

# Complex-predicate Formation and Some Consequences in Japanese

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## 1. Introduction

The debate has not yet been settled as to whether Japanese morphological causative structures are ‘bi-clausal’ or ‘mono-clausal’.<sup>1</sup> Within the framework of LFG, Ishikawa (1985) and Matsumoto (1996)<sup>2</sup> have claimed that the causatives are bi-clausal in f-structure (involving an XCOMP), and mono-clausal in c-structure.

In this paper I would like to argue that the recent LFG approach to complex predicates in various languages (cf. Alsina 1996, Butt 1995, etc) actually holds good in Japanese causatives and several other related constructions; i.e., these predicates exhibit the property of mono-clausality in f-structure, and bi-clausality in c-structure, contrary to Ishikawa’s and Matsumoto’s assumption. It is also

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<sup>1</sup> Outside LFG framework, recent studies of Japanese causatives include Gunji (1999), Manning, et al.(1999) in HPSG, Harley (1995) in GB/MP.

<sup>2</sup> In Matsumoto (1996) he argued that in Japanese morphological causatives differ in their bi-clausal properties between coercive (*make*) causatives and permissive (*let*) causatives; the former are mono-clausal and the latter are bi-clausal at f-structure. However, as we will see shortly in the following sections, this distinction seems rather unmotivated, unnecessary in analyzing morphological causatives in the language.

argued that the determination of semantic scope should be treated in terms of c-structure as well as f-structure. We lastly argue for a claim that the causative verb *-(s)ase*<sup>3</sup> is certainly a verb, not an affix.

## 2. Evidence for functional mono-clausality

Japanese morphological causative verbs are formed by adding *sase* to a verb stem, as shown in (1). The causer is marked with the nominative case (*-ga*), and the causee is marked with the dative particle (*-ni*) or optionally the accusative case (*-o*) if the stem is intransitive.

(1) Hanako ga musume ni sono hon o yom-ase-ta.

Hanako Nom daughter Dat that book Acc read-Caus-Past  
'Hanako made /let her daughter read that book.'

However, as will be discussed in Section 3, *sase* is certainly a verb, not a simple affix, if not a full-fledged verb.

### 2.1. Reexamination of Matsumoto (1998, 2000)

In his latest study, Matsumoto (1998, 2000) argues that there exist clear differences in f-structure between permissive causatives and coercive causatives; i.e., Though in Japanese both types of causative have mono-clausal c-structure, the coercive causative has mono-clausal f-structure and the permissive causative has bi-clausal f-structure. This assumption, however, is not correct. I will reexamine his data in order, and then alternatively propose that Japanese morphological causatives are definitely mono-clausal in f-structure, and try to argue for its bi-clausality in c-structure, though they apparently appear synthetically in the surface form (ex. *yom-ase-ta* 'read-Caus- Past' in (1)).

I agree with the assumption that causatives can be roughly divided into two types; coercive and permissive. I, however, assume that the Japanese causative verb *sase* has basically or intrinsically coercive reading, (i.e., mono-clausal in f-

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<sup>3</sup> *Sase* is attached to a verb stem which ends with vowel, while *ase* is attached to a verb stem with consonant.

structure), though, of course, the inherent meaning of the base verb or pragmatic factors can sometimes decide which reading. Then, permissive reading often derives from the context, outside syntax. An adverbial element, for example, might be added to produce unambiguously either the permissive reading or the coercive reading, as exemplified in (2). In the sentences, *-o* and *-ni* are used as coercive and permissive, respectively.

(2) a. Taroo wa iyagaru musuko o / ??ni puuru de oyog-ase-ta  
 Taro Top be reluctant son Acc / Dat pool at. swim-Caus-Past  
 ‘Taro made / ??let his son, who is reluctant to do, swim in the pool.’

b. Oyogi-tai to iu-node, Taroo wa musuko ?o / ni puuru de.  
 swim-want Comp say-because, Taro Top son Acc / Dat pool  
 oyog-ase-ta  
 at swim-Caus-Past  
 ‘Taro ??made / let his son swim in the pool, because his son said he wanted to do so.’

The example (2) suggests that permissive reading itself need not be described in terms of syntax, which means Matsumoto’s structural distinction of causatives between coercive and permissive is rather dubious. This is why I will not distinguish the syntactic structures of the two types of Japanese causatives.

The data are reexamined in what follows, which Mastumoto (2000) presents as strong evidence for the mono-clausality of the coercive causative and bi-clausality of the permissive causative in f-structure. Our analysis, however, will show that the supposedly crucial data for him are no longer strong evidence for functional bi-clausality.

### 2.1.1. Subject Honorification

According to Mastumoto, the best diagnostic for identifying grammatical subjects in Japanese is the test employing honorific marking, in which a certain marking on the verb indicates the speaker’s sense of respect toward the grammatical subject of the verb.

In (3) a marking of *o-V-ni nar* 'Hon-V-Cop become' is used as a test for the subjecthood of a causee NP.

(3) a. Permissive:

Daijin wa ooji ni sono kutsushita o *o-haki ni*  
minister Top prince Dat the socks Acc Hon-put.on Cop *nar-ase te ok-*  
*are-mashi-ta.*

beome-Caus leave-Hon-Pol-Past

'The minister let the Prince (continue to) put the socks on his feet.'

b. Coercive:

??Karera wa muriyari ooji ni sono kutsushita o *o-haki*  
they Top forcibly prince Dat the socks Acc Hon-put.on *ni nar-ase-rare-*  
*mashi-ta.*

Cop become-Caus-Hon-Pol-Past

'They forcibly made the Prince put the socks on his feet.'

(Matsumoto 2000; 147)

The subject-honorified form can be followed by the causative, in which case it is the object, not the subject, that is honored. Matsumoto's argument, based on the observation in (3), is as follows; The object *ooji* 'prince' is definitely a grammatical subject and so the permissive causative is bi-clausal at f-structure.

