



# Bulletin of International Center Yamaguchi University

Volume 1

October, 2005

## Contents

### Foreword

"I've been workin' on the railroad..." .....Mitsuyasu MIYAZAKI

### Research/Practical Articles

Various Requirements for Teaching Japanese to Graduate Students of the Faculty of Technology .....	Misaki SHIGETA	1
Logical Structures and Case Marking Systems in Japanese .....	Shingo IMAI	10
Japanese Language Education for Young Learners in the Community .....	Yayoi AKAGI, Midori NISHIMURA	51
A Survey Conducted on the Native Speaking Japanese Language Teachers at the High Schools in Korea : On Japanese Language Education during the Sixth Education Curriculum .....	Kaoru KADOWAKI	56
Prototype 1 of J-CAT (Japanese Computerized Adaptive Test) .....	Shingo IMAI	67
Paragraph Writing Applied to Japanese Language Learning at a University .....	Yayoi AKAGI	72
Japanese Language Education for Foreign Children .....	YANG Qing Yu	80

### Annual Reports (April 2004-March 2005)

Japanese Language and Culture .....	85
Japanese Proficiency Test .....	98
Pre-graduate Course .....	99
Japan-Korea Joint Undergraduate Science and Engineering Program .....	107
Freshman seminar .....	110
Student Consulting and Advising .....	122
Manual for Student Consulting and Advising .....	125
Committee for the Promotion of Student Exchanges & Round Table for International Students .....	131
Exchange & Volunteers .....	135
Local Exchange .....	140
Flower Arrangement: Japanese Culture Experience Program .....	144
Home Stay, Home Visit .....	147
Field Trip .....	150
Inter-University Program: Kongju University, Shangdong University, and Yamaguchi University .....	151
Short-term Study Abroad Program .....	156
University-High School Joint Program with Ube High School .....	202
Academic Exchange Agreements .....	205
Activity Records .....	206
Number of International Students .....	207
Information for Authors .....	208

# Logical Structures and Case Marking System in Japanese

Shingo Imai

## Abstract

Logical structures and case marking systems in Japanese are investigated in the framework of Role and Reference Grammar. Section one summarizes theoretical backgrounds. In section two, transitive, ditransitive, inversion, possessor-raising, causative, direct passive, and indirect passive constructions are discussed. Based on the observations of those structures and syntactic behaviors, it is concluded that case marking systems in Japanese are accounted for by referring to logical structures and the notion of ' pragmatic peak '. Instead of grammatical relations, the combination of semantic argument status in logical structures, syntactic argument/adjunct status, and pragmatics are appropriate to describe case marking systems and syntactic behaviors in Japanese.

## Abbreviations

#	pragmatically anomalous
AAJ	argument adjunct
ACC	accusative
ACH	achievement
ACM	accomplishment
ACT	activity
ACT-ACH	active-achievement
ACT-ACM	active-accomplishment
ASP	aspect
AUX-V	auxiliary-verb
CAUS	causative
COMP	complementizer
CONJ	conjunction
DCA	direct core argument
DEC	declarative
DO	direct object
H	honorific
IND	indicative
INF	infinitive
int.	intended
IO	indirect object
L	linker
LOC	locative

LS	logical structure
MR	macrorole
NEG	negation
NOM	nominative
NP	noun phrase
NPST	nonpast
NUC	nucleus
PASS	passive
PL	plural
PP	pre/postpositional phrase
PRES	present
PSTP	past participle
PURP	purposive
RSLT	resultative
SUBJ	subject
TNS	tense
TOP	topic marker
UND	undergoer

## Notes on Transcriptions

Glosses, morpheme-boundaries, and translations in cited examples may be modified for the sake of consistency.

### 0. Introduction

Grammatical relations, especially the notion of ‘ subject ’, have been one of the central notions in many theories in syntax. In the following examples of inversion constructions, it is not easy to determine which argument is the ‘ subject ’. The example (1) is from Japanese, the example (2) is from Italian, and the example (3) is from Korean.

#### (1) Japanese

Sensei-ni          furansugo-ga    o-wakari          ni nar-u.  
 teacher-DAT    French-NOM    H-understand    become-NPST  
 ‘ The teacher understands French. ’

#### (2) Italian

Gli          piacciono le sinfonie    di Beethoven  
 him.DAT like.3PL the symphonies of Beethoven.  
 ‘ He likes Beethoven's symphonies. ’ (Perlmutter 1984:293)

(3) Korean

Sensaengninm-eykey casin-iy yunyensicel-i saengkakn-at-ta.  
teacher- DAT self- GEN childhood -NOM remember-PAST-IND

‘ The teacher remembered his own childhood days. ’ (Gerds 1987:194)

Japanese, an accusative language, usually encodes a ‘ subject ’ by a nominative case, however in (1), instead of the subject, the theme NP *furansugo* ‘ French ’ is encoded by the nominative *ga*. The so called logical subject *sensei* ‘ teacher ’, which is the subject from the semantic point of view, is encoded by the dative case *ni*. This case encoding suggests that the theme NP is the syntactic subject. On the other hand, the dative coded NP triggers *o...ni naru* honorification. As we will see later in details, it has been pointed out (Harada 1976, Shibatani 1978) that the NP which triggers *o...ni naru* honorification is the subject. The example (1) shows mismatch of the logical subject and the syntactic subject in semantics, case coding, and syntactic behaviors such as the so-called subject honorification. Examples from other languages show the same contradiction. In (2), the logical and semantic subject is dative, while the theme NP is nominative, and the verb agrees with the nominative NP. Perlmutter (1984) provides five syntactic phenomena indicating indirect object-hood and four phenomena indicating subject-hood of the same dative NP *Gli*. In Korean, the controller of a reflexive is either subject or direct object (Kozinsky and Polinsky 1993:187). The reflexive controller in (3) suggests the dative NP *sensaengninm-eykey* ‘ teacher-dative ’ is the subject, while the dative case suggests it is not the subject.

It is evident from these examples that a single term ‘ subject ’ is not sufficient to refer to a NP whose ‘ subject ’-hood is not consistent in terms of semantics, morphology, and syntax. ‘ Subject ’-hood also varies between constructions as we will see elsewhere in this paper.

The framework I use to tackle these problems is Role and Reference Grammar (henceforth RRG) of Van Valin and Lapolla 1997 (henceforth VV & LP). RRG claims semantic structures (i.e. logical structures) but not grammatical relations are primitives. In this theory, the trigger (i.e. controller) of the honorification in the Japanese example, the controller of the verb agreement in the Italian example, and the controller of the reflexive in the Korean example are structure-specific. In other words, a controller is not necessarily the same among different structures within a language, nor does RRG claim that a nominative case is a ‘ subject ’ marker. In this paper, I will discuss how these claims can shed new light on some case marking patterns in Japanese.

## 1. Theoretical Background

### 1.1. Logical structures and macroroles

In RRG, semantic decomposition of predicates and their semantic argument structures are represented as logical structures (henceforth LS). A similar notion called ‘ argument structure ’ or ‘ semantic structure ’ is found in other literature.

- (1)
- (a) ' The mouse died. '
- BECOME **dead** '(mouse) [accomplishment]
- (b) ' The cat killed the mouse. '
- [**do** '(cat, Ø)]CAUSE [BECOME **dead** '(mouse)] [causative accomplishment]
- (c) ' John made the cat kill the mouse. '
- [**do** '(John, Ø)] CAUSE[ [**do** '(cat, Ø)]CAUSE [BECOME **dead** '(mouse)]] [causative accomplishment]
- (d) ' John ran. '
- do** '(John, [**run** '(John)]) [activity]
- (e) ' John is at the store. '
- be-at** '(store, John) [state]
- (f) ' John ran to the store. '
- [**do** '(John, [**run** '(John)])] & [BECOME **be-at** '(store, John)] [active accomplishment]
- (g) ' The window shattered. '
- INGR **shattered** '(window) [achievement]
- (h) ' John gave the book to Mary. '
- [**do** '(John, Ø)] CAUSE [BECOME **have** '(Mary, book)] [causative accomplishment]

In RRG, there are four basic classes of predicates: states, activities, accomplishments, achievements (cf. Dowty 1979, Vendler 1957). In addition, accomplishment with activity, i.e. active accomplishments, is recognized. As we will see later, there are also active achievement predicates in Japanese. The classes are determined by Aktionsart tests such as whether the predicate may occur with *for one hour*, *in one hour*, and *slowly*; and whether the predicate occurs in the progressive or not (see VV & LP for details). The characteristics of the basic four classes are summarized in terms of three features, [static], [punctual] and [telic]. The last feature [telic] refers to the presence of an inherent temporal terminal point.

- (2)
- |                |           |          |             |
|----------------|-----------|----------|-------------|
| State          | [+static] | [-telic] | [-punctual] |
| Activity       | [-static] | [-telic] | [-punctual] |
| Accomplishment | [-static] | [+telic] | [-punctual] |
| Achievement    | [-static] | [+telic] | [+punctual] |

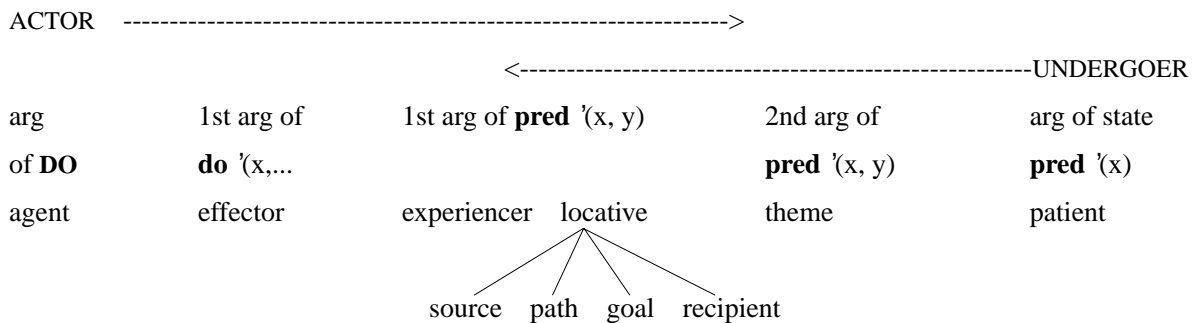
The notation **do** ' denotes an activity predicate as in (1d). The example (1e) without **do** ' denotes a stative predicate. The notation BECOME in example (1a) denotes an accomplishment predicate. The notation INGR in (1g) denotes an achievement predicate. It is interesting to note that in English, *die* is an accomplishment since it can be used in the progressive e.g. ' he is dying. ' On the other hand, *sinu* ' die ' in Japanese is an achievement. (cf. VV & LP 106.)

- (3) Kare-wa sin-de-i-ru.
- he-TOP die-L-RESL-be.
- ' He is in the state of being dead. ' = ' He is dead. '
- INGR **dead** '(he)

The notation  $\emptyset$  in (1b, c, h) denotes unspecified activity. All clauses may have causative counterparts indicated by the notation CAUSE as in (1b,c,h). The notation & in (1f) denotes temporarily sequenced state of affairs without causation.

RRG posits two macroroles, actor and undergoer. The actor subsumes agent-like thematic roles (e.g. an agent, an experiencer) while the undergoer subsumes patient-like thematic roles (e.g. a theme, a patient). In (4) below, the argument at the left end of the actor-undergoer hierarchy is the most typical actor, namely an animate agent that acts upon and affects an undergoer argument. The argument at the right end is the most typical undergoer, namely an inanimate patient that is acted upon and affected by an actor argument. Moving toward the center of the scale, actor-hood and undergoer-hood become less typical. An 'agent' is the x argument preceded by the notation **DO** ', for example, as in the verb *murder* as represented by **DO** '(x, [**do** '(x, [**kill** '(x, y))] CAUSE [BECOME **be-dead** '(y)]. Usually, the notation **DO** '(x is usually omitted in the representation, because agentivity is an implicature for most verbs. (Holisky 1987, Van Valin and Wilkins 1996; but see Hasegawa (1996: 60) who argues that many Japanese verbs, unlike English, are lexically agentive.)

(4) Actor-Undergoer Hierarchy



[The arrow indicates the increasing markedness of realizations of argument as actor or undergoer]

When a **pred** ' is preceded by **do** ', it denotes an activity predicate; the **pred** ' which is not preceded by **do** ' denotes a stative predicate. This diagram is a combination of the one in Van Valin (1993) and the one in VV & LP. Thematic roles in RRG are primarily determined in terms of the Aktionsart of a predicate and the position of arguments within a LS. RRG has no commitment to their labels.

Using the hierarchy, John in (1h) repeated below is the actor, while between *Mary* and *book*, the lower ranking argument, *book*, is chosen as the undergoer. The remaining argument, namely *Mary*, is called a ' non-macrorole core argument '.

(1h) ' John gave the book to Mary. '

[**do** '(John,  $\emptyset$ )] CAUSE [BECOME **have** '(Mary, book)]

The term ' argument ' is used in two senses. In one sense, it refers to semantic argument(s) that a predicate requires semantically. *Kill*, for example, takes two semantic arguments and *give* takes three semantic arguments. The other sense of argument refers to syntactic argument(s). We can see these two senses in the following example:

(5) The mouse was killed by the cat.

Here, *mouse* is a semantic argument as well as a syntactic core argument while *cat* is a semantic argument but not a syntactic core argument (‘core’ refers to a syntactic but not a semantic property). *Cat* is syntactically an adjunct, i.e., peripheral element in RRG terminology. *At six* in (6), a modifier of the phrase *John got up*, is also an adjunct.

(6) John got up at six.

