–lexical causative pairs should yield results that will help us in understanding this issue of derivation.

7.3 The nature of case marking

As the final topic, I note that the analysis of case marking given in this chapter raises a number of questions about the nature of case marking in Japanese. I suggested that the dative *ni* associated with the "make" causee appears for the first time in PF. As far as the syntactic side of the derivation is concerned, the Case requirement of the "make" causee is met by Abstract Objective Case. If this turns out to be correct, the appearance of this *ni* at PF is indicating some yet-to-be identified constraint on pronunciation of noun phrases. One might speculate that other case markers (as opposed to postpositions and inherent case) such as the nominative *ga* may also appear only in PF, in order to meet the requirement of the unidentified pronunciation constraint. To ultimately justify the "PF" account of *ni* on the "make" causee, we must identify the exact nature of the pronunciation requirement at PF that is met by adding the *ni* to the noun phrase.

NOTES

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1 Some of the issues I take up for the syntactic/lexical causative forms originally arose from a controversy between two approaches to the analysis of *V-(s)ase*. Kuroda (1965a, 1981, 1990, 1993a), as well as most linguists, assumes what I term a "different-component" analysis of the causative construction. The "different component" refers to the idea that, in this approach, the syntactic *V-(s)ase* is constructed in the syntactic component, while the lexical causatives exist in the

lexicon. In contrast, Miyagawa (1980) as well as Farmer (1980) propose a "same-component" analysis, in which both the "syntactic" *(s)ase* and the lexical causatives are formed in the same component of the grammar. In Miyagawa (1980, 1984, 1986, 1989b), I assumed that both causative forms are built in the lexicon, thus this approach has come to be termed the "lexical" approach to the causative construction. More recently, I have argued that the "same component" is syntax (Miyagawa in press), on the basis of the design of grammar made possible by Distributed Morphology (Halle and Marantz 1993). The difference between "syntactic" and "lexical" causatives is a function of the phrase structure underlying these two causative forms. In this chapter, I will not attempt to argue for or against either of these approaches (cf. Kuroda 1981, 1990, 1993a, for example, for arguments for the different-component analysis; cf. Miyagawa in press for a "syntactic" same-component analysis). One thing that the "same-component" analysis has done is to call attention to the structure of lexical causatives and their relationship to the "syntactic" *V-(s)ase* form. I will present some of the findings of this line of research, but will stay neutral to the same/different-component approaches.

2 Y. Kitagawa (1986) proposes that the "syntactic" *V-(s)ase* is formed in the lexicon, thus adopting the same-component approach. He has, in addition, a proposal that at LF, the causative morpheme moves to a higher point in the structure by excorporation, thereby effecting a biclausal structure. Miyagawa (1987b) provides independent evidence from Wh-movement for LF excorporation, although the structure that is involved is not the causative construction.

3 See Shibatani (1973b) for arguments based on adverbial scope that also give evidence for the biclausal nature of the *V-(s)ase* sentence.

4 It should be noted that *-(s)ase* may attach to a verbal form "larger" than a verb stem. For example, the aspectual form *hazime* "begin" attaches to a verb stem, *tabe-hazime* "begin to eat," and *(s)ase* may attach to this complex form: *tabe-hazime-sase* "cause to begin to eat."

5 There is a problem here with regard to the domain in which the Double-*o* Constraint applies. The Double-*o* Constraint prohibits two instances of the accusative *o* in a simplex clause. If we adopt Kuno's (1973) analysis that collapses the biclausal structure, then we can readily account for the ungrammaticality that arises if the causee is marked with *o* in a transitive-stem "make" causative. Both the causee with *o* and the accusative object with *o* end up in the same simplex clause after the biclausal structure is restructured into a simplex one. However, under the assumption that this "restructuring" does not apply, which is the position I am assuming, the two occurrences of *o* are always in two different clauses, thus Double-*o* Constraint should not rule this structure out. I will show later that it is in fact possible to keep the "nonrestructuring" analysis and still have the Double-*o* Constraint prohibit only the ungrammatical sentences.