The test in (3), however, is not reliable in order to distinguish the two types of causative. First, in (3b) subject honorification marker *-(r)are* 'Hon' is placed on the main verb (i.e., on the causative verb in (3b)) to indicate the speaker's respect toward the causer. This additional morpheme, as Matsumoto states, is added for pragmatic naturalness. This, however, seems to make the sentences in question unnecessarily more complicated, which might lead to the unacceptability of (3b). This does not mean that the marker to be put right after *sase* must be *-(r)are*. In fact, if the affix is removed, or if it is replaced by *-te o-oki-ni nari- mashi-ta*, which is another honorific pattern of *-te ok*, then the acceptability of the coercive pattern increases as shown in (4). Note that we can get coercive reading in both (4a) and (4b).

(4) coercive:

a. Daijin wa muriyari ooji ni sono kutsushita o *o-haki* .  
minister Top forcibly prince Dat the socks Acc Hon-put.on  
*ni nar-ase-ta*

Cop become-Caus-Past

'They forcibly made the Prince put the socks on his feet.'

b. Daijin wa muriyari ooji ni sono kutsushita o *o-haki*  
minister Top forcibly prince Dat the socks Acc Hon-put.on  
*ni nar-ase-te o-oki-ni nari-mashi-ta.*

Cop nar-Caus Hon-leave-Cop become-Pol-Past

'They forcibly made the Prince put the socks on his feet.'

Second, which is more important, in (3b) and elsewhere in Matsumoto's paper the permissive causative in his examples employ *-te oku* 'particle-leave,' which is placed on the causative verb so that the sentence in question will unambiguously produce permissive reading. I, however, assume this additional element is a two place control predicate like *-te hoshii* 'particle-want', *-te morau* 'particle-receive'<sup>4</sup>, subcategorizing for VP. This raises a serious problem; in his data the (un)acceptability on the permissive causative are affected by the verb *-te oku*, which situation does not elucidate the contrastive nature of the two types of causatives. The construction of (3a) is different from that of (3b), which does not constitute a minimal pair any longer, and then the status of the two predicates in (3a) and (3b) are different. The verb *-te oku* seems to be responsible for the possible reading in (3a). From this reason throughout the paper when I discuss the permissive causative I will use adverbials indicating only permission like (*soo-*)*sitai-to iu-node* 'saying s/he wants to do so' or *iuyo to itte* 'saying yes you can', so that we can make fair judgments of sentences. The desirable sentence in our discussion would be as follows. Note that the acceptability is the same as (3a).

(4) Permissive:

Daijin wa ooji ni soo-si-tai to iunode sono kutsushita o *o-haki ni*

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<sup>4</sup> See Matsumoto (1996; Chapter 3) for an analysis of particle *-te + hoshii / morau*, where he provides

*nar-ase-ta / nar-ase-te o-oki-ni nari-mashi-ta .*

‘The minister let the prince, saying he wants to do so, put the socks on his feet.’

The honorification pattern exhibited in (4) will support the mono-clausality in f-structure of both the coercive and permissive causative in Japanese.

Thus, it is reasonable to consider that it is unnecessary to posit two different types of causative verb *-sase* as Matsumoto claims. If subject honorification has nothing to do with subjecthood in terms of grammatical subject but rather something to do with logical subject or pragmatic factor(s), re-examination of previous studies of causative constructions, which depends upon the test, might be needed.

### 2.1.2. Passivization

In LFG it is widely assumed that the arguments of both the causative verb and the base verb map onto grammatical functions (i.e., f-structure) of a single predicate in f-structure.<sup>5</sup> In (5) - (7) the direct object of the base verb can be long-distance passivized. This certainly confirms the mono-clausality of f-structure with Japanese causatives, as Matsumoto argues.

(5) *Sono rinyuu-shoku wa mada dono akachan ni mo*

the baby.food Top yet any baby Dat even

*tabe-sase-rare-te i-nai.*

eat-Caus-Pass Asp-Neg

‘The baby food has not yet been given to feed any child.’

(Matsumoto 2000; 148)

(6) *(Yotei yori ichi-jikan mo okurete yatto)           kaikai ga*

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them with bi-clausality of f- and c-structures.

<sup>5</sup> Regarding Japanese causatives, as many researchers have pointed out, not every direct object of the base verb can be a passive subject. I do not know exactly why. Probably, some pragmatic constraint for the (im)possibility of the passive construction need to be taken into account, which should be dealt with outside syntax. (cf. Takami & Kuno 1993)

schedule than one-hour as.much.as behind finally opening Nom John ni-yotte  
gichoo ni sengen sase-rare-ta.

John by chairperson Dat announce Caus-Pass-Past

‘(An hour behind the schedule, finally) the opening of the meeting  
was made the chairperson to announce by John.’

(7) Taro ga wazato korob-ase-rare-ta.

Taro Nom on.purpose fall.down-Caus-Pass-Past

‘Taro was caused, on purpose, to fall down.’

### 2.1.3. Pronominal Binding

Matsumoto does not use the reflexive *jibun* ‘self’ as a test for the subjecthood of a causee NP. (See Iida (1996) for non-grammatical factors involved in *jibun* binding.) Instead, he uses a pronoun *kare* ‘he/his/him’ as a test for distinguishing the two types of causatives. Consider (8).

(8) a. Taro<sub>i</sub> wa Jiro<sub>j</sub> ni sonomama kare<sub>i,\*j</sub> / karejisin<sub>\*i,j</sub> o bengo

Taro Top Jiro Dat as.it.is he/himself Acc defend  
s-ase-te oi-ta.

do-Caus put-Past

‘Taro let Jiro continue to defend him(self).’

b. Taro<sub>i</sub> wa Jiro<sub>j</sub> ni muriyari kare<sub>?,i,\*j</sub> / karejishin<sub>i,j</sub> o

Taro Top Jiro Dat forcibly he/himself Acc  
bengo sase-ta.

. defend do-Caus-Past.

‘Taro forcibly made Jiro defend him(self).’