*To the station* in (7) and *on the desk* in (8),

(7) John ran to the station

(8) John put the book on the desk

are called a ‘semantic/syntactic argument-adjunct’. An argument-adjunct is like an adjunct since neither of them is completely predictable from their LS. Note that *John ran* and *John put the book down* without an argument-adjunct are complete sentences. On the other hand, if they appear in sentences, they are construed as semantic/syntactic arguments of predicates rather than adjuncts.

## 1.2. Case

VV & LP propose case assignment rules for German and Icelandic as follows. I added ‘core’ in the definition as they note that ‘these rules apply within the core direct arguments only.’ (VV & LP:359)

(9) Case assignment rules for German and Icelandic

- a. Assign nominative case to the highest-ranking macrorole core argument.
- b. Assign accusative case to the other macrorole core argument.
- c. Assign dative case to non-macrorole core argument (default).

The rules are a semantics-based formulation with syntactic constraints incorporated. Interaction between semantics and syntax is most evident in a passive construction.

(10) He was hit by Mary.

LS: **do** '(Mary [**hit** '(Mary, 3sg.m)])

*Mary* would be the actor and a syntactic argument if the sentence were active, but in the passive sentence, *Mary* is an adjunct syntactically (i.e. actor-adjunct). Consequently, the other macrorole, namely the undergoer is the highest macrorole argument syntactically and receives nominative case. I will use the above formulation as a starting point to formulate the case assignment rules of Japanese.

## 1.3. Nexus and Juncture

In RRG, syntactic structures are represented as layered structures by using two notions, juncture and nexus. Juncture refers to the three levels of syntactic units, viz. clause, core, and nucleus. Each level is determined in terms of ‘operators’ that modify different levels. For example, aspect is a nuclear operator, which modifies a nuclear level unit. Deontic/root modality is a core operator; tense is a clause operator. Nexus indicates how these units are combined. There are three kinds of nexus, viz. subordination, cosubordination, and coordination. If one unit is embedded within another unit, it is subordination. If one of two units is not embedded under the other, but obligatorily share the same operator at the level in question, it is cosubordination. If two units are coordinated and each unit may have its own operator at the level, it is coordination. My main concern in this paper is nuclear junctures.

The sentence (11) is an example of nuclear cosubordination and the sentence (12) is an example of core coordination in French from VV & LP (p.443-444).

(11) Je ferai manger les gâteaux à Jean

I will.make eat the cakes to Jean

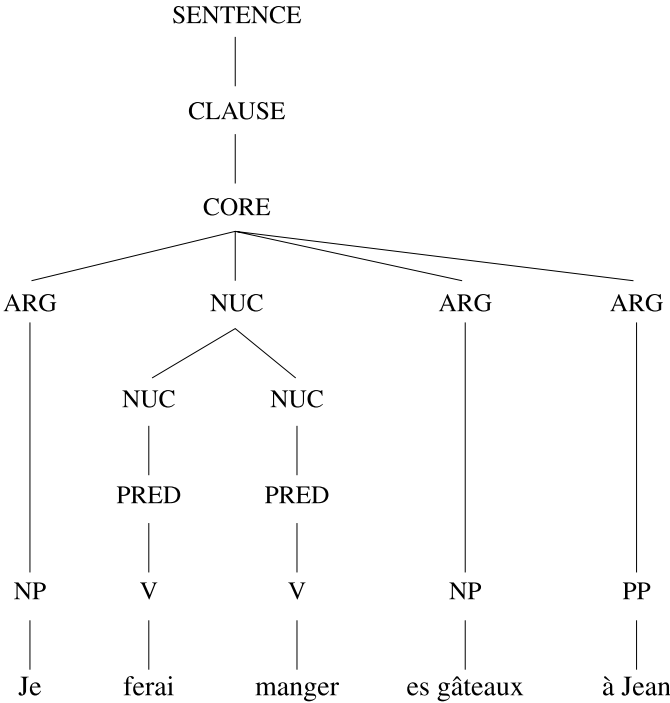
' I will make Jean eat cakes. '

(12) Je laisserai Jean manger les gâteaux.

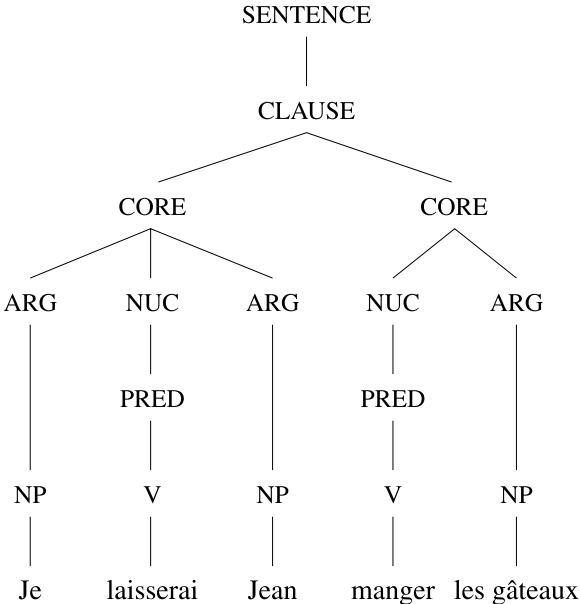
I will.let Jean eat the cakes

' I will let Jean eat the cakes. '

(11 ) Nuclear cosubordination



(12 ) Core coordination





Nuclei must be adjacent to each other in linear order in nuclear juncture as in (11), while nuclei may be separated by an argument in core juncture as in (12). This is a characteristic to distinguish nuclear juncture from core juncture in French. Hasegawa (1996) argues that, in Japanese, nuclear predicates in nuclear junctures cannot be separated by an element except by some particles such as a topic marker or nuclear-level operators. (See Hasegawa 1996: 67-70 for diagnostic tests of nuclear juncture in Japanese.)

(13a) Tegami-ga das-anai-de ar-u. (Hasegawa 1996: 88)

letter-NOM send -NEG-L be-NPST

‘ There is a letter which hasn’t been sent out. ’

(13b) Tegami-ga mada das-anai-de ar-u. (modified from Hasegawa 1996: 88)

letter-NOM still send -NEG-L be-NPST

‘ There is still a letter which hasn’t been sent out. ’

(13c) \*Tegami-ga das-anai-de mada ar-u.

letter-NOM send -NEG-L still be-NPST

‘ (int.) There is still a letter which hasn’t been sent out. ’

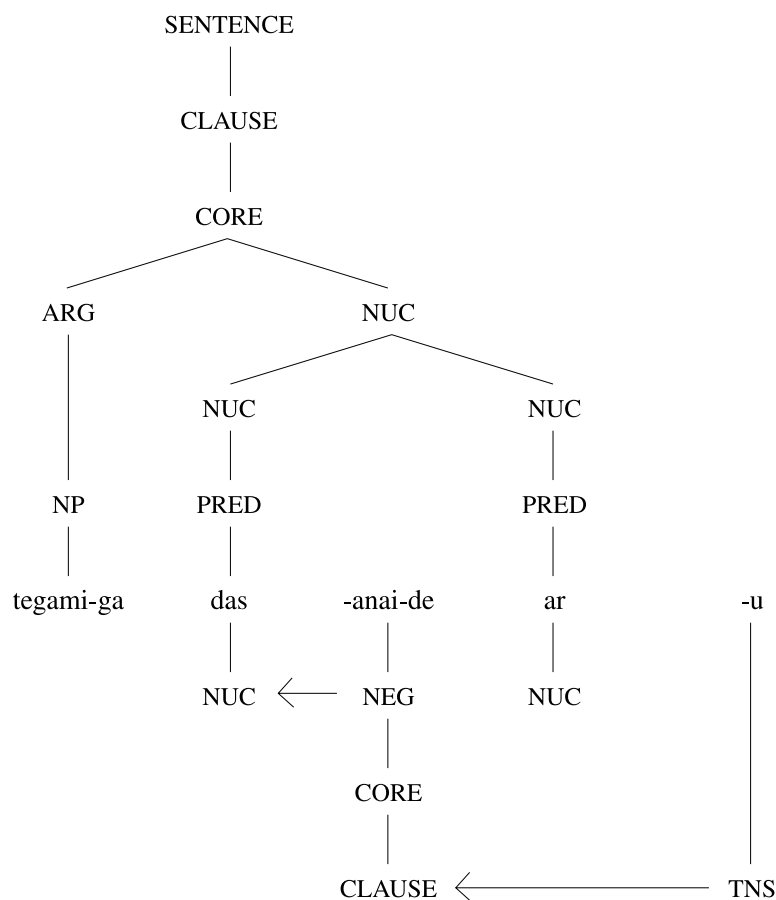
The sentence (13) is an example of nuclear coordination and (14) is an example of nuclear subordination in Japanese. (Hasegawa 1996: 87-88).

(14) John-ga soto ni kuruma-o tome-te ar-u

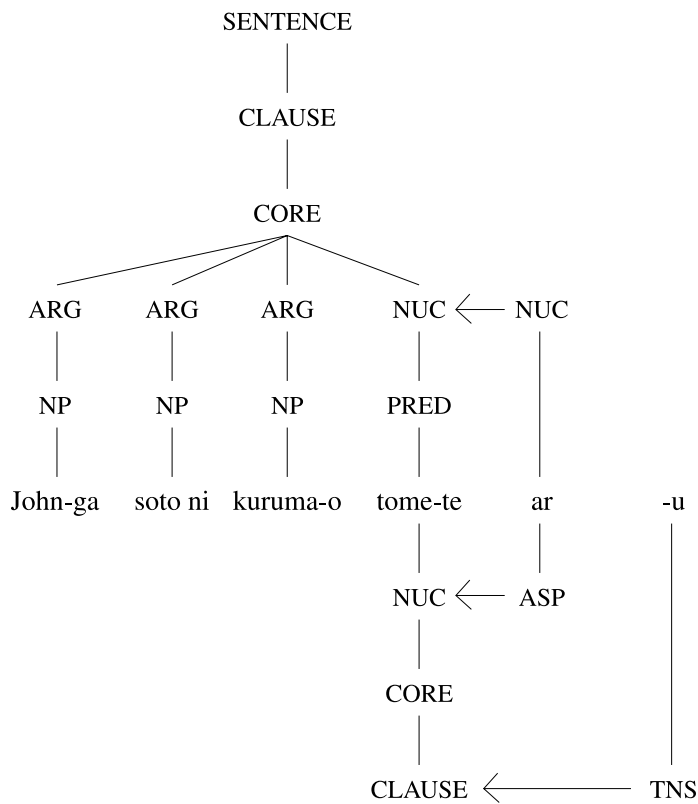
John-NOM outside LOC car-ACC stop-L be-NPST

‘ John has parked the car outside. ’

(13a ) Nuclear coordination



(14 ) Nuclear subordination



(14) is an example of nuclear subordination because ‘ the valence of the complex nucleus “ V-te ar- ” is identical with that of the TE-predicate (i.e. *tome-te*) itself...*ar-* makes no contribution to the argument structure ’ (Hasegawa 1996: 87). The representation of the layered structure is modified in accordance with VV & LP. By contrast, nuclear coordination and nuclear cosubordination may change the valence of the (first) predicate, which is the case in (13a). *Das-u* ‘ send ’ is a transitive verb, but when it is followed by *te-ar-* as in *das-i-te-ar-*, the valence is reduced by one and *das-i-te-ar-u* as a whole becomes an intransitive predicate. *Ar-* in (14) is an aspectual operator, while *ar-* in (13a) is a nuclear predicate. Note that *ar-* in (13a) is not an operator. If it were, *das-* ‘ send ’ would remain as transitive and *tegami* ‘ letter ’ would be marked by accusative. Thus, (13a) is either nuclear coordination or nuclear cosubordination but not subordination. In order to determine the nexus between the two possibilities, we look at nuclear operator sharing. Since the first predicate *das-* ‘ send ’ takes its own nuclear operator in (13a ), it is coordination.

## 2. Logical Structures and Case

### 2.1. Transitive Construction

Typical examples with transitive verbs are (1) in the active voice and (2) in the passive voice.

- (1) Hanako-ga Taro-o tatai-ta.  
 Hanako-NOM Taro-ACC hit-PAST  
 ‘ Hanako hit Taro. ’

- (2) Taro-ga (Hanako ni) tatak-are-ta.

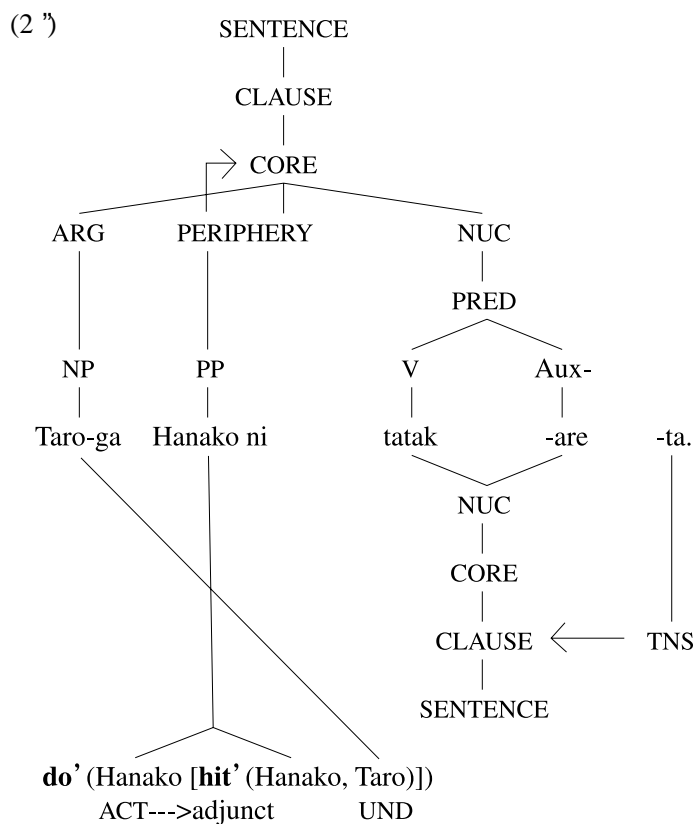
Taro-NOM (Hanako by) hit-PASS-PAST

' Taro was hit by Hanako. '

**do** '(Hanako [**hit** '(Hanako, Taro)])

ACT--->adjunct      UND

*Hanako-ni* is an actor-adjunct. The presence of the passive morpheme *-(r)are-* reduces the number of core arguments, since an argument is ' demoted ' to the periphery or may be totally deleted from the clause. The passive morpheme *-(r)are-* is within a nucleus, but it is not predicative by itself since it does not have its own meaning besides reducing the number of arguments in direct passives. It is labeled as an auxiliary verb since it becomes inflected by tense like verbs. The layered structure, the logical structure, and their linking for (2) are as follows:



VV & LP's case assignment rules for Icelandic and German account for these Japanese examples as well. The rules are repeated below.