6 Kuroda (1978, 1992) argues that the "regular" *tokoro*-complement sentence in (16) does not contain a matrix object, thus making it unnecessary to invoke Counter

Equi. The direct object shows up in structures that underlie, for example, the cleft.

7 See n. 11 for some possible analyses of Poser's observation.

8 To be precise, the arguments in Miyagawa (1996, 1997a) do not exclude VP-adjunction as an intermediate step in a longer movement, but do prohibit a movement in which the final landing site is a VP-adjoined position.

9 See Miyagawa (1997b) for an alternative analysis in which the causee in both "make" and "let" causative originates in the embedded subject position. The "make" causee undergoes LF raising to the matrix "object" position, as proposed by Harley (1995) and defended in this chapter. For the "let" causee, which always receives the dative *ni*, it raises to the matrix clause to be licensed by Tense. This latter movement occurs at overt syntax, unlike the "covert" LF movement for the "make" causative.

10 This is very close to the characterization of inherent case. With the verb of change of position, the *ni* phrase acts as an inherent case (Sadakane and Koizumi 1995), but the *ni* on the "let" causee is postposition (Harley 1995, Sadakane and Koizumi 1995). It is not clear how we derive this difference.

11 The verb *yurusu* "permit," which is close in meaning to the "let" causative, has a similar structure.

(i) Hanako-ga kodomo-ni [PRO
Hanako-Nom kids-Dat [PRO
kooen-e iku koto]-o
park-to go Comp]-Acc
yurusita.
permitted
"Hanako permitted the kids to go to the park."

This *ni* is a postposition, as shown by the fact that it cannot be associated with a floated numeral quantifier.

(ii) *Hanako-ga kodomo-ni
Hanako-Nom kids-Dat
san-nin [PRO kooen-e iku
3-Cl [PRO park-to go
koto]-o yurusita.
Comp]-Acc permitted
"Hanako permitted three kids to go to the park."

12 This section assumes knowledge of the basic notions in the Minimalist Program (N. Chomsky 1993, 1995a). Readers not familiar with this program are referred to, among others, Marantz (1995). For an introductory discussion of the notion of Logical Form (LF), see Huang (1995), among others.

13 Harley (1995) also gives an argument that the "make" causative raises at LF, on the basis of an observation by Terada (1990) about the scope of "only" relative to the causative morpheme *(s)ase*. Terada notes that if "only" attaches to the "let' causee, it only takes wide scope relative to *(s)ase*, but in the "make" causative, it is scopally ambiguous.

(i) "make"
Taroo-ga Hanako-dake-o
Taro-Nom Hanako-only-Acc
suwar-ase-ta.
sit-Cause-Past
"Taro made only Hanako sit down."
only ⩾ make, make ⩾ only

(ii) "let"
Taroo-ga Hanako-dake-ni
Taro-Nom Hanako-only-Dat
suwar-ase-ta.
sit-Cause-Past
"Taro let only Hanako sit down."
only ⩾ let, *let ⩾ only

Suppose that Taro, Michiko, and Ikuko told everyone to sit down (or told everyone they can sit down), including Hanako. For Hanako, she was the only one that Taro had sit down. The others were told by someone other than Taro to sit down. This is the interpretation in which "only" takes wide scope over *(s)ase*, and this interpretation is available in both the "make" and "let" causatives above. Now suppose that there are three people in the room, Hanako, Masako, and Jiro. They were all ready to sit down, and Taro, Michiko, and Ikuko have the authority to permit it. However, Taro, invoking seniority over Michiko and Ikuko, had Hanako sit, and the others not sit. Thus, only Hanako sat down, in contrast to the first interpretation. This situation describes the situation in which "only" takes narrow scope relative to *(s)ase*. Terada claims that this interpretation is available only for the "make" causative. The ambiguity observed in the "make" causative can be captured if we assume that the "make" causee forms a chain, formed by NP movement, whose head is in the matrix clause and the tail in the embedded clause. As Harley herself admits, this distinction in scope between "make" and "let" is quite subtle.