(Matsumoto 2000; 148)

In LFG account, the pronoun *kare* must be referentially disjoint from its clausemate in f-structure. In causatives, the pronoun may be bound by the subject but must be disjoint in reference with the causee. (cf. Kitagawa 1986) However, I would like to argue that the pronominal *kare* -binding fact does not really support Matsumoto’s

assumption that the permissive causative has a bi-clausal f-structure and the coercive causative has a mono-clausal f-structure. With regard to (8) he argues the pronominal binding to the causee is not possible. The reflexive for *karejishin* ‘himself’, in contrast, must be bound within its clause.

As we have seen in 2.1.1, (8) does not constitute a minimal pair, either; in (8a) an additional word *-te oku* is placed on the causative verb *sase*. The problem is, it is highly likely that the verb might be responsible for the possible pronominal reading in (8a). The pronominal binding to the causee is actually allowed in both coercive and permissive reading as shown in (9).

- (9) a. Taro<sub>i</sub> wa Jiro<sub>j</sub> ni iiyo to itte mina no maede kare<sub>i,(?)j</sub> /  
 Taro Top Jiro Dat saying OK everyone Gen front him /  
 karejisin<sub>i,j</sub> o hinan sase-ta.  
 himeself Acc criticize do.Caus-Past  
 ‘Taro let Jiro blame him(self) in front of others, saying OK.’
- b. Taro<sub>i</sub> wa Jiro<sub>j</sub> ni muriyari mina no maede kare<sub>i,(?)j</sub> /  
 Taro Top Jiro Dat forcibly everyone Gen front him /  
 karejishin<sub>i,j</sub> o hinan sase-ta.  
 himself Acc criticize do.Caus-Past  
 . ‘Taro forcibly made Jiro blame him(self), in front of others.’

In (9) the pronominal expression *kare* ‘him’ can be the causer (Taro) as well as the causee (Jiro). According to Matsumoto’s assumption, this pronominal should exhibit behavior which is complementary to the reflexive *karejishin*, this, however, is not the case as indicated in (9).

The acceptability in (8) and (9) suggests that coreference relation, whether it is of *kare* ‘him’ or *karejishin* ‘himself’, cannot be simply determined in f-structure; it might also be involved in a-structure and



c-structure, and sometimes pragmatic factor(s).<sup>6</sup> Thus, the pronominal binding test again does not clearly argue for the difference between mono-clausality and bi-clausality of f-structure.

#### 2.1.4. Control

It is well-known that the subject of certain adverbial control clauses can be controlled by either grammatical or logical subject.

(10) a. John<sub>i</sub> wa sono ko<sub>j</sub> ni [PRO<sub>ni,j</sub> terebi o mi-nagara] sono kutsusita  
John Top the child Dat [television Acc watch-while] the socks  
o hak-ase-te oita.  
Acc put.on-Caus left.  
'John let the child put on the socks, watching TV.'

b. John<sub>i</sub> wa muriyari sono ko<sub>j</sub> ni [PRO<sub>ij</sub> terebi o mi-nagara] sono  
John Top forcibly the child Dat [television Acc watch-while] the  
kutsushita o hak-ase-ta.  
socks Acc put.on-Caus-Past  
'John forcibly made the child put on the socks, watching TV.'

(Matsumoto 2000; 149)

Here too, the structure of the permissive causative that Matsumoto gives in his argument is different from that of the coercive causative. From this reason, I will continue to use an adverbial which provide an unambiguous meaning of permission. Then, compare (10) with (11).

(11) a. John<sub>i</sub> wa iiyo to i-tte musume<sub>j</sub> ni [PRO<sub>ij</sub> terebi o mi-nagara]  
John Top OK Comp say daughter Dat [TV Acc watch-while]  
sono kutsushita o hak-ase-ta.  
the socks Acc put.on-Caus-Past  
'Saying 'yes you can', John let his daughter put on the socks,  
watching TV.'

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<sup>6</sup> See Bresnan (1995), Choi (1996) for a treatment of operator binding within Optimality Theory.

b. John<sub>i</sub> wa muriyari musume<sub>j</sub> ni [PRO<sub>i,j</sub> terebi o mi-nagara]  
 John Top forcibly daughter Dat [TV Acc watch-while]  
 sono kutsushita o hak-ase-ta.  
 the socks Acc put.on-Caus-Past  
 ‘John forcibly made his daughter put on the socks, watching  
 TV.’

In (11a) and (11b), there exist no different behaviors with respect to the interpretation of PRO. Interestingly, when the control clause is placed at the beginning of the sentence, the interpretation differs greatly. In (12), PRO is interpreted as only John.

(12) [PRO<sub>i,\*j</sub> Terebi o mi-nagara] John<sub>i</sub> wa iiyo to itte musume<sub>j</sub>  
 [TV Acc watch-while] John Top saying OK Comp daughter  
 ni sono kutsushita o hak-ase-ta.  
 Dat the socks Acc put.on-Caus-Past  
 ‘Watching TV, John let his daughter put on the socks, saying  
 ‘yes you can’.’

The contrast observed between (11a) and (12) might pose quite serious a problem for the standard treatment of adverbials at f-structure, because f-structure does not tell us anything about word order.<sup>7</sup> (cf. Andrews 1983, Andres and Manning 1999, etc) If we want to get the proper semantic interpretation of the examples in (11) and (12), we need take c-structure into consideration in some way, because the semantic interpretation clearly reflects the phrase structure (c-structure). In (11a) and (11b) the adverbial clause is within VP, whereas in (12) outside VP. We now assume that c-structure as well as f-structure should be participated in the semantic interpretation.

Thus, the control test does not support the structural distinction of

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<sup>7</sup> So do the examples involving adjuncts given in 2.1.5.

the permissive and coercive causatives. The same argument provided here is hold for the interpretation of adjuncts, which I will consider in the next section.

### 2.1.5. Adjunct Interpretation

Following Jackendoff (1972), Matsumoto argues that adverbials like *ooyorokobide* ‘happily’ or *shibushibu* ‘reluctantly’ can be interpreted with respect to either grammatical or logical subject when placed inside VP. Based on the assumption, Matsumoto (2000) presents (13).