(3) Case assignment rules for German and Icelandic (VV & LP: 359)

- (a) Assign nominative case to the highest-ranking macrorole core argument.
- (b) Assign accusative case to the other macrorole core argument
- (c) Assign dative case to non-macrorole core argument (default)

For example, in (2), the higher macrorole, which is the undergoer since the actor is ' demoted ' to an adjunct, receives nominative case. Strictly speaking, the actor is not ' demoted ' as Relational Grammar

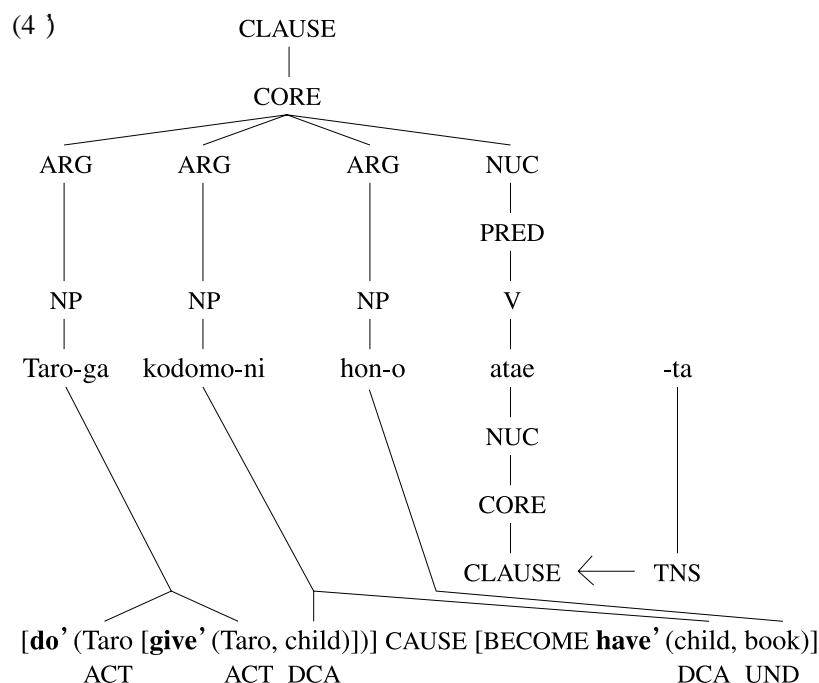
puts it. Non-derivational RRG regards the superficial ‘ demotion ’ as an alternative linking between the LS and syntax. The actor is linked to an adjunct whereas the undergoer is linked to the ‘ subject ’. The former was called backgrounding, the latter was called foregrounding in Foley and Van Valin (1984). In order to avoid the confusion with terminology referring to pragmatic saliency in cognitive linguistics, VV&LP:(P.294) refer to them as ‘ Privileged Syntactic Argument Modulation ’ and ‘ Argument Modulation ’ respectively. I simply adopt ‘ demotion ’ and ‘ promotion ’ without a commitment to the derivational view of Relational Grammar.

## 2.2. Ditransitive Construction

An example of ditransitive sentence is:

- (4) Taro-ga kodomo-ni hon-o atae-ta.  
 Taro-NOM child-DAT book-ACC give-PAST  
 ‘ Taro gave a book to the child. ’

The layered structure of (4) is:



The identically represented semantic arguments in the LS (the first and the second *Taro*; the first and the second *kodomo* ‘ child ’ in the LS respectively) receive the same syntactic-semantic value.

Case marking of ditransitive sentences in the active voice follows the case assignment rule introduced above. The actor *Taro*, the higher macrorole, takes nominative according to the rule (3a). The undergoer *hon* ‘ book ’, the other macrorole, takes accusative according to (3b). By the rule (3c), the remaining core argument, the recipient, takes dative by default.

However, the rules fail to account for case marking of passive sentences with a ditransitive in Japanese. In Japanese, not only the theme, as in (5), but also the recipient may be passivized as in (6). Note that the recipient is a non-macrorole core argument and there is no dative shift in Japanese.

(5) Hon-ga      Kodomo-ni      (Taro ni-yotte)      atae-rare-ta  
 book-NOM child-DAT      (Taro by      give-PASS-PAST  
 ' The book was given to the child (by Taro). '

(6) Kodomo-ga      (Taro ni)      hon-o      atae-rare-ta .  
 child-NOM      (Taro by)      book-ACC      give-PASS-PAST  
 ' The child was given the book (by Taro). '

The actor-adjunct is coded by *ni-yotte* rather than *ni* in (5) in order to avoid the ambiguity of homophones (i.e. the recipient and actor-adjunct).

For the sake of comparison, let us examine related English constructions. In English, verbs such as *present* and *give* alternate undergoer assignment between the theme and the recipient. (VV & LP: 338-360)

(7a) He presented them to Mary  
 [do '(he [present '(he, Mary)])] CAUSE [BECOME have '(Mary, them)]  
 ACT                      OCA                                      UND

(7b) They were presented to Mary (by him).  
 UND                                      OCA (actor-adjunct)

(8a) He presented her with the books.  
 [do '(he [present '(he, her)])]CAUSE [BECOME have '(her, the books)]  
 ACT                                                                                      UND      OCA

(8b) She was presented with the books (by him).  
 UND                                      OCA      (actor-adjunct)

Case assignment rules introduced above apply to these English examples. In passive sentences (7b) and (8b), the highest macrorole core argument, receiving nominative case, is the undergoer since the actor is an adjunct. The remaining syntactic core argument, which is called an ' oblique core argument ', receives dative case as default in (7b). It is marked by the *with* preposition in (8b). Alternation of the undergoer with the verb *give* is known as a ' dative shift '.

(9a) John gave them to her.

(9b) John gave her the books.

(9c) \*John gave her them.

In (9a), *them* is the undergoer, whereas in (9b), *her* is the undergoer. The case of *the books* in (9b) is not overtly marked. Both *her* and *the books* in (9b) must be accusative, given that they are not nominative. (9a) and (9b) can be passivized. Many American English speakers (but not British English speakers) find passivization of the theme in (9b) ungrammatical. It indicates American English has the constraint that only an undergoer may be passivized.

(9a ) They were given to her by John.

(9b ) She was given the books by John.

(9b ) \*?The books were given her by John.

Acceptability of passivization in the dative shift sentences is controlled by the interaction of foregrounding versus backgrounding (in the sense of a cognitive operation), topicality, and speaker's

perspective. (9b) indicates *her* is relatively foregrounded compared to *the books*. Topicalization of the foregrounded *her* as in (9b) is pragmatically natural, however topicalization of *the book* is odd because the dative shift in (9b) is the operation of backgrounding *the books*, while topicalization of *the books* in (9c) is foregrounding *the books*. Two operations contradict each other in terms of pragmatics, which leads to the oddity.

Load/spray verbs also show undergoer assignment alternation.

(10a) John loaded the hay on the wagon.

[do '(John [load '(John, wagon)])] CAUSE [be-on '(wagon, hay)]  
 ACT OCA UND

(10b) John loaded the wagon with the hay.

[do '(John [load '(John, wagon)])] CAUSE [be-on '(wagon, hay)]  
 ACT UND OCA

(11a) They loaded a box onto the truck. (Yasui 1987: 147)

(11b) \*They loaded the truck with a box. (Yasui 1987: 147)

(11c) They loaded the truck with a single, enormous box.

(10a) is considered to be the unmarked undergoer assignment, whereas (10b) is considered to be the marked undergoer assignment in RRG. Marked assignment of macroroles is motivated by pragmatics and/or semantics. In (10a), the undergoer *the hay* receives a holistic interpretation, whereas the *wagon* receives a partitive interpretation. This holistic-partitive relation reverses in (10b) in accordance with undergoer assignment alternation. (11b) is ungrammatical because the holistic interpretation of *the truck* is not possible with a single box. However, Van Valin (p.c.) pointed out that (11c) is grammatical since a holistic interpretation is possible, even with a single box.

Not all verbs taking a goal allow the undergoer shift. *Put*, for instance, taking a typical goal, does not.

(12a) John put the hay on the wagon.

do '(John [put '(John, wagon)]) CAUSE [be-on '(wagon, hay)]  
 ACT AAJ, UND

(12b) \*John put the wagon with the hay.

Japanese lacks the undergoer assignment alternation. How then can we account for a sentence like (6) repeated below, which assigns nominative case to a non-macrorole core argument?

(6) Kodomo-ga (Taro ni) hon-o atae-rare-ta .  
 child-NOM (Taro by) book-ACC give-PASS-PAST  
 ' The child was given the book (by Taro). '

I propose that ' pragmatic peak ' is another motivation to assign nominative case in Japanese. ' Pragmatic peak ' refers to the most salient argument in a simple clause. The terminology is adopted from early RRG. Van Valin and Foley (1980:338-339) say:

Pragmatic salience is established by two interacting factors, discourse prominence (i.e. definiteness, specificity, and givenness), on the one hand, and what Zubin (1979) calls the speaker's ' focus of interest, ' on the other, that is, that participant which the speaker treats as most salient in the situation

under consideration. The pragmatically most salient NP in a clause is called PRAGMATIC PEAK....According to Zubin (1979), the speaker's focus of interest plays the primary role in German in determining which NP will occur as the pragmatic peak in the nominative case,...These two sets of pragmatic factors can be characterized as ' speaker related ' and ' hearer related '. The speaker-related factors are those discussed by Zubin and reflect the speaker's judgment about the relative importance of the participants in a situation.... The hearer-related factors, on the other hand, are those of definiteness, specificity, and givenness, which are tied up with speaker's assumption about hearer's ability to identify the referents of NPs and about what has been established in the discourse context.

What I refer to as ' pragmatic peak ' is similar to Zubin's ' focus of interest '. Both are speaker-related factors. Hearer-related factors are usually called ' topic '. The pragmatic peak and discourse topic are distinct notions, therefore the pragmatic peak may actually be manifested as either a discourse focus (coded by the nominative *ga*) as in (13a), a discourse topic (the nominative *ga* is replaced by a topic particle *wa*) as in (13b), or a deleted topic (i.e. zero anaphor) as in (13c). If the pragmatic peak takes a surface case, it is nominative.

(13a) Taro-ga daigaku e it-ta.

Taro-NOM college to go-past

' Taro went to college. '

(13b) Taro-ga daigaku e it-ta. Taro-wa keizaigaku -o benkyoo-si-ta.

Taro-NOM college to go-past. Taro-TOP economics-ACC study-do-past.

' Taro went to college. Taro studied economics. '

(13c) Taro-ga daigaku e it-ta. Sosite, Ø keizaigaku-o benkyoo-si-ta.

Taro-NOM college to go-past. and economics-ACC study-do-past.

' Taro went to college. And (he) studied economics. '

Discourse focus is subsumed under the pragmatic peak, thus exhaustive *ga* (Kuno 1973) is one manifestation of a pragmatic peak (cf. see section 2.3 for examples). The pragmatic peak may be best defined as a sum of various factors. The following are candidates to determine the pragmatic peak. They are not meant to be exhaustive or hierarchically ordered.

(14) (a) A figure is more likely to be the pragmatic peak than the ground --- [Figure-ground hierarchy].

(b) Discourse focus is more likely to be the pragmatic peak.

(c) An animate nominal is more likely to be the pragmatic peak than an inanimate nominal----  
[Animacy hierarchy].

(d) A higher argument is more likely to be the pragmatic peak than a lower argument in the LS ---  
[Argument hierarchy]. (An argument that appears toward the left in the LS is higher than an argument that appears toward the right. For instance, in a schematic LS [**pred** '(x, y) CAUSE **pred** '(y, z)], x is higher than y, in turn, y is higher than z.)

(e1) The actor is more likely to be the pragmatic peak than the undergoer.

(e2) A macrorole is more likely to be the pragmatic peak than a non-macrorole core argument ---  
[Macrorole hierarchy].

(f) The pragmatic peak must be a core argument.