14 This analysis, if correct, leads us to an apparent paradox about Objective Case in Japanese. The Objective Case may be licensed at LF, as in the case of the causative, or at overt syntax, as in the case of Poser's (1981) example given in (26). In Poser's example, which involves topicalization, the Objective Case on the empty element is visible to the Double-*o* Constraint, thus, under the "PF" application of the Constraint, this Objective Case is licensed at overt syntax. There are a number of possible ways to cope with this apparent paradox. One possibility is that topicalization does not involve movement (e.g. Kuno 1973, Saito 1985), and the empty element is an empty pro, not an A'-bound trace. We can surmise that an empty pro comes equipped with a Case that need not be licensed by AGRo to be visible, very much like the accusative case marker *o*. Another possibility is that the difference between these two "kinds" of Objective Case may be a function of the kind of chain involved, A'-chain (topicalization) or A-chain (LF movement for Case). Yet another possibility is that the Objective Case is licensed as soon as the phrase resides in an object position. For the topicalization example, the empty element resides in the object position of the verb, thus licensed at that position. But the "make" causee only resides in the "object" position – specifier of AGRo – at LF. I will not attempt to resolve this issue in this chapter.

15 If this *ni* indeed has no function in the syntactic component, we are in fact led to conclude that it only appears at PF. All LF objects must be interpretable (N. Chomsky 1995a). If there is an uninterpretable element, it must be checked off, or the string "crashes." There is nothing in the string that could check off *ni* at LF, thus if it were to appear at LF, the string would crash.

16 There are a number of questions that arise for this "PF" analysis of the "case-marker" *ni*. What precisely is the PF condition that requires this *ni* to appear at PF? How is this *ni* assigned to the correct phrase? I do not have an answer to the

first question. For the second, one possibility is to follow Takezawa's (1987) analysis. Takezawa argues that the nominative *ga* is licensed by tense. If tense does not occur, as in the case of the embedded clause in the causative construction, *ni* is inserted as a "default" case marker. If this *ni* only appears at PF, as I have speculated, Takezawa's "default *ni* rule" would apply at PF.

17 I have constructed the first example, with *aw-ase-sase-ru*. The examples with *suw-ase(-ase)* are taken from Kuroda (1993a).

18 There is another way to view the "absentee" double causative. We might say that the higher of the two syntactic causatives is literally missing from the structure. Following Hale and Keyser (1993), the causative interpretation comes purely from the structure of the sentence. On this account, the lack of passivization is straightforwardly explained – there is no verb to passive.

19 There is a regional difference that distinguishes *(s)ase* and *(s)as*. According to Shibatani (1973b: 346), "in the Kansai area, e.g., Osaka, still the *sas* form is much more often used than the *sase* form . . . On the other hand, in the Kantoo area, e.g., Tokyo, the *sas* forms are innovative forms in colloquial speech." In a similar vein, Kuroda (1993a: fn. 4) notes that the dictionary, *Kokugogaku ziten*, "has *-sase* in the verb paradigm for the Tokyo dialect and *-sas* for the Kyoto [Kansai] dialect." Consequently, some of the distinctions we will draw in this section are pertinent only to the speakers from the Kantoo region. Historically, the *sas* form "gave rise to the *sase* form around the 12–15th century" (Shibatani 1973b: 346; cf. Miyagi 1969).

20 See Jacobsen (1992) for an extensive list of lexical causative verbs and their intransitive (inchoative) counterparts in Japanese.

21 Kuroda (1993a: 14–15) notes that *ugok-as-u* "move" is structurally ambiguous between the lexical causative and the syntactic causative. The syntactic causative is, presumably, the *(s)as* that is the allomorph of *(s)ase*, which in this case is solely syntactic because the lexical causative *(s)as* blocks it from participation in the lexical causative. Thus, Kuroda (1993a: 14) notes that the following example "sounds unacceptable, or at best peculiar . . . [because] the causee of a productive causative is *prototypically* understood as a (secondary) agent."

(i) Naomi-ga isu-o
Naomi-Nom chair-Acc
ugok-ase-ta.
move-Cause-Past
"Naomi caused a chair to move."