(13) a. John wa sono ko ni sono kutsushita o ooyorokobide

John Top the child Dat the socks Acc happily

hak-ase-te oita.

put.on-Caus left

‘John let the child put on his socks(,) happily.’

b. John wa muriyari sono ko ni sono kustushita o shibushibu

John Top forcibly the child Dat the socks Acc reluctantly

hak-ase-ta.

put.on-Caus-Past

‘John forcibly made the child put on his socks(,) reluctantly.’

(Matsumoto 2000; 151)

Matsumoto (2000) actually focuses on the analysis of lexical *sase* causatives comparing with morphological causatives, so he was not considering or even mentioning the behavior exhibited in the permissive (13a) and the coercive (13b). It is not clear how these sentences including adjuncts can be treated properly, with Matsumoto’s assumption that the permissive causatives have a bi-clausal f-structure, which has two PRED(icate)s, whereas the coercive causatives mono-clausal f-structure, which has a single PRED. But he is not able to account for the case where the position of

an adverb is placed outside VP.<sup>8</sup>

- (14) Ooyorokobide John wa sono ko ni sono kutsushita o hak-asete  
happily John Top the child Dat the socks Acc put.on-Caus  
oita.  
left  
'John happily let the child put on his socks. / \*John let the child  
put on the socks happily.'

The following example also would support our claim that the ambiguity is more of a structural nature than a lexical nature.

- (15) a. Taro ga Jiro ni sono hon o damatte yom-ase-ta. <ambiguous>  
Taro Nom Jiro Dat the book Acc silently read-Caus-Past.  
'Taro silently made / let Jiro read the book. / Taro made / let read the book  
silently.'
- b. Damate Taro ga Jiro ni sono hon o yom-ase-ta. <unambiguous>  
silently Taro Nom Jiro Dat the book Acc read-Caus-Past.  
'Taro silently made / let Jiro read the book. / \*Taro made / let read the  
book silently'

In our analysis, Japanese causatives have mono-clausal f-structures. Throughout the discussion I adopt an important assumption concerning adjunct interpretation by Andrews and Manning (1999).

(16) Grammatical relation spreading:

“[I]f we regard complex predicates as a syntactically mono-clausal domain of grammatical relation spreading, the right notion is that adjuncts must scope

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<sup>8</sup> There might be apparent counterexamples like (i).

(i) Yukkuri to Ken ga Naomi o suwar-ase-ta.  
'Ken slowly made Naomi sit. / ??Ken slowly made Naomi sit  
slowly.'

Regarding (i), one might think that it is ambiguous; the adjunct *yukkurito* 'slowly' can be interpreted with respect to both Ken (causer) and Naomi (causee). However, the latter interpretation can be obtained only when some pause is put right after the adjunct. In such cases the adjunct clause may have been long-distance scrambled. If so, this does not affect the analysis proposed in this paper.

within the domain in which grammatical relations are shared.”

(Andrews and Manning (1999; 55))

Given (16), in the c-structure if the two verbs form a complex predicate, then the complement VP should be the domain of grammatical relation spreading. In cases like this, semantic ambiguity will arise if an adverb appears within the VP domain.<sup>9</sup>

Examining the facts about the interpretation of adverbs (ex (13), (14) and (15)), I propose that c-structure as well as f-structure should participate in adverb interpretation.

#### 2.1.5.1. The two types of syntactic compound verbs

As many researchers including Matsumoto point out, not all control / raising verbs exhibit the functional mono-clausality of complex predicates like *sase*. Following such researchers, I will divide syntactic compound verbs in Japanese into two types. According to Kageyama (1993, 1999), the primary motivation for establishing the two structures resides in the passivization of a whole (compound) verb and scope ambiguity facts.

The first are *Complex Predicates*, which are genuinely verb complex and exhibit functional mono-clausality, including *-sase-ru* ‘Caus-Pres’, *-hajimeru* ‘begin’, *-naosu* ‘do again’, *-oeru* ‘finish’, *-tukusu* ‘exhaust, do thoroughly’, etc.

(17) V1+V2 = complex predicates:

- a. *Kare wa suupu o atatame-naoshi-ta*  
he Top soup Acc heat-do.again-Past  
‘He reheated the soup.’

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<sup>9</sup> Technically, to handle possible adverb interpretations we will have to need combining the three assumptions;(i) the existence of a VP in Japanese, (ii) a requirement that the adverbs c-command their ‘understood subjects’ (experiencer of happiness (13a), displayer of reluctance (13b), etc), (iii) a mechanism such as the glue-logic scheme proposed by Andrews and Manning so that an adverb in a clause with a mono-clausality composed complex predicate can modify any level of the complex predication, provided that any other relevant constraints are satisfied. (Avery Andrews, p.c.)

b. *suupu ga atatame-naos-are-ta.*  
soup Nom heat-do.again-Pass-Past  
'The soup was reheated.'

As (17b) shows, in the construction the direct object of the base verb can be usually passivized. Consider then the adverb interpretation.

(18) *Hanako ga biiru o nomi nagara tegami o kaki-hajime-  
Hanako Nom beer Acc drinking while letter Acc write-begin-  
ta.  
Past*

'Hanako began writing a letter while drinking beer.'

(i) At some point during Hanako's drinking of beer, Hanako's  
writing of a letter was began. [V1]

(ii) Hanako began the action of drinking of beer and writing a letter  
simultaneously. [V1+V2]

(19) *Kanojo wa teineiini aisatsu shi-naoshi-ta.*  
she Top politely bow do-do.again-Past

(i) 'She made a deep bow again.' [V1+V2]

(ii) 'She had not made a deep bow, but this time she made a deep bow.' [V1]

The second are *XCOMP Control Predicates*, which do not form complex predicates and have an *XCOMP* complement, including *-sokoneru* 'miss', *-sobireru* 'miss the chance', *-akiru* 'become weary', *-tukeru* 'be accustomed to', *-kaneru* 'hesitate', etc.