The pragmatic peak is manifested as nominative in Japanese (the same is true of German, as stated by Zubin) but the reverse is not necessarily true. There are nominative NPs which are not pragmatic peaks as we will see later. A pragmatic peak may interact with syntax but not necessarily determine a controller, a pivot, or a subject. Case and postposition assignment rules for Japanese, with the notion of pragmatic peak incorporated, are formulated as follows:

(15) Case/postposition assignment rules (Japanese)

- (P) Assign nominative case to the pragmatic peak.
- (A) Assign nominative case to the higher-ranking macrorole core argument.
- (B) Assign accusative case to the other macrorole core argument.
- (C) Assign dative case to the other core argument as default (Direct Core Argument)
- (C ') The other core argument may take a postposition (Oblique Core Argument)

(16) Nature of macrorole ranking

A 'demoted' macrorole is respected in terms of macrorole ranking even if it is not assigned case. The rules apply in the order listed above. The rule (15P) is added to the former rules. In many instances, addition of (15P) is trivial because the higher-ranking macrorole core argument and the pragmatic peak are expressed by the same NP. I will discuss the nature of macrorole ranking, shortly.

Let us examine how the new rules handle the ditransitive sentences repeated below.

(17) Taro-ga      Kodomo-ni hon-o            atae-ta  
 Taro-NOM    child-DAT   book-ACC      give-PAST  
 ' Taro gave a book to the child. '

[do '(Taro [give '(Taro, child)])] & [have '(child, book)]  
 ACT=peak                                                          DCA    UND

(18) Hon-ga      kodomo-ni (Taro ni-yotte) atae-rare-ta  
 book-NOM    child-DAT   (Taro by)      give-PASS-PAST  
 ' The book was given to the child (by Taro). '

[do '(Taro [give '(Taro, child)])] & [have '(child, book)]  
 ACT--->adjunct                                                          DCA    UND=Peak

(19) Kodomo-ga Taro ni      hon-o            atae-rare-ta .  
 child -NOM Taro by      book-ACC      give-PASS-PAST  
 ' The child was given the book by Taro. '

[do '(Taro [give '(Taro, child)])] & [have '(child, book)]  
 ACT--->adjunct                                                          DCA=peak    UND

Case marking in (17) is straightforward and requires no explanation. Between (18) and (19), the choice of the pragmatic peak alternates. In (18), *hon* 'book' is chosen as the pragmatic peak because the undergoer outranks a non-macrorole for the choice of pragmatic peak. In (19), on the other hand, different criteria apply. The animate *kodomo* 'child' outranks the inanimate *hon* 'book', furthermore, the higher argument *kodomo* 'child' outranks the lower argument *hon* 'book'. Note that, in neither sentence, the actor-adjunct *Taro* cannot be the pragmatic peak. In (18), *hon* 'book' takes nominative by



the rule (15P); *kodomo* 'child' takes dative by the rule (15C). In (19), *kodomo* 'child' takes nominative by (15P). *Hon* 'book' in (19) would be the highest macrorole receiving nominative if the actor-adjunct were not counted which would be true in Icelandic and German but not in Japanese. In order to account for the fact that the undergoer takes accusative but not nominative, I proposed the 'nature of macrorole ranking' in (16). The actor-adjunct or the implicit actor after ellipsis at syntax level is still counted as the higher macrorole at semantics. Thus, the undergoer *hon* 'book' is counted as the lower (i.e. the other) macrorole. The rule (15A) fails to apply to the actor-adjunct or the implicit actor since they are not syntactic core arguments. The rule (15B) applies to *hon* 'book' and assigns it accusative. Thus, both (18) and (19) are potential passive counterparts of (17). One of the two forms is chosen based on the context. (18) is used when the context requires *hon* 'book' to be the focus, while (19) indicates *kodomo* 'child' is the focus, such as an answer to wh-question sentences. (18) is used when there is a presupposition that something was given to the child, whereas (19) is used when there is a presupposition that somebody was given the book.

An example of an oblique core argument is the goal of the verb *okuru* 'to send'. *Okuru* is ambiguous in the meaning between 'to send' and 'to present, give'. They are homophones but orthography differentiates them by different characters. *Okuru* 'to send' in (20) takes a goal nominal, whereas *okuru* 'to present or to give' in (21) takes a recipient.

(20) Taro-ga afurika kara Hanako ni kozutumi-o okut-ta.  
 Taro-NOM Africa from Hanako to parcel-ACC send-PAST

'Taro sent a parcel to Hanako from Africa.'

**do** '(Taro,[**send** '(Taro, Hanako)])CAUSE[[NOT **be-at** '(Africa, parcel)]&[**be-at** '(Hanako, parcel)]]  
 ACT AAJ OCA UND

(21) Taro-ga Hanako-ni yubiwa-o okut-ta.  
 Taro-NOM Hanako-DAT letter-ACC present-PAST

'Taro presented a ring to Hanako.'

**do** '(Taro, [**present** '(Taro, Hanako)]) CAUSE [**have** '(Hanako, ring)]  
 ACT DCA UND

Although Hanako is a human in (20), it is construed as a goal, but not a recipient. We can argue for this view based on the facts that 1) *Hanako* is paired with the source of geographic location *afurika* 'Africa'; 2) *Hanako* may be replaced by an explicitly 'localized' NP *Hanako no tokoro* 'Hanako's place' or *Hanako no moto* 'the place where Hanako stays at'; 3) *Hanako* may be replaced by a goal of geographic location such as *Tokyo*. None of these three applies to the recipient of (21). The recipient may be replaced by *Tokyo*, but only if *Tokyo* is interpreted as an organization. It is noteworthy that the passivization of a recipient is perfectly fine while the passivization of a goal is anomalous. The interpretation I get from (20) is an adversative passive reading, where Taro sent a parcel to somebody else from Africa, and Hanako was affected.

(20)?? Hanako-ga afurika kara Taro ni kozutumi-o okur-are-ta.  
 Hanako-NOM Africa from Taro by parcel-ACC send-PASS-PAST

'(int.) Hanako was sent a parcel from Africa by Taro.'

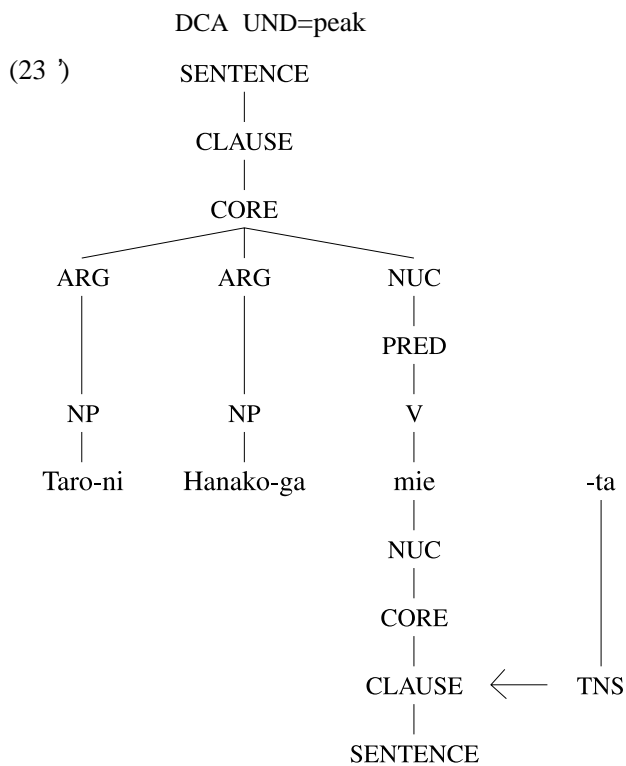
- (21 ) Hanako-ga Taro ni yubiwa-o okur-are-ta.  
 Hanako-NOM Taro by ring-ACC present-PASS-PAST  
 ' Hanako was presented a ring by Taro. '

### 2.3. Inversion construction (Nominative-dative construction)

Inversion is the construction in which the so-called subject is coded by dative and the so-called object is coded by nominative.

- (22) Taro-ni sono imi-ga wakat-ta.  
 Taro-DAT that meaning-NOM understand-PAST  
 ' Taro understood the meaning. '  
 BECOME **know** '(Taro, meaning)  
 DCA UND=peak

- (23) Taro-ni Hanako-ga mie-ta.  
 Taro-DAT Hanako-NOM visible-PAST  
 ' Taro saw Hanako. (lit.) Hanako was visible to Taro. '  
**visible** '(Taro, Hanako)  
 DCA UND=peak



The pragmatic peak *Hanako* in (23) receives nominative case by the case assignment rule (15P). The higher macrorole argument is the undergoer because there is no actor. The rule (15A) says to assign nominative to the higher macrorole, namely *Hanako*. However it has been already assigned nominative case by the rule (15P), therefore the rule (15A) does not apply. The remaining non-macrorole core argument is assigned dative by the rule (15C). In Japanese, a single macrorole is the default for predicates containing no [+activity] (i.e. state, achievement, and accomplishment without **do** '...)

predicate). I propose the principle of M(acrorole)-transitivity for Japanese (and other languages with many inversion verbs) as follows:

(24) M-Transitivity Principle for Japanese

If a predicate has no activity predicate in its LS, the predicate is M-intransitive as default (i.e. it takes a single macrorole).

Van Valin (1993:47)'s Default Macrorole Assignment Principles state that ' [f]or verbs which take one macrorole,...[and if] the verb has no activity predicate in the LS, the macrorole is undergoer. 'The principle (24) with the Default Macrorole Assignment Principles predict that a stative predicate has an undergoer but not an actor.

Other examples of inversion verbs are:

- (25) *kikoe-ru* ' to be audible ' **audible** '(x, y)  
*deki-ru* ' can do ' **able** '(x, y)  
*i-ru/hituyoo-da* ' to need ' **need** '(x, y)  
*ar-u* ' to have ' **have** '(x, y)  
*nai* ' not have ' **NOT.have** '(x, y)  
*kowai* ' be afraid of ' **afraid** '(x, y)

- (26) *Ningen-ni wa 50 herutsu ika-no oto-ga kikoe-nai.*  
human.beings-DAT TOP 50 Hz under-GEN sound-NOM audible-not  
' Human beings can not hear the sound under 50 Hz. '

Potential verbs derived by adding *-(ar)e-r-* to a verb stem are productive.

- (27) *kak-e-ru* ' can write ' **write.able** '(x, y) cf. *kak-u* ' to write '  
*yom-e-ru* ' can read ' **read.able** '(x, y) cf. *yom-u* ' to read '  
*tsuka-e-ru* ' can use ' **use.able** '(x, y) cf. *tsuka-u* ' to use '  
*taber-are-ru* ' can eat ' **eat.able** '(x, y) cf. *taber-u* ' to eat '  
*kir-are-ru* ' can wear ' **wear.able** '(x, y) cf. *kir-u* ' to wear '

- (28) *Kumon kaado de benkyoo sure-ba, 3 sai-no kodomo-ni mo kanji-ga*  
Kumon cards by study do-if, 3 years.old-GEN child-DAT also kanji-NOM  
*yomeru-yoo ni naru.*  
read.able-nominalizer to become

' If he/she studies by using Kumon cards, even a three-year-old child becomes to be able to read kanji (chinese characters). '

The majority of inversion verbs have an alternative case marking pattern. Both arguments may be coded by nominative.

- (29a) *Taro-ni okane-ga hituyooda*

Taro-DAT money-NOM need

' Taro needs money. '

**need** '(Taro, money)

DCA UND=peak

(29b) Taro-ga okane-ga hituyooda  
 Taro-NOM money-NOM need  
 ' Taro needs money. '  
**need** '(Taro, money)  
 DCA=peak UND

The two arguments in the inversion construction are equally good candidates for the pragmatic peak. On the one hand, *Taro*, a human nominal, is more likely the pragmatic peak than the inanimate *okane* ' money ' according to the animacy hierarchy. In addition, *Taro*, the higher argument is more likely to be the pragmatic peak than the lower argument *okane* ' money ', according to the argument hierarchy. On the other hand, a macrorole argument, namely the undergoer *okane* ' money ', is more likely to be the pragmatic peak than non-macrorole *Taro*. In (29b), the case marking rule (15P) assigns the pragmatic peak *Taro* nominative. The undergoer is the higher macrorole because there is no actor even in the periphery. The rule (15A) assigns nominative to the undergoer. The result is a double nominative construction. When a speaker pays more attention to the non-macrorole direct core argument than the undergoer, the pragmatic peak shifts to the non-macrorole argument. It is the context that helps choose one of the two alternatives. In (29 'b), *Taro* is the focus, i.e. pragmatic peak, since *Taro* is compared with others. Example (29 'b) is more natural than (29 'a) since *Taro* is coded by nominative in (29 ). As the result, the sentence becomes a double nominative construction. In (29 'a), *okane* ' money ' is the focus, i.e. pragmatic peak, since *okane* is compared with others. Example (29 'a) is more natural than (29 'b) since not *Taro* but *okane* is marked by nominative in (29 'a).

(29 'a) ?Dare-yorimo Taro-ni okane-ga hituyooda  
 anybody-than Taro-DAT money-NOM need  
 ' Taro needs money more than anybody else. '  
 (29 'b) Dare-yorimo Taro-ga okane-ga hituyooda  
 anybody-than Taro-NOM money-NOM need  
 ' Taro needs money more than anybody else. '  
 (29 'a) Taro-ni nani-yorimo okane-ga hituyooda  
 Taro-DAT anything-than money-NOM need  
 ' Taro needs money more than anything else. '  
 (29 'b) ?Taro-ga nani-yorimo okane-ga hituyooda  
 Taro-NOM anything-than money-NOM need  
 ' Taro needs money more than anything else. '

Voice morphology affects the number and linking of macroroles as we saw in the transitive and ditransitive constructions in Japanese. The inversion construction, however, is not coded morphologically on the verb. Therefore we can safely say that the macrorole value is intact in inversion sentences, which consequently guarantees the occurrence of double nominatives by following the case assignment rules. There are a handful of predicates whose x argument as well as y argument must take nominative case.

(30) *zyoosu-da* ' be good at ' **skillful** '(x, y)  
*heta-da* ' be poor at ' **bad** '(x, y)

<i>hosii</i>	‘ want ’	<b>want</b> ‘(x, y)
<i>suki-da</i>	‘ like ’	<b>fond</b> ‘(x, y)
<i>kirai-da</i>	‘ dislike ’	<b>hateful</b> ‘(x, y)

e.g. Taro-ga/\*ni Hanako-ga sukida.  
 Taro-NOM/\*DAT Hanako-NOM like  
 ‘ Taro likes Hanako. ’

Tentative explanations for the contrast between (30) versus (25),(27) are as follows. Predicates of (25), (27) but not (30) allow the undergoer to be construed as being the pragmatic peak. Ability, possession, and necessity in (25),(27) are construed as being located at animate nominals. Locatives are cognitively the ground, rather than the figure. In perception predicates, such as *mieru* ‘ can see, be visible ’ and *kikoeru* ‘ can hear, or be audible ’, the percept figuratively moves from its origin to the perceiver (cf. fictive motion in Talmy 1995). The percept is the figure, and the end point or the perceiver, is the ground. The former is construed as the pragmatic peak. Such interpretation is not available for (30). The animate nominal x, rather than the locative y, is more likely to become the pragmatic peak according to the animacy hierarchy.

*Wakaru* ‘ understand ’ may take an adverbial *5-fun-de* ‘ in five minutes ’ indicating [+telic].

(31) Taro-ni/-ga sono kotae-ga 5-fun de wakat-ta  
 Taro-DAT/-NOM that answer-NOM 5-minutes in understand-PAST  
 ‘ Taro understood the answer in five minutes. ’

It shows that *wakaru* ‘ understand ’ in this sentence is an accomplishment and the LS for (31) is:

(31 ’) BECOME **know** ‘(Taro, answer)  
 DCA UND

*Wakaru* ‘ understand ’ in the next sentence is a state as it is evident from simple present. The non-past form, i.e. -u ending verbs, denotes simple present if the predicate is state. Other verbs in non-past denote future in Japanese, e.g. *taberu* ‘ to eat or will eat ’.

(32) Taro-ga/ni Furansugo-ga wakar-u.  
 Taro-NOM/DAT French-NOM understand-NPST  
 ‘ Taro understands French. ’  
**know** ‘(Taro, French)

When *wakaru* is embedded in a causative phrase, the theme must be coded by accusative.

(33) Boku-wa Mary-ni kore-o /\*-ga wakara-se-ru. (Kuno 1973: 139)  
 I-TOP Mary-DAT this-ACC/\*-NOM understand-CAUSE -NPST  
 ‘ I will make Mary understand this. ’

Kuno argues as follows:

‘ *[W]akar* ‘ to understand ’ is [+stative] and thus takes *ga* for making its object. When it is followed by the causative *-(s)ase*, however, the whole form *wakar-(s)ase* ‘ to make (someone) understand ’ becomes [-stative] because of the [-stative] feature of *-(s)ase*. Thus *ga* cannot be used to mark the object or this derived form. (1973: 139)

In our account, case marking of (33) falls out naturally from its LS.

(33) [do '(I, Ø)]CAUSE [BECOME know '(Mary, this)]

ACT

DCA UND

*Kore* 'this', the undergoer, takes accusative, whereas *Mary*, the non-macrorole core argument, takes dative as default.

Kuno cites another example which does not alter case marking even though the right most element is [-stative].

(34) John-wa nihongo-ga wakari hazime-ta. (ibid.143)

John-TOP Japanese-NOM understand begin-PAST

' John began to understand Japanese. '

He argues that:

Affixes seem to influence the case marking of the object of the derived forms only when they are bound forms (such as the causative -(s)ase)...*Hazime-ru* is an independent verb that means 'to begin'. Since *hazime-ru* in itself implies an action, derived compound verbs are also [-stative]. However, it does not influence the case marking of the object of the verbs to which it is added. (ibid.142-143)

Kuno stipulates that bound morphemes influence case marking, while free morphemes do not. Matsumoto (1992) criticizes Kuno's stipulation and proposes that *wakara-seru* 'cause to understand' is a single predicate and therefore mono-clausal in f-structure (in LFG), while *wakari-hajimeru* 'begin to understand' is bi-clausal in f-structure. In a single predicate clause, the whole predicate namely non-stative *wakara-seru*, governs the object and assigns accusative. Whereas in a bi-clausal sentence, only the head, namely the stative *wakaru* 'understand' but not non-stative *hajimeru* 'to begin', governs the object and assigns nominative case. Contrary to Matsumoto's claim, it has been agreed in the literature that causative sentences are bi-clausal-like to some extent, while aspectual elements (i.e. a partial verb of a compound verb or a serial verb which indicates some aspectuality) are not usually considered to contribute to bi-clausal structures. In our account, the reason that *hajimeru* 'to begin' does not influence the case marking falls out naturally by referring to the LS. *Hajimeru* 'to begin' is not a predicate but an aspectual verb, thus it does not appear in the LS. The LS of (34) is [BECOME know '(John, Japanese)].<sup>1)</sup> When *nihongo* 'Japanese' is chosen as the pragmatic peak, we get dative-nominative, when *John* is chosen as the pragmatic peak, we get nominative-nominative.

Potential predicates have three alternatives in case marking. (35c) is a new form gaining popularity among new generations.

---

1) Note that BECOME is due to *wakaru* 'to become to) understand' in the same vein as in (31) but not due to *hajimeru* 'to begin or to start'. It is also worthy to point out that *hajimeru* 'to begin' is a transitive verb if it is used as a full verb, whereas it does not affect case marking when it is used as an aspectual operator.

a) Taro-ga benkyoo-o hajime-ta. (*hajimeru* as a transitive verb)  
Taro-NOM study-ACC begin-PAST

' Taro started his study. '

b) Akanboo-ga naki-hajime-ta. (*hajimeru* as an aspectual operator)  
baby-NOM cry-begin-PAST

' The baby started crying. '

- (35a) John-ni furansugo-ga hanas-e -ru  
 John-DAT French- NOM speak-POTENTIAL -NPST  
 DCA UND=peak
- (35b) John-ga furansugo-ga hanas-e -ru.  
 John-NOM French-NOM speak-POTENTIAL -NPST  
 DCA=peak UND
- (35c) John-ga furansugo-o hanas-e -ru.  
 John-NOM French-ACC speak-POTENTIAL -NPST  
 ACT=peak UND

' John can speak French. '

Potential predicates in (35a) and (35b) are [+static]. However, case marking of (35c) indicates the predicate is [+activity]. The potential morpheme *-e-* is affecting the meaning of the whole sentence, namely making the whole sentence [+static]. Nevertheless, the morpheme does not affect case marking in (35c). Furthermore, even though the predicate in sentence (35c) must be an activity in terms of case marking, it is not compatible with a volitional or a progressive form which we expect to be compatible with activity predicates.

- (35c ') \*John-ga furansugo-o hanas-e -te-i -ru.  
 John-NOM French-ACC speak-POTENTIAL-L -PROG -NPST  
 ACT=peak UND

' \*John is being able to speak French. '

- (35c ") \*John-ga furansugo-o hanas -e -yoo to si-ta.  
 John-NOM French-ACC speak-POTENTIAL -VOLITIONAL COMP do-PAST

' \*John tried to be able to speak French. '

It suggests that there is an on-going transition from a stative to an activity.

## 2.4. Nominative-ni postposition construction

### 2.4.1. Motion verbs

Some examples of this class are: *iku* 'to go', *kuru* 'to come', *hairu* 'to enter', *noru* 'to get on', *atumaru* 'to congregate', *chikazuku* 'to come close', *kaeru* 'to return or to go back', *modoru* 'to return or to go back', *hiromaru* 'to disperse', *utsuru* 'to move to another place' (many of these examples are from Teramura 1982)

- (36a) Taro-ga heya ni/e hait-ta  
 Taro-NOM room to/to enter-PAST  
 ' Taro entered the room. '
- do** '(Taro, [move '(Taro)]) & [INGR **be-in** '(room, Taro)]  
 ACT ACT OCA ACT

- (37) Taro-ga gakkoo ni/e it-ta.  
 Taro-NOM school to/to go-PAST  
 ' Taro went to school. '

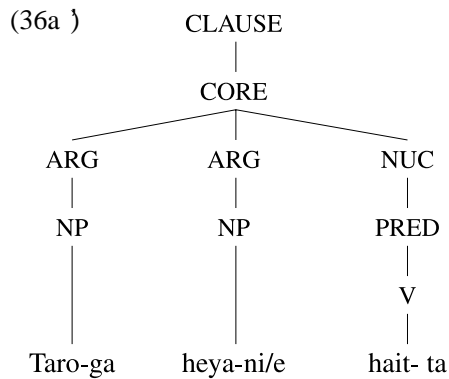
**do** '(Taro, [move.away.from.ref.point (Taro)]) & [INGR be-at '(school, Taro)]

ACT

ACT

OCA ACT

The highest argument and the lowest argument in the LS are identical, namely *Taro*, thus, there are two possibilities to assign a macrorole to this argument, either actor or undergoer. In such a case, the higher macrorole on the actor-undergoer hierarchy is chosen. Therefore, *Taro* is an actor and receives nominative case by the rule (15P) and by the rule (15A). The remaining *heya* 'room' is the oblique core argument in the same vein as a goal of ditransitive verbs. It is followed by a directional postposition *ni* which should be distinguished from dative *ni*. The layered structure is:



The verbs in this class have an alternative LS, for example, the verb *hairu* 'enter', when it is followed by *te-iru* form, manifests another LS as in (38a):

(38a) Taro-ga heya ni/e hait-te i-ru.

Taro-NOM room to/to enter-L-RSLT-NPST

'Taro has entered the room.' or 'Taro is in the room.' \* 'Taro is entering the room.'

INGR **be-in** '(room, Taro)

OCA UND

The morpheme *-i-*, otherwise glossed as progressive, is glossed as RSLT (resultative) in (38a). It denotes resulting state of an event but not the continuation of motion. When a verb is used in a sense of resultative meaning, it lacks internal temporal continuity. They are construed as perfective (i.e. achievement) and perfect. (cf. definition by Comrie 1976.) Thus (36b) allows the co-occurrence of a pace adverb but (38b) does not. The grammaticality of (36b) is attributed to an activity LS component. The sentence is an active-achievement. The ungrammaticality of (38b) is due to the lack of an activity component

(36b) Taro-ga yukkuri heya ni/e hait-ta

Taro-NOM slowly room to enter-PAST

'Taro entered the room slowly.'

**do** '(Taro, [move '(Taro)]) & [INGR **be-in** '(room, Taro)]

(38b) \*Taro-ga yukkuri heya ni hait-te -i -ru.

Taro-NOM slowly room in enter -L-RSLT-NPST

\* 'Taro has slowly entered the room.'

INGR **be-in** '(room, Taro)



(38b) becomes acceptable when a speaker is reporting the activity on the spot. The speaker pays more attention to the internal structure of the event rather than taking the event as a single whole (cf. Comrie 1976). In such an imperfective reading, the LS gains the activity component as in (36). Motion verbs in this section are traditionally categorized as punctual verbs. (cf. *shunkan-dooshi* 'i.e. punctual verb' in Kindaichi 1954). The claim is based on the fact that those verbs in *te-iru* 'linker-be' form denote the result state but not progression. This interpretation, however, should not be taken as an indication of punctuality, perfective or achievement of a verb per se. The interpretation of the result of an event becomes salient only when the *te-iru* form is used. In this case, the LS is constituted by a single achievement component. As long as a verb contains an achievement component, its *te-iru* form may denote the resulting state regardless of whether the verb is inherently an achievement (e.g. verbs of arriving in the next section). The verb may alternate between an achievement and an active-achievement as in motion verbs. To sum up, co-occurrence with a pace verb observed in (36b) on the one hand, is attributed to the activity component of the LS. The perfective interpretation of (38b) or indication of telicity, on the other hand, is attributed to the achievement component of the LS.

#### 2.4.2. Verbs of arriving

*Tsuku* 'arrive', *tassuru* 'reach', and *todoku* 'reach' do not denote motion, at least syntactically. Such verbs are inherently perfective or achievement because they do not allow a durational expression as in (39b), a pace adverb as in (39c), nor mean progression or continuation of an action in the *te-iru* 'linker-be' form as in (39d). *-Te-iru* form denotes the result state of a telic event.

(39a) Taro-ga mise ni/e tsui-ta.  
 Taro-NOM store to/to arrive-PAST  
 'Taro arrived at the store.'  
 INGR **be-at** (store, Taro)  
 OCA UND

(39b) \*Taro-ga mise ni iti-jikan tsui-ta.  
 one-hour  
 \* 'Taro arrived at the store for one hour.'

(39c) \*Taro ga mise ni yukkuri tsui-ta.  
 slowly  
 \* 'Taro arrived at the store slowly.'

(39d) Taro ga mise ni ui -te-i -ru.  
 -L-RSLT -NPST  
 'Taro has arrived at the store.' \* 'Taro is arriving at the store (now).'

The macrorole NP receives nominative case. The goal is marked by the postposition *ni* 'to' but not dative *ni*, as indicated by the fact that it is interchangeable with a directional postposition *e* 'to'.

#### 2.5. Possessor raising (double nominative) construction

Possessive is coded by the genitive.

(40a) Mary-no me-ga aoi  
 Mary-GEN eye-NOM blue

' Mary's EYES are blue. '(Speaker's attention is on eyes as parts of Mary.)