(20)  $V1+V2 = XCOMP$  control predicates:

a. *Keeki o tabe-sokone-ta.*  
cake Acc eat-miss-Past  
'(I) missed eating a cake.'

b. *\*Keeki ga tabe-sokone-rare-ta.*  
cake Nom eat-miss-Pass-Past

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'A cake was missed eating.' (intended)

(20b) shows that the direct object of the base verb cannot be passivized in such constructions.

(21) Taro wa biiru o nomi-nagara sakana o *tabe-wasure-ta*.

Taro Top beer Acc drinking-while fish Acc eat-forget-Past

'Taro forgot eating some fish, while drinking beer.'

\*(i) At some point during Taro's drinking of beer, Taro's eating of some fish was forgotten. [V1]

(ii) Taro forgot the action of drinking of beer and eating some fish simultaneously. [V1+V2]

(22) a. Shoogatsu-ni kimono-de *dekake-sokone-ta*.

New Year-at kimono-in go.out-miss-Past

(i) 'I missed going out in kimono at the New Year.' [V1+V2]

\*(ii) 'The action of going out in kimono was not done at the New Year' (intended) [V1]

b. Kare ni sono shirase o chokusetsu *shirase-sobire-ta*.

he Dat the news Acc directly tell-fail-Past

(i) 'I failed to tell him the news directly.' [V1+V2]

\*(ii) 'The action of telling him the news directly was not done.' (intended) [V1]

Although these predicates appear the same structures in c-structure, a complex predicate is mono-clausal in f-structure, while an XCOMP predicate is bi-clausal in f-structure. The information of both levels would participate in determining the semantic scope. So if a syntactic compound verb does not form a complex predicate, scope ambiguity involving adverbs would not arise even when some adverb is placed inside VP. Consequently, in such cases where grammatical relations are not shared, the adverb will modify unambiguously the whole VP; V1+V2.

### 2.1.5.2. *Shika-na(i)*

The causative pattern involving the *shika-na* ‘only-Neg’ construction will produce semantic ambiguity.

(23) Taro ga Hanako ni kyooiku terebi *shika mi-sase-nakat-*

Taro Nom Hanako Dat education channel only watch-Caus-Neg-  
ta. [ambiguous]

Past

(i) Taro didn’t cause Naomi to watch other things.

(cf. kyooiku terebi-*shika* [<sub>VP</sub> mi]-s-ase-*nakat-ta*)

(ii) Taro didn’t cause Naomi to do other things.

(cf. [<sub>VP</sub> kyooiku terebi-*shika* mi]-s-ase-*nakat-ta*)

Note that this kind of ambiguity does not arise for the lexical ditransitive verb *mise* ‘show’, for which there can be no bi-clausal structure (cf. Gunji 1999).

(24) a. Ken ga Naomi ni kyooiku terebi-*shika mise-nakat-ta.*

Ken Nom Naomi Dat education channel-only show-Neg-Past  
‘Ken didn’t show Naomi other things (than watching the  
channel).’ [unambiguous]

b. Taro ga Saburo o yukkuri **osi-taosi-ta.**

Taro Nom Saburo Acc slowly push-topple-Past

‘Taro pushed and toppled Saburo, slowly.’ [unambiguous]

c. Ookami ga niwatori ni gaburi to **kami-tsui-ta.**

wolf-Nom Nom chicken Dat mimetics bite-attach-Past

‘The wolf bit at the chicken.’ [unambiguous]

I have argued that the ambiguity is more of a structural nature than a lexical nature.

## 2.2. More evidence for functional mono-clausality

So far we have seen that all the diagnostic tests given by Matsumoto do not support the f-structure differences between the permissive and



coercive causative. Rather, it is reasonable to say that both are uniformly treated as functional mono-clausal, which means that the causative verb *sase* certainly constitute a complex predicate with the base verb at syntax.

In this section, we additionally present another syntactic evidence for the mono-clausality of Japanese causatives. The further evidence comes from double *o* constraint, and *shika-na(i)* construction.

### 2.2.1. Double-*o* constraint<sup>10</sup>

I will argue that the ‘deep’ double-*o* constraint can be used as a test to identify functional mono-clausality. It has been pointed out in the literature that there are two types of double *o* constraint; the ‘deep’ double *o* constraint and the ‘surface’ one. The former is shown as (25), and the latter is shown as (26), respectively

(25) a. Taro ga kooen o arui-ta.

Taro Nom park Acc walk-Past

‘Taro walked in the park.’

b. Taro ga Jiro \*o / ni kooen o aruk-ase-ta.

Taro Nom Jiro Acc / Dat park Acc walk-Caus-Past

‘Taro made Jiro walk in the park.’

(26) a. Taro ga hon o yon-da.

Taro Nom book read-Past

‘Taro read the book.’

b. Taro ga Jiro \*o / ni hon o yom-ase-ta.

Taro Nom Jiro Acc / Dat book Acc read-Caus-Past

‘Taro made Jiro read the book.’

Although (25b) and (26b) appear to show no difference, a difference, as Kuroda (1978) notes, emerges if one forms a so-called pseudo cleft sentences. In these

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<sup>10</sup> See Kuroda (1978), Poser (1983) and Sells (1989) for detailed discussion on the two different double-

pseudo-cleft sentences, the NP that immediately precedes *da* 'is' the focus of the sentence. Notice the contrast between (27) and (28).

(27) Taro ga Jiro o aruk-ase-ta no wa kooen (o) da  
Taro Nom Jiro Acc walk-Caus-Past Gen Top park (Acc) is  
'It is the park that Taro made Jiro walk in.'

(28) \*Taro ga Jiro o yom-ase-ta no wa hon (o) da.  
Taro Nom Jiro Acc read-Caus-Past Gen Top book (Acc) is  
'It is a book that Taro made Jiro read.'

The contrast indicates that although the double-*o* constraint equally rules out (25b) and (26b), as we observed, the NPs marked with *o* are different in nature. In (25b) both NPs are not objects, while in (26b) both NPs are objects. The ungrammaticality of (25b) is accounted for if we regard the verb *yom-ase-ta* 'read-Cause-Past' in (26b) as a single predicate. Keeping this in mind consider the causative cases.