If the possessor is ' raised ', the sentence ' becomes ' a double nominative construction.

(40b) Mary-ga me-ga aoi  
 Mary-NOM eye-NOM blue

' MARY's eyes are blue. '(Speaker's attention is on Mary as a whole.)

The adjective *aoi* ' (be) blue ' is a one-place predicate, however, the sentence has two nominative nominals. This construction was called multi-subject construction by Kuno (1973). The syntactic status of two ' subjects ' has been a challenge to many syntactic theories. Kuno (1973:68-71) and Tateishi (1994:179-207) from the perspective of Generative Grammar allow multiple ' subject ' assignments. Other theories, such as Lexical Functional Grammar, Relational Grammar and RRG, do not allow ' multiple subjects '. Relational Grammar has analyzed ' multiple objects ' construction in Korean as follows. Two constructions (i.e. " double-subject " construction and " double-object " construction) are parallel because both involve possessor raising.

(41a) Kay-ka haksyang-uy tali-lul mwul-ess-ta. (Chun 1986: 72 via O ' Grady1991: 67)  
 dog-NOM student-GEN leg-ACC bite-PAST-IND

' The dog bit the student's leg. '

(41b) Kay-ka haksyang-ul tali-lul mwul-ess-ta. (O ' Grady1991: 71)  
 dog-NOM student-ACC leg-ACC bite -PAST-IND

2 chômeur

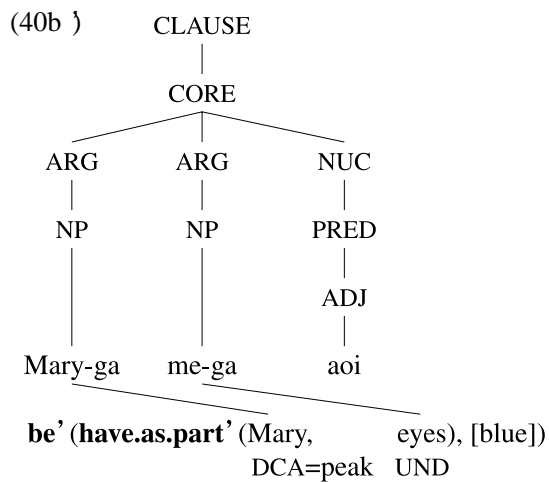
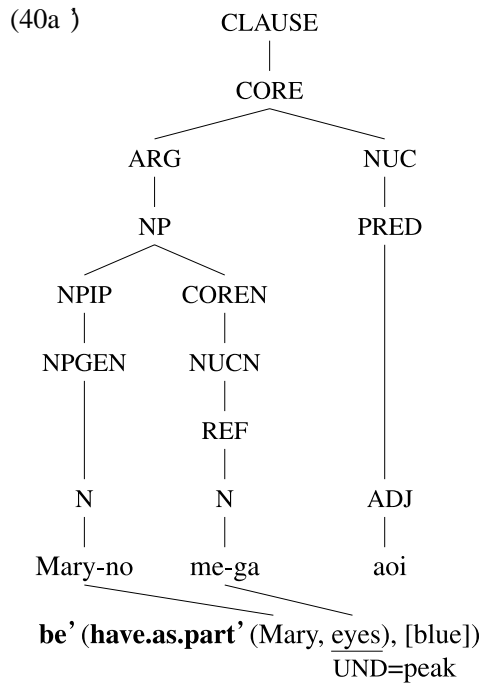
' The dog bit the student on the leg. '

In Relational Grammar, the ascended possessor is an argument and the remaining possessee nominal is a *chômeur*. (cf. Gerdts 1987, Chun1986, Perlmutter and Postal 1983). This analysis was supported by the facts that only the raised possessor but not the remaining possessee nominal may undergo *hi*-passivization (Korean has another passive which does not work for this construction), plain topicalization, and clefting in Korean. This approach, however, does not provide an explanation for the case marking. The fact that the remaining possessee is still marked by accusative is an open question.

Nakamura (1997) posits that both the raised possessor and the remaining possessee share the same macrorole value. He extends this notion of sharing to non-macrorole arguments to account for instances such as case spreading among adjuncts. He argues that the same case is shared by the raised possessor and the remaining possessee because they share the same semantic value. His claim is based on the observation that a possessee as well as a possessor may launch QF. He assumes this fact indicates two nominals are identical in terms of macrorole value. This approach, however, ignores all other syntactic asymmetries between the raised possessor and the remaining possessee investigated in Relational Grammar. Another problem seems to be the notion of entailment which he supposes to be true of all the instances of whole-part relation. For example, in (41), the fact that a dog bit the student's leg entails that the dog bit the student. In his theory, this entailment guarantees the sharing of the same semantic value.

However, whole-part relation does not necessarily evoke entailment. In (40), the fact that ‘ Mary's eyes are blue ’ does not entail ‘ Mary is blue. ’

I propose an analysis of possessor raising construction as follows:



In (40a ), the underlined part of the LS indicates a head. The modifier *Mary* is linked to NP initial position in the layered structure and appears in the genitive (cf. VV & LP: 61). The undergoer is assigned to the lowest core argument in the LS by default, namely *me* ‘ eyes ’. [*Mary no me*] ‘ Mary's eyes ’ is a single NP. Nominative case is assigned to [*Mary no me*]. In (40b ), both *Mary* and *me* ‘ eyes ’ are NP arguments as the result of possessor-raising, in spite of the fact that *aoi* ‘ blue ’ is a one-place predicate. An element, for instance, an adverb modifying the predicate, may be inserted between the two arguments in (40b), while it is not the case in (40a).

(40a ") \**Mary-no totemo me-ga aoi*  
Mary-GEN really eye-NOM blue

(40b) Mary-ga totemo me-ga aoi  
 Mary-NOM really eye-NOM blue  
 ' Mary's eyes are really blue. '

The undergoer is assigned to the lowest semantic argument *me*. *Mary* is the pragmatic peak. *Mary* receives nominative case by the case assignment rule (15P). The undergoer *Mary* receives nominative case by the rule (15A). The shift of the pragmatic peak reflects foregrounding of *Mary*. The speaker's attention changes from the body part *me* ' eyes ' to *Mary* as a whole. Figuratively, the sight of the speaker zooms in on *Mary*'s eyes in (40a), while the sight zooms out and now is on *Mary* as a whole in (40b). In the Korean examples, I hypothesize that possessor raising is the foregrounding of the possessor, whereas the passivization and clefting of the possessed is the foregrounding of the possessed. The two operations on the same clause are not valid together since they contradict each other.

A constraint called ' double-*o* constraint ' blocks possessor raising from the accusative host in Japanese. The double-*o* constraint says that a clause may not have more than one nominal coded by accusative (Harada 1973). This constraint may be evaded if accusative is replaced by other particles. (cf. Kuno 1983:218)

(42a) John-ga Tom-no kao-o nagut-ta  
 John-NOM Tom-GEN face-ACC hit-PAST  
 ' John hit Tom's face. '

(42b) \*John-ga Tom-o kao-o nagut-ta  
 John-NOM Tom-ACC face-ACC hit-PAST  
 ' John hit Tom on his face. '

(43) John-ga Tom-o atama-**mo** kao-**mo** nagut-ta. (modified from Kuno:1983: 218)  
 John-NOM Tom-ACC head-too face-too hit-PAST  
 ' John hit Tom both on the head and on the face. '

## 2.6. Causative Construction

In the rest of this section, I investigate causative and indirect passive constructions, whose LSs are complex, and the possessor raising passive construction which is often confused with the indirect passive. I will point out that the construction is actually a kind of direct passive in terms of LSs and case marking.

The causative suffix *-(s)ase-* has been called *jodoosi* ' auxiliary verb ' in traditional Japanese grammar.

(44) Hanako-ga Taro-ni hon-o yon-de-simaw -ase -ta  
 Hanako-NOM Taro-DAT book-ACC read-L-complete- CAUS-PAST  
 ' Hanako made/let Taro finish reading the book. '

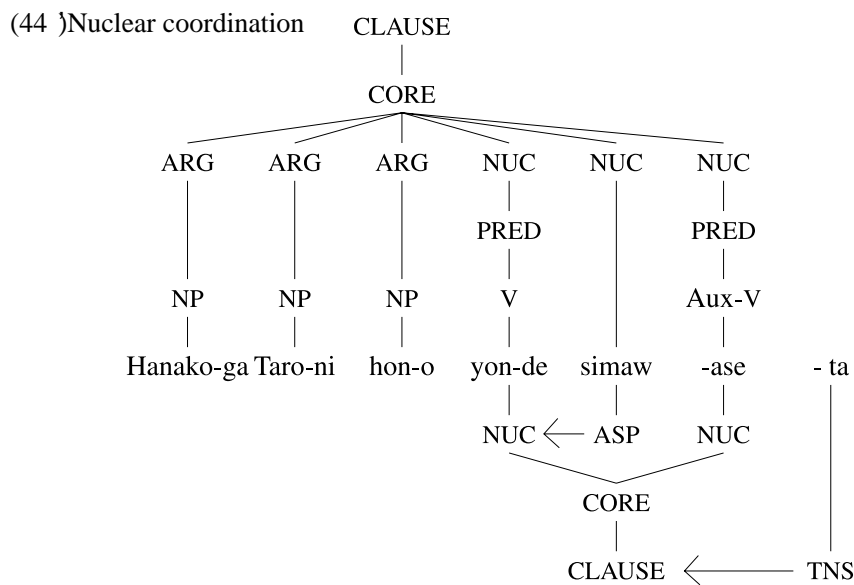
[**do** '(Hanako, Ø)] CAUSE [**do** '(Taro[**read** '(Taro, book))]]

ACT DCA UND

(45a) Hanako-ga Taro-o utaw-ase -ta.  
 Hanako-NOM Taro -ACC sing-CAUS-PAST  
 ' Hanako made Taro sing. '

- [do '(Hanako, Ø)] CAUSE [do '(Taro[sing '(Taro))]]  
 ACT UND  
 (45b) Hanako-ga Taro-ni utaw-ase -ta.  
 Hanako-NOM Taro-DAT sing-CAUS-PAST  
 ' Hanako let Taro sing. '
- [do '(Hanako, Ø)] CAUSE [do '(Taro[sing '(Taro))]]  
 ACT DCA  
 (46) Hanako-wa kodomotachi-ni yoru osoku made oki -te- i- sase- ta.  
 Hanako-TOP children -DAT night late until stay.up-L- PROG-CAUSE-PAST  
 ' Hanako let the children stay up late. '

The layered structure of (44) is:



-(s)ase- is a nucleus which must be cliticized to the stem (with an aspect marker subordinated to it). It affects the LS of the verb stem by increasing the number of arguments by one. It indicates that the nexus between the causative morpheme and the verb is either coordination or cosubordination. The example (44) shows that the stem and -(s)ase- may be separated by an aspectual element *simaw* modifying only the verb stem independently. Therefore, the nexus is coordination. The level of juncture is nuclear because no syntactic argument may intervene between the two nuclei. *Simaw* 'to complete' which follows the *te* linker is a verb but it does not determine nor affect the number of arguments, therefore the nexus type between *yomu* 'read' and *simaw* 'to complete' is subordination. *Simaw* 'to complete' functions as an operator at the same time, thus it is double duty. (See Hasegawa (1996) for an RRG analysis of *te-simaw* construction.)

In (44) with a transitive verb, the actor is assigned nominative case by the rule (15A), and also by (15P) as an actor is the default choice for the pragmatic peak. The undergoer receives accusative by the rule (15B). The remaining non-macrorole core argument receives dative. In the coercive causative (45a), *Taro* is the undergoer receiving accusative by the rule (15B), whereas in the permissive causative (45b), *Taro* is the non-macrorole core argument receiving dative by the rule (15C). (45b) shows a marked

linking between semantics and syntax. The lowest semantic argument is not assigned undergoer. An undergoer argument is a more patient-like argument than a non-macrorole core argument. Choosing a non-macrorole argument over an undergoer argument denotes the argument in question as less patient-like. The similar semantic difference is observed in Korean. (Kozinsky and Polinsky (1993:202), Choi (1983) (cited in Gerdts (1990:221), and Yang(1994).) In Korean, a causee may be coded by either nominative, dative, or accusative case. It is claimed that the nominative-coded causee has the most control, a dative-coded causee has less control, and the accusative-coded causee has no control over the situation. The alternative case assignment in the causative constructions in other languages are summarized in VV & LP section 9.2.2.

Alternative assignment of undergoer in causative constructions is available only when the verb is intransitive in Japanese. The double-*o* constraint blocks accusative coding of the causee in a sentence of a transitive verb.

- (47) Hahaoya-ga kodomo-ni/\*-o hon-o yom-ase-ta.  
 mother-NOM child-DAT/\*-ACC book-ACC read-CAUS-PAST  
 ‘ The mother made/had/let the child read the book. ’

In such a sentence, the semantic difference between coercive causation and permission is neutralized.

## 2.7. Passive construction

### 2.7.0. Introduction

Passive constructions are divided into two types, direct passive and indirect passive. The indirect passive construction, which is rare cross-linguistically, has case making and syntactic properties which require special considerations.

We have already seen direct passive constructions. The examples are repeated as (48a) and (49a) below.

- (48a) Taro-ga Hanako ni tatak-are-ta.  
 Taro-NOM Hanako by hit-PASS-PAST  
 ‘ Taro was hit by Hanako. ’
- (49a) Kodomo-ga Taro ni hon-o atae-rare-ta .  
 child -NOM Taro by book-ACC give-PASS-PAST  
 ‘ The child was given the book by Taro. ’

Direct passive sentences have active counterparts. The examples (48b) and (49b) are the active counterparts of (48a) and (49a) respectively.

- (48b) Hanako-ga Taro-o tatai-ta.  
 Hanako-NOM Taro-ACC hit-PAST  
 ‘ Hanako hit Taro. ’
- (49b) Taro-ga kodomo-ni hon-o atae-ta  
 Taro-NOM child-DAT book-ACC give-PAST  
 ‘ Taro gave a book to the child. ’

Indirect passives may be formed from an intransitive verb as in (50a), from a transitive verb as in (51a),

or from a ditransitive verb as in (52a). Contrary to direct passives, indirect passives lack active counterparts.

(50a) Hanako-ga Taro-ni sin-are-ta.

Hanako-NOM Taro-DAT die-PASS-PAST

' (lit.)Hanako was died by Taro. 'or' Taro died on Hanako. '

(50b) \*Taro-ga Hanako-o sin-da.

Taro-NOM Hanako-ACC die-past

(51a) Hanako-ga Taro-ni uta-o utaw-are-ta.

Hanako-NOM Taro-DAT song-ACC sing-PASS-PAST

' Hanako was affected by Taro's singing a song. '

(51b) \*Taro-ga Hanako-o uta-o utat-ta.

Taro-NOM Hanako-ACC song-ACC sing-past

(52a) Hanako-ga kodomo-ni tomodachi-o takusan paatii-ni/e shootai-s-are-ta.

Hanako-NOM child-DAT friends-ACC many party-to/to invite-do-PASS-PAST

' Hanako was affected by her child inviting many of her friends to the party. '

(52b) \*Kodomo-ga Hanako-o tomodachi-o takusan paatii-ni/e shootai-si-ta.

child -NOM Hanako-ACC friends-ACC many party-to/to invite-do-PAST

The indirect passive construction is also called the adversative passive (Howard 1968), the adversity passive (Kuno 1973), or the affective passive (N. McCawley 1972) because of the semantics. The sentences denote that the ' subject ' is adversely affected. A construction with *on*, with limited verbs in English, may express the similar adversity as in the translation of (50a). In such a sentence, the affected experiencer appears as an argument-adjunct, in an *on* prepositional phrase.

(53) The horse died on John.

AAJ

Some researchers have argued that some indirect passives do not denote adversity. (Wierzbicka 1979, Kuno 1983.) However, a closer look reveals that all the examples of non-adversative reading, except one example, that is (57a), which we will see shortly, are what I call possessor-raising passives. Such sentences have active counterparts, therefore they are actually direct passives. (54a), (55a), (56a) are examples of possessor-raising passive and (54b), (55b), and (56b) are their active counterparts.

(54a) Hanako-ga (Taro ni) kata -o dak- are -ta.

Hanako-NOM (Taro by) shoulder-ACC hold -PASS-PAST

' Hanako had Taro's arm around her shoulders. '

(54b) Taro-ga Hanako-no kata -o dai -ta.

Taro-NOM Hanako-GEN shoulder-ACC hold-PAST

' Taro put his arm around Hanako's shoulders. '

(55a) Taro-ga (Hanako ni) asi- o fum- are-ta.

Taro-NOM (Hanako by) foot-ACC step.on PASS-PAST

' Taro had (his) foot stepped on (by Hanako). '

(55b) Hanako-ga Taro-no asi- o fum- da.  
 Hanako-NOM Taro-GEN foot-ACC step.on PAST  
 ' Hanako stepped on Taro's foot. '

(56a) Seito-ga (sensei ni) sakubun-o home -rare-ta.  
 student-NOM (teacher by) composition-ACC compliment-PASS-PAST  
 ' The student was complimented on his composition (by his teacher). '

(56b) Sensei-ga seito-no sakubun-o home -ta.  
 teacher-NOM student GEN composition-ACC compliment-PAST  
 ' The teacher complimented the student on his composition. '

Shibatani (1990) claimed that passive sentences with a body-part like object such as (54a) and (55a) are not indirect passives against other authors. I agree with him and will argue later that not only passive sentences with a body-part object, but all possessor raising passive sentences including sentences such as (56a), are direct passives. He also claims that the only one remaining problematic example with the verb *huku* ' blow ' as in (57a) is actually a direct passive sentence, even though there is no active counterpart.

(57a) Konoha-ga kaze ni huk-are -te tit -ta.  
 tree.leaf -NOM wind by blow-PASS-CONJ scatter-PAST  
 ' Leaves scattered, being blow (away) by the wind. '

(57b) \*Kaze-ga konoha-o huk-u.  
 wind-NOM tree.leaf-acc blow-NPST  
 ' (int.) The wind blows (away) a leaf. '

The problem of *huku* ' blow ' is due to the accidental lack of an overt transitive counterpart, which has mislead many to claim that there is an intransitive, and hence, indirect passive that lacks the adversative reading. ... certain (direct) passives lack corresponding well formed active sentences, though the positing of the corresponding active forms or of a basic argument structure underlying them must be recognized. The case of *huku* is exactly of this kind, and together these cases require us to think deeply the nature of argument structures associated with individual verbs. (Shibatani 1990: 332. emphases are added)

Accordingly, passive sentences with neutral (i.e. non-adversative) reading are direct passives. Of course, it does not deny that direct passives may denote adversity. If a direct passive denotes adversity (e.g. (55a)), it is because of the semantics of the predicate, whereas adversity is structurally coded in indirect passives.

### 2.7.1. Direct passive (revised)

With the revised case assignment rules (15), direct passive sentences of transitive verbs are accounted for as follows (We have already seen ditransitive passive sentences in terms of rules (15) in section 2.2.):

An example is (2) (repeated as (58) below).

(58) Taro-ga Hanako ni tatak-are-ta.  
 Taro-NOM Hanako by hit-PASS-PAST  
 ' Taro was hit by Hanako. '



**do** '(Hanako, [**hit** '(Hanako, Taro)])

ACT--->Adjunct      UND=peak

The undergoer *Taro* must be the pragmatic peak since there is no other core argument in the sentence. According to the rules (15) with the notion of pragmatic peak, *Taro* takes nominative by the rule (15P). The rule (15A) fails to apply to *Hanako* since it is not a core argument.

### 2.7.2. Indirect passive

As we saw above, the adversative meaning is inherent in true indirect passive sentences. I indicate it as **feel-affected** ' in the LS. The sign  $\text{---}$  in the LSs indicates simultaneous states of affairs.

(59a) Hanako-ga      Taro-ni      sin-are-ta.

Hanako-NOM      Taro-DAT      die-PASS-PAST

' (lit.) Hanako was died by Taro. ' or ' Taro died on Hanako. '

[INGR **be-dead** '(Taro)]]] [**feel-affected** '(Hanako)]

(60a) Hanako-ga      Taro-ni      uta-o      utaw-are-ta.

Hanako-NOM      Taro-DAT      song-ACC      sing-PASS-PAST

' Hanako was affected by Taro's singing a song. '

[**do** '(Taro, [**sing** '(Taro, song)]]] [**feel-affected** '(Hanako)]

Both direct passives and indirect passives ' demote ' an argument. Shibatani (1990) argues that indirect passives do not share the universal ' agent-defocusing ' property of passivization. ' Agent-defocusing ' refers to the property that passivization demotes the agent to an adjunct or syntactically deletes it from a clause. It is true that indirect passivization does not demote the agent to an adjunct status, however, it does ' demote ' the ' subject ' to the dative coded ' non-subject ' (as we see presently). In this broad sense, the indirect passive construction deserves to be called ' passive '.

Indirect passives differ from direct passives regarding a ' demoted ' argument in very important respects. First, what is demoted is restricted to the actor in direct passive, whereas, the undergoer as well as the actor may be ' demoted ' in indirect passives. Second, in direct passives, the actor is ' demoted ' to an adjunct status, and consequently it can be deleted, whereas, in indirect passives, the demoted highest macrorole must be kept in a clause (unless it is understood as a *pro* whose identity is provided contextually. (Shibatani 1990:325-326)

(61) John-ga      tatak-are-ta.

John-NOM      hit-PASS-PAST

' John was hit. '

(62) \*John-ga      sin-are-ta.

John-NOM      die-PASS-PAST

' (Someone) died on John. '

Accordingly, the highest macrorole is ' demoted ' to a direct core argument status coded by dative but not to an adjunct status. Thus, it may be stated as follows:

(63) The highest macrorole of the basic sentence is ' demoted ' to non-macrorole direct core argument

status.

The indirect passive construction is parallel to the causative construction in some respects. The causer is added to the corresponding non-causative sentence. Analogously, the affected experiencer is added to the corresponding non-passive sentence in indirect passives.

(59b) Taro-ga sin-da.

Taro-NOM die-PAST

' Taro died. '

INGR **be-dead** '(Taro)

UND=peak

(59c) Hanako-ga Taro-o sin-ase-ta. (Causative)

Hanako-NOM Taro-ACC-CAUS-PAST

' Hanako had Taro died. '

**do** '(Hanako, Ø) CAUSE [INGR **be-dead** '(Taro)]

ACT=peak

UND

(59a) Hanako-ga Taro-ni sin-are-ta. (Indirect Passive)

Hanako-NOM Taro-DAT die-PASS-PAST

' (lit.) Hanako was died by Taro. ' or ' Taro died on Hanako. '

[INGR **be-dead** '(Taro)]] [**feel-affected** '(Hanako)]

DCA

DCA=peak

(60b) Taro-ga uta-o utat-ta.

Taro-NOM song-ACC sing-PAST

' Taro sang a song. '

[**do** '(Taro, [**sing** '(Taro, song))]

ACT=peak

UND

(60c) Hanako-ga Taro-ni uta-o utaw-ase-ta. (Causative)

Hanako-NOM Taro-DAT song-ACC sing-CAUS-PAST

' Hanako had Taro sing a song. '

**do** '(Hanako, Ø) CAUSE [**do** '(Taro, [**sing** '(Taro, song))]

ACT

ACT--->DCA

UND

(60a) Hanako-ga Taro-ni uta-o utaw-are-ta. (Indirect Passive)

Hanako-NOM Taro-DAT song-ACC sing-PASS-PAST

' Hanako was affected by Taro's singing a song. '

[**do** '(Taro, [**sing** '(Taro, song))]] [**feel-affected** '(Hanako)]

ACT--->DCA

UND

DCA=peak

In both causative and indirect constructions, the number of arguments increases by one. The number of macroroles, on the other hand, is reduced by one in indirect passives. Note that corresponding sentences for causative and indirect passive sentences are not ' counterparts ' which share the same LS as in active sentences and their direct passive versions. The indirect passive construction is different from the causative construction in the sense that what is added is assigned a macrorole in causatives but it is a

non-macrorole direct core argument in indirect passives. The following proposal regarding the ‘ added ’ argument is required in indirect passive constructions.

(64) Non-macrorole status assignment in indirect passives.

The lowest semantic argument in the LS (i.e. the affected participant) is assigned a non- macrorole direct core argument status.

This has an important consequence for accusative case marking in sentences with a transitive verb such as in (60a). *Taro*, the ‘ demoted ’ argument can not be the pragmatic peak, since demotion is the operation used to make an argument pragmatically less salient. Instead, the ‘ added ’ experiencer is more likely to be the pragmatic peak. The animate *Hanako* is more likely to be the pragmatic peak than inanimate *uta* ‘ song ’ is. The pragmatic peak *Hanako* gets nominative case from the rule (15P). (63) says that *Taro* is ‘ demoted ’ from actor status. Therefore by (16) repeated below, the undergoer *uta* ‘ song ’ is considered to be the lower macrorole.

(16) Nature of macrorole ranking

A ‘ demoted ’ macrorole is respected in terms of macrorole ranking (even if it is not assigned case). The lower macrorole *uta* ‘ song ’ receives accusative by the rule (15B). The remaining non-macrorole direct core argument receives dative by the rule (15C). If we did not have (64) and assigned the undergoer to the lowest argument *Hanako*, then *uta* ‘ song ’ would be assigned DCA. In that case, we cannot account for the fact that *uta* ‘ song ’ is marked by accusative rather than dative.

Case assignment for sentences with an intransitive verb is exemplified with (59a) repeated below.

(59a) Hanako-ga Taro-ni sin-are-ta.  
 Hanako-NOM Taro-DAT die-PASS-PAST  
 ‘ (lit.) Hanako was died by Taro. ’ or ‘ Taro died on Hanako. ’  
 [INGR **be-dead** ‘(Taro)]]] [**feel-affected** ‘(Hanako)]]  
 UND--->DCA DCA=peak

The pragmatic peak takes nominative case by the rule (15P). The non-macrorole direct core argument takes dative by the rule (15C).

Sugioka (1984 via Miyagawa 1989: 186) observes that *te-i-*, an aspect marker, may intervene between a verb and a passive morpheme in the indirect passive construction as in (65), whereas it is not the case in the direct passive construction as in (66a).