If Japanese morphological causatives were functionally bi-clausal, then the two objects would appear in two different clauses in f-structure, and so the deep double *o* constraint, which checks the number of direct objects in a single clause, does not rule out such a case. To handle this problem, Matsumoto argues that the permissive causative does not rule out the occurrence of two objects, while the coercive causative does.

(29) a. ??Taro wa Hanako o sono-mama hon o yom-asete oita.  
Taro Top Hanako Acc as.it.is book Acc read-Caus left  
'Taro let Hanako continue to read a book.'

b. \*Taro wa Hanako o muriyari sono hon o yom-ase-ta.  
Taro Top Hanako Acc forcibly the book Acc read-Caus-Past  
'Taro forcibly made Hanako read the book.'

(Matsumoto 1996; 151)

It should be noted that in (29a) *Hanako o* ‘Hanako Acc’ might be an argument of *te-oita* ‘particle-left’, which I believe is a control verb. Given that the double-*o* constraint applies only within a single clause, there should be nothing strange about (29a) better than (29b), because the NPs might belong to different clauses.

Thus, for the present purposes, (29a) should be look like (30a) below. The sentence to be compared with (29b) as the permissive causative would be that in (30a), which is as bad as the coercive causative (29b). If we omit *sono hon o* ‘the book Acc’ as in (30b), then the sentence will be bad. This cannot be accounted for in terms of f-structure.

(30) a. \*Taro wa Hanako o iiyo to itte sono hon o yom-ase-ta.

Taro Top Hanako Acc OK Comp say book Acc read-Caus-Past  
 ‘Taro let Hanako read the book, saying, ‘Yes you can.’.’

b. Taro wa Hanako o iiyo to itte \*(sono hon o) yom-ase-ta.

‘Taro let Hanako read the book, saying, ‘Yes you can.’.’

Mastumoto also notes that some speakers find that the replacement of *o* by *mo* more significantly improves double-*o* permissive causative sentences, indicating that what is involved here is the “surface” double-*o* constraint, while this is not the case with coercive causatives, as given in (31).

(31) a. (?)Taro wa Hanako mo sono-mama sono hon o yom-ase-te oita.

Taro Top Hanako too as.it.is the book Acc read-Caus left  
 ‘Taro let Hanako continue to read that book, too.’

b. \* Taro wa Hanako mo muriyari sono hon o yom-ase-ta.

Taro Top Hanako too forcibly the book Acc read-Caus-Past  
 ‘Taro forcibly made Hanako read that book.’

(Matsumoto 1996; 151)

In the next example, however, the object *sono hon* ‘that book’ in (31) has been

topicalized, so that it does not take *o*. (32a) is as bad as (32b). The double-*o* constraint is violated, which suggests that the deep double-*o* constraint is really involved in the causatives.

(32) a. \*Sono hon wa Taro ga Hanako mo iiyo to itte yom-ase-ta.  
the book Top Taro Nom Hanako too OK Comp say read-Caus-Past  
'That book, Taro let Hanako read it, too.'

b. \*Sono hon wa Taro ga Hanako mo muriyari yom-ase-ta.  
the book Top Taro Nom Hanako too forcibly read-Caus-Past  
'That book, Taro forcibly made Hanako read it, too.'

In this subsection I have argued that both coercive and permissive causatives are in fact subject to the 'deep' double *o* constraint, which prohibits more than two objects occurring in a single clause.

### 2.2.2. *Shika-na(i)* construction

There is another piece of evidence for the mono-clausal structure of the causatives in Japanese. I will argue that the *shika-na(i)* 'only-Neg' sequence, serves as a diagnostic test for functional mono-clausality. It has been argued that *shika* can only be added to a phrase that is in the same clause as its associated negative marker (the Locality Condition)<sup>11</sup>. Consider the contrast between sentences like (33a) and (33b).

(33) a. Taro wa Tokyo e *shika* ik-anakat-ta.  
Taro Top Tokyo Goal only go-Neg-Past  
'Taro went to Tokyo only.'

b. \*Hanako wa [Taro ga Tokyo e *shika* itta] to iw-anakat-ta.  
Hanako Top Taro Nom Tokyo Goal only went Comp say- Neg-Past  
'Hanako said that Taro went to Tokyo only' (intended)

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<sup>11</sup> See Muraki (1978), Kato (1985, 1993) and Sells (1996) for detailed discussion on the *sika-na(i)* construction, and references therein.

Next consider the following example.

- (34) a. Hanako wa musume ni hoka no hon o yomi-tai-to  
Hanko Top daughter Dat other Gen book Acc read-want-Comp  
itta noni sono hon-sika yom-ase-nakat-ta.  
said though the book-only read-Caus-Neg-Past  
'Hanako made her daughter read only the book, though her daughter said  
she wanted to read another book.'
- b. Hanako wa musume ni hoka no hon wa yomi-tak-unai  
Hanako Top daughter Dat other Gen book Top read-want-not  
to iu node sono hon-sika yom-ase-nakat-ta.  
Comp say because book-only read-Caus-Neg-Past  
'Hanako let her daughter read only the book, for her daughter said she didn't  
want to read another book.'

If we distinguish between a permissive causative and a coercive one in f-structure, then it is difficult to account for (35). The grammaticality of (35a) and (35b) suggests that both *shika* and *na(i)* are within the same clause at its surface structure. Mastumoto explains (35), based on the assumption that the clause-mate condition on *shika* --- *na(i)* must be met at the surface structure, i.e., c-structure. As a piece of evidence, he gives the following example.

- (35) a. John wa [PRO BLS ni *shika* ik-anaka-tta koto] ga aru.  
John Top [BLS Goal only go-Neg-Past Comp] Nom have  
'John has the experience of going only to BLS (among many  
conferences in a year).'
- b. ??BLS ni *shika* John wa [PRO ik-anaka-tta koto] ga aru.  
BLS Goal only John Top [go-Neg-Past Comp] Nom have  
'John has the experience of going only to BLS (among many conferences in a  
year).'

c. BLS ni *shika* Jon wa [PRO i-tta] koto ga *nai*.  
 BLS Goal John Top [go-Past] Comp Nom have.Neg  
 ‘John does not have the experience of going to conferences other than BLS.’  
 (Mastumoto 1996; 38)

Regarding (35b), however, my informants all judge the sentence as grammatical. Matsumoto’s assumption that the distribution of *shika* --- *na(i)* is sensitive to c-structure configuration fails to account for sentences like (36), where *shika* --- *na(i)* is not within the same clause.(cited from Sells (1996))

(36) a. Taro wa [Hanako ni Tanaka sensee o syookai-*shika*  
 Taro Top [Hanko Dat Tanaka teacher Acc introduce-only  
 suru] tumori-wa *nai*.  
 do intend-Foc Neg.  
 ‘Taro intends only to introduce Professor Tanaka to Hanako.’

b. Boku wa [Hanako *shika* soko ni iru to] omow-*anak-atta*.  
 I Top [Hanako only there in be Comp] think-Neg-Past  
 ‘I thought that only Hanako was there.’

c. Gakko de *shika* John wa [Bill ga benkyoo shi-*nai* to] omotte-iru.  
 school at only John Top [Bill ga study do-Neg to] think-Pres  
 ‘John thinks that Bill studies at school only.’

Furthermore, the following involving long-distance scrambling of adjuncts might be counterexamples to Matsumoto’s view (cited from Sugisaki (2001; 387- 388)).

(37) a. Mary ga [John ga yukkuri to booru o nageta to] itta.  
 Mary Nom John Nom slowly ball Acc threw Comp said  
 ‘Mary said that John slowly threw a ball.’

b. Yukkuri to Mary ga [John ga booru o nageta to] itta.  
 slowly Mary Nom John Nom ball Acc threw Comp said

‘\*Mary said that John slowly threw a ball.’

‘Mary said slowly that John threw a ball.’

c. Yukkurito *shika* Mary ga [John ga booru o nage-*nak-atta*  
slowly only Mary Nom John Nom ball Acc throw-Neg-Past  
to] itta.

Comp said

‘Mary said that John only slowly threw a ball.’

(38) a. Mary ga [John ga kyuuni naki-dashita to] itta.

Mary Nom John Nom suddenly cry-began Comp said

‘Mary said that John suddenly started crying.’

b. Kyuuni Mary ga [John ga naki-dashita to] itta.

suddenly Mary Nom John Nom cry-began Comp said

‘\*Mary said that John suddenly started crying.’

‘Mary suddenly said that John started crying.’

c. Kyuuni *shika* Mary ga [John ga naki-dasa-*nak-atta* to]  
suddenly only Mary Nom John Nom cry-begin-Neg-Past Comp  
itta.

said

‘Mary said that John only suddenly started crying.’

(39) a. Mary ga [John ga nikai Susan ni kisu-shita to] itta.

Mary Nom John Nom twice Susan Dat kiss-did Comp said

‘Mary said that John kissed Susan twice.’

b. Nikai Mary ga [John ga Susan ni kisu-shita to] itta.

twice Mary Nom John Nom Susan Dat kiss-did Comp said

‘\*Mary said that John kissed Susan twice.’

‘Mary said twice that John kissed Susan.’

c. Nikai *shika* Mary ga [John ga Susan ni kisu-shi-*nak-atta*  
twice only Mary Nom John Nom Susan Dat kiss-do-Neg-Past  
to] itta.

Comp said

‘Mary said that John kissed Susan only twice.’

### 3. Revisit of c-structure of Japanese causatives

As argued by Kitagawa (1986), Manning et al. (1999), among others, a sequence like *kak-ase* ‘write-Caus’ is a phonological unit. It then should be noted that it behaves just like a single word as far as phonology is concerned.

But the discussion in Section 2 has suggested that such a sequence would be inconsistent if it is indeed a single word. In this last section I would like to argue that the c-structure of Japanese causatives is actually ‘bi-clausal’, not mono-clausal as has been traditionally assumed in LFG (cf. Ishikawa 1985, Matumoto 1996). What I would like to pursue here is that the causative morpheme *-sase* can appear as an independent word. (cf. Kuroda 1981, 1990) The evidence for it comes from separability of the predicate itself.

#### 3.1. Separability

As Kuroda (1981, 1990) argues negative morpheme *na-* and certain focus particles such as *wa-*, *mo-* and *sae-* can intervene between a base stem and a bare causative morpheme *-sase*. Further, Kuno (1983) discuss the separability of the base verb and the causative verb in a honorific form *o-V ni nar* as follows.

(40) Karera ga ooji ni sono kutushita o *o-haki ni sae / mademo*  
they Nom prince Dat the socks Acc Hon-put.on even  
*na-rase-ta.*  
become-Caus-Past  
‘They made the prince even put on the sox.’

(40) indicates that one of the honorific forms ‘*o-V-ni-nar*’ is not one word formed at lexicon, but formed at syntax; hence bi-clausal at



c-structure in our context. Note that the subjecthood is not exhibited any longer by the honorific marking test, as we have observed in Section 2.1.1. Thus, f-structure of (40) does not need to be bi-clausal. Consider the following contrasts between (41a) and (41b), (42a) and (42b).

(41) a. Boku wa Jon ni pan o tabe-wa-sase-ta ga ...  
 I Top John Dat bread Acc eat Foc Caus-Past but  
 'I did make John eat the bread, but ...'

b. John wa pan o tabe wa shi-ta ga ...  
 John Top bread Acc eat do-past but  
 'John did eat the bread, but ...'

(42) a. John wa Biru ni tabako o suwa-naku-sase-ta.  
 John Top Bill Dat tobacco Acc smoke-Neg Caus?-Past  
 'John made Bill not be able to smoke cigarettes.'

b. \*Biru ga tobacco o suwa-naku sita.  
 'Bill Nom tobacco Acc smoke-Neg did'  
 'Bill didn't smoke cigarettes.'

There might be two possible accounts for (41) and (42). One, which I believe correct, takes *sase* as an independent verb (cf. Kuroda 1981, 1990). If one assumes that (41a) is derived from (41b), then s/he can equally expect (42a) to be derived from (42b). However, this is not the case as (42b) shows its ungrammaticality. This indicates that the c-structure of the causative in (42b) has a bi-clausal structure. The other is based on the assumption that *sase* in (41a) or (42a) is not an independent causative verb, but the form that results from adding *sase* to the verb stem s-'do' + (s)ase \_ *sase*.<sup>12</sup> However, as Kuroda notes, few lexicalists taking this view give convincing arguments

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<sup>12</sup> See Miyagawa (1989), Manning, et al. (1999), among others. See also Kato (1985).

against the former Kuroda's syntactic account (ex. (41) and (42), (45)).

### 3.1.1. Particle intervention and *do*-support in Japanese:

'Do' in the constructions like (43a) is different from *do* in the light verb constructions in that its existence is dependent on focus particles (cf. Poser (1992), Sells (1998)).

(43) a. *tabe-wa-shi-ta* \**tabe-shi-ta*  
eat-Top-do-Past eat-do-Past

b. *shokuji-wa/o-shi-ta* *shokuji-shi-ta*  
eating-Top/Acc-do-Past eating-do-Past

We here assume that the scope-bearing particles like *wa*, *mo*, *sae* can attach to the fronted VP, not IP (or TP). (cf. Nishiyama & Cho 1998)

(44) a. John *ga* *compuuta o* *kai-wa/mo/sae shita*.  
John Nom computer Acc buy -at.least/also/even did  
'John at least/also/even brought a computer.'

b. \*John *ga* *compuuta o* *kat-ta-wa/mo/sae shita*.  
John Nom computer Acc buy-Past-at.least/also/even did  
'John at least/also/even brought a computer.'

Thus, it is reasonable to assume that a causative verb *sase* takes a VP complement and the focus particles usually attach to the VP.

(45) John *ga* Bill *ni* *compuuta o* *kawase-wa/mo/sae* *sase-ta*.  
John Nom Bill Dat computer Acc buy-at least/also/even Caus-Past  
'John made Bill at least/also/even buy a computer.'

There are clear syntactic differences between auxiliaries and verbs if one follows the assumption that *do*-insertion salvages from affix hopping (cf. Lasnik 1981, Chomsky 1995). The dummy verb *su* 'do'

appears in a tensed clause, i.e., IP (or TP) for supporting the tense marker *ta* 'Past'. In (45), where *sase* clearly takes a VP complement, therefore, it is not necessary for the dummy verb *su* 'do' to get inserted within the VP.

#### 4. Summary

Examining Japanese morphological causatives in detail, I have argued that they are certainly formed at syntax, not at lexicon, through the complex-predicate formation in the sense of Alsina (1996); i.e., characteristically mono-clausal at f-structure. I have also argued that the c-structure is not mono-clausal, but bi-clausal, contrary to Matsumoto and Ishikawa. The present analysis can correctly capture the facts involving morphological causatives in Japanese.

#### References

- Alsina, Alex. 1996. *The Role of Argument Structure in Grammar*. CSLI Publications.
- Andrews, Avery D. and Christopher D. Manning. 1999. *Complex Predicates and Information Spreading in LFG*. CSLI Publications.
- Bresnan, Joan and Sam A. Mchombo. 1995. "The Lexical Integrity Principle: Evidence from Bantu," *NLLT* 13, 181-254.
- Butt, Miriam. 1995. *The Structure of Complex Predicates in Urdu*. CSLI Publications.
- Gunji, Takao 1999. "On Lexicalist Treatments of Japanese Causatives," in Levine, R. and Green, G. eds (1999), 119-160.
- Iida, Masayo 1996. *Context and Binding Japanese*. CSLI Publications.
- Ishikawa, Akira. 1985. *Complex Predicates and Lexical Operators in Japanese*. PhD. diss. Stanford University.
- Kuno, Susumu 1983. *Shin nihon bunpoo kenkyuu* [The New Study of Japanese Grammar]. Taishukan Publishers.
- Kuroda, Shige-Yuki 1990. "Shieki no jodooshi no Jiritusei ni tsuite [On the independence of the causative auxiliary]", In Kunihiro Tetsuya Kyooju Kanreki Taikan Kinen Ronbunshuu Henshuu-iinkai, ed., *Bunpoo to imi no aida* [Between Grammar and Semantics], 93-104. Tokyo: Kuroshio.

- Levine, Robert and Green, Georgia (1999) *Studies in Contemporary Phrase Structure Grammar*. Cambridge University Press.
- Manning, Christopher D., and Ivan A Sag, and Masayo Iida. 1999. "The Lexical Integrity of Japanese Causatives," in Levine, R. and Green, G. eds. (1999), 39-79.
- Matsumoto, Yo. 1996. *Complex Predicates in Japanese*. CSLI Publications and Kuroshio Publishers.
- Matsumoto, Yo 1998. "A Reexamination of the Cross-linguistic Parametrization of Causative Predicates: Japanese Perspectives", in *Proceedings of the LFG98 Conference*, ed. M. Butt and T. H. King. CSLI On-line Publications.
- Matsumoto, Yo. 2000. "On the Crosslinguistic Parametrization of Causative Predicates: Implication from Japanese and Other Languages", in *Argument Realization*, ed. M. Butt and T. H. King. 135-169. CSLI Publications.
- Nishiyama, Kunio and Cho, Eun. 1998. "Predicate cleft constructions in Japanese and Korean: The role of dummy verbs in TP/VP-preposing", *Japanese / Korean Linguistics 7*
- Sells, Peter. 1994. "The projection of phrase structure and argument structure in Japanese", ms.
- Sugisaki, Koji. 2001. "Scrambling of adjuncts and last resort", *Japanese / Korean Linguistics 10*