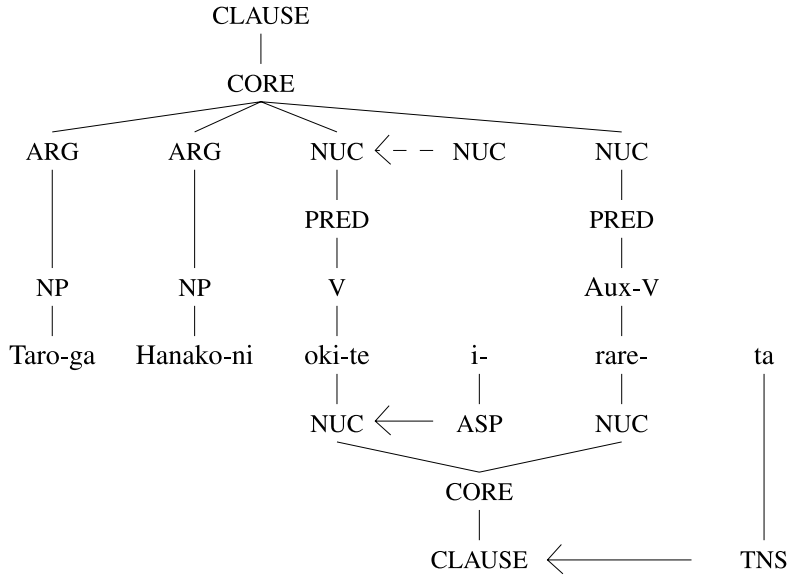
(65) Taro-ga Hanako-ni (yodoosi) oki- te-i -rare -ta.  
 Taro-NOM Hanako -DAT (all.night) stay.up L-PROG-PASS-PAST  
 ‘ Taro was affected by Hanako's staying up (all night). ’  
 (modified from Sugioka 1984 via Miyagawa 1989: 181)  
 [**do** ‘(Hanako,[**stay-up** ‘(Hanako)]] [**feel-affected** ‘(Taro)]]  
 ACT--->DCA DCA=peak

(66a) \*Taro-ga Hanako ni tatai-te-i -rare -ta.  
 Taro-NOM Hanako by hit-L-PROG-PASS-PAST  
 ‘ (int.) Taro was being beaten by Hanako. ’

cf. (66b) Taro-ga Hanako ni tatak-are-te-i -ta.  
 Taro-NOM Hanako by hit-PASS-L-PROG-PAST  
 ' Taro was being beaten by Hanako. '

The layered structure of (65) is:

(65 ) Nuclear coordination



Note that the aspect maker *-i-*, which is a state verb in origin, is subordinated to the verb stem *oki* 'stay up' (cf. Hasegawa (1996) 's example cited as (14) in section one). Since the passive morpheme *-(r)are-* can be separated from the verb stem by an aspectual element and the aspectual element can modify only the verb stem, the nexus of the verb stem and *-(r)are-* is coordination. This is again shared with causatives but not with direct passives. *-(r)are-* affects the number of semantic arguments. Therefore, I consider *-(r)are-* itself to be an independent nucleus.

### 2.7.3. Possessor-raising passive

If a possessor is raised from (67a), the sentence would be like (67b) in principle. However, the sentence is ungrammatical because of the double-o constraint. (It is well known that Korean and some other languages allow double accusative constructions. One of the Japanese dialects, spoken in the *Hachijoojima* island, also has double accusative constructions. (Kaneda 1993.)

(67a) Hanako-ga Taro-no asi- o fum- da.  
 Hanako-NOM Taro-GEN foot-ACC step.on PAST  
 ' Hanako stepped on Taro's foot. '

(67b) \*Hanako-ga Taro-o asi- o fum- da.  
 Hanako-NOM Taro-ACC foot-ACC step.on PAST  
 ' Hanako stepped on Taro's foot. '

The constraint is evaded in the passive version.

(67c) Taro-ga (Hanako ni) asi- o fum- are-ta.  
 Taro-NOM (Hanako by) foot-ACC step.on PASS-PAST

‘ Taro had (his) foot stepped on (by Hanako). ’

The possessor-raising passive construction is one of the direct passive constructions for the following reasons.

Firstly, the passive morpheme does not affect the number of semantic arguments of the LS, in other words, the passive morpheme does not increase the number of semantic arguments of the clause.

Secondly, there exists an active counterpart sentence linked to the same LS (which is not the case for indirect passive). For instance, both active (67a) and its passive counterpart (67c) share the same LS (67 ), except that *asi* ‘ foot ’ is the head in (67a), while both Taro and *asi* ‘ foot ’ are arguments in (67c).

(67 ) **do** ‘(Hanako [**step-on** ‘(Hanako, [**have.as.part** ‘(Taro, foot))])’)

Another example of possessor-raising passives is (68c), which shares its LS with the active counterpart (68a) and another passive form (68b).

(68a) Sensei-ga Taro-no ronbun-o hihan-si-ta.  
 teacher-NOM Taro-GEN thesis-ACC criticism-do-PAST

‘ The teacher criticized Taro's thesis. ’

**do** ‘(teacher [**criticize** ‘(teacher, [**have** ‘(Taro, thesis))])’)

ACT=peak UND

(68b) Taro-no ronbun-ga (sensei ni) hihan-s-are-ta.  
 Taro-GEN thesis-NOM (teacher by) criticism-do-PASS-PAST

‘ Taro's thesis was criticized by the teacher. ’

**do** ‘(teacher [**criticize** ‘(teacher, [**have** ‘(Taro, thesis))])’)

ACT--->adjunct UND=peak

(68c) Taro-ga (sensei ni) ronbun-o hihan -s -are -ta.  
 Taro-NOM (teacher by) thesis-ACC criticism-do-PASS-PAST

‘ Taro was criticized on his thesis (by the teacher). ’

**do** ‘(teacher [**criticize** ‘(teacher [**have** ‘(Taro, thesis))])’)

ACT--->adjunct DCA=peak UND

The difference among these sentences lies in the linking of macroroles, syntactic argument status, and the pragmatic peak. In terms of syntactic arguments, direct passives reduce their number by one as the actor is ‘ demoted ’ to an adjunct status or unspecified. A possessor-raising passive sentence reduces a syntactic argument through passivization. However, a possessor-raising passive sentence increases its syntactic argument through possessor-raising, by assigning ‘ argument ’ status to both the possessor and the possessed. Note that as far as semantic arguments are concerned, there is no change among LSs of (68a), (68b), and (68c). The difference among those is the status of syntactic arguments.

In non-possessor-raising (68b), *Taro* cannot be the pragmatic peak since it is not a core argument. In possessor-raising (68c), both *Taro* and *ronbun* ‘ thesis ’ are arguments, therefore *Taro* is a core argument. *Taro* is most likely to be the pragmatic peak since it is higher than *ronbun* ‘ thesis ’ in terms of argument hierarchy and in terms of the animacy hierarchy. In (68c), the case assignment rule (15P) assigns nominative case to the pragmatic peak *Taro*, the undergoer *ronbun* ‘ thesis ’ receives accusative by the rule (15B). Note that the undergoer is lower than the actor-adjunct in terms of the macrorole ranking

since the actor-adjunct is respected by the nature defined in (16).

Thirdly, NP-*ni* is 'demoted' to an adjunct status (i.e. to the periphery). It does not receive dative case as it does in the indirect passive construction as seen in the previous section.

Fourthly, Miyagawa (1989: 187) observes that aspectual elements cannot intervene between a verb stem and a passive morpheme in this construction. (67a,b) are adapted from Miyagawa. (In his analysis, *sensei-ni* is dative contrary to the present analysis)

(67a) Taro-ga sensei ni ronbun-o hihan -s -are -te -i -ru.  
 Taro-NOM teacher by thesis-ACC criticism-do-PASS-L -PROG-NPST

(67b) \*Taro-ga sensei ni ronbun-o hihan -si-te -i -rare-ru.  
 Taro-NOM teacher by thesis-ACC criticism-do-L-PROG-PASS-NPST

' Taro is being criticized on his thesis by the teacher. '

Indirect passives allow an aspectual element to intervene between a verb stem and a passive morpheme, whereas possessor-raising passives do not. The ungrammaticality of (67b) is parallel to that of a typical direct passive (68b).

(68a) Kodomo-wa Hanako ni sikar-are -te-i -ta.  
 child -TOP Hanako by scold-PASS -L-PROG -PAST

(68b) \*Kodomo-wa Hanako ni sikat-te-i -rare -ta.  
 scold-L-PROG -PASS -PAST

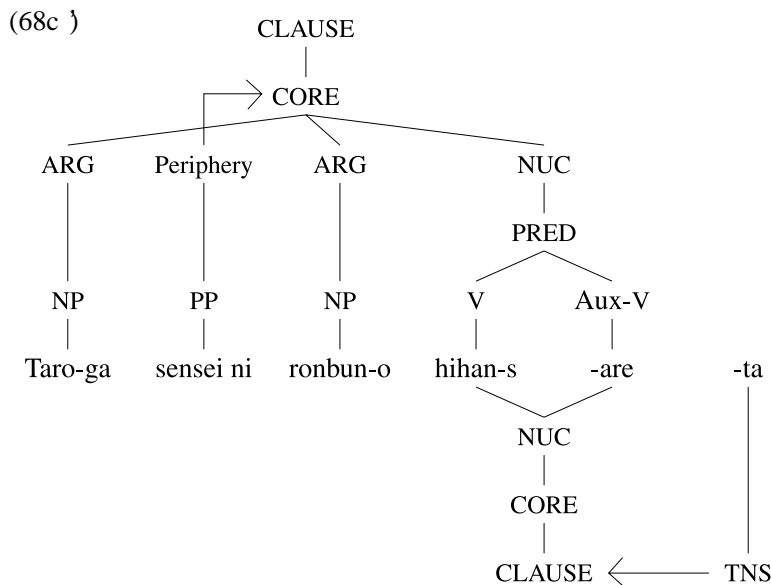
' The child was being scolded by Hanako, '

The layered structure of (68c) (repeated below) is (68c ).

(68c) Taro-ga sensei ni ronbun-o hihan -s -are -ta.  
 Taro-NOM teacher by thesis-ACC criticism-do-PASS-PAST

' Taro was criticized on his thesis by the teacher. '

**do** '(teacher [criticize '(teacher [have '(Taro, thesis))])  
 ACT-->adjunct DCA=peak UND



### 3. Conclusion

The following rules for case assignment in Japanese were proposed and then applied to several constructions.

Case/postposition assignment rules (Japanese):

- (P) Assign nominative case to the pragmatic peak.
- (A) Assign nominative case to the higher ranking macrorole core argument.
- (B) Assign accusative case to the other macrorole core argument.
- (C) Assign dative case to the other core argument as default (Direct Core Argument)
- (C ) The other core argument may take a postposition (Oblique Core Argument)

Nature of macrorole ranking:

A ' demoted ' macrorole is respected in terms of macrorole ranking even if it is not assigned a case.

The rules correctly accounted for all constructions including inversions, dative-postposition, double nominative, possessor-raising double nominative, causative, direct passive, possessor-raising passive, and indirect passive constructions.

### References

- Choi, Bonghee. 1983. ' Constraints on Lexical Causativization in Korean. ' Paper presented at the Harvard Conference on Japanese and Korean Linguistics.
- Chun, Soon, Ae. 1986. ' Possessor ascension in Korean. ' Chun, Soon, Ae. (ed.) *Relational Studies on Korean*. Buffalo Papers in Linguistics. State University of New York at Buffalo.
- Comrie, Bernard. 1976. *Aspect: An Introduction to The Study of Verbal Aspect and Related Problems*. Cambridge: Cambridge UP.
- Dowty, David. 1979. *Word meaning and Montague Grammar*. Dordrecht: Reidel.
- Dubinsky, Stanley. 1990. ' Japanese direct object to indirect object demotion. ' In Postal, Paul M. and Brian D. Joseph (eds.) *Studies in Relational Grammar 3*. Chicago: The University of Chicago Press.
- Dubinsky, Stanley. 1997. ' Predicate union and the syntax of Japanese passives. ' *Journal of Linguistics* 33:1-37.
- Gerds, Donna. 1987. ' Surface case and grammatical relations in Korean: The evidence from quantifier float. ' *Studies in Language* 11: 181-97.
- Gerds, Donna B. 1990. ' Revaluation and inheritance in Korean causative union. ' In Postal, Paul and Brian D. Joseph (eds.) *Studies in Relational Grammar 3*. Chicago: The University of Chicago Press.
- Harada, S. 1973. ' Counter equi NP deletion. ' Research Institute of Logopedics and Phoniatics. University of Tokyo. *Annual Bulletin* 7:113-147.
- Harada, S.I. 1976. ' Honorifics. ' In Shibatani Masayoshi (ed.) *Japanese Generative Grammar: Syntax and Semantics* V.5. New York: Academic Press.
- Hasegawa, Yoko. 1996. *A Study of Japanese Clause Linkage: The Connective TE in Japanese* Stanford:

- CSLI and Tokyo: Kuroshio Publishers.
- Hinds, John and Irwin Howard. 1978. *Problems in Japanese Syntax and Semantics*. Tokyo: Kaitakusha.
- Holisky, Dee A. 1987. 'The case of the intransitive subject in Tsova-Tash (Batshi)'. *Lingua* 71: 103-132.
- Howard, Irwin. 1968. 'The so-called Japanese passive'. University of Hawaii Education Research and Development Center.
- Howard, Irwin and Agnes M. Niyekawa-Howard. 1976. 'Passivisation'. In Shibatani, Masayoshi (ed.) *Japanese Generative Grammar: Syntax and Semantics* v.5. New York: Academic Press.
- Howard, Irwin and Agnes M. Niyekawa-Howard. 1974. 'On "picture nouns" in Japanese'. *Gengo Kenkyuu* (Journal of the Linguistics Society of Japan). 66: 59-72.
- Iida, Masayo and Peter Sells. 1987. 'Discourse factors in the binding of *jibun*'. In Masayo Iida, Stephen Wechsler, and Draga Zec (eds.) *Working papers in Grammatical Theory and Discourse Structure*, Stanford: CSLI.
- Iida, Masayo. 1992. *Context and Binding in Japanese*. Doctoral dissertation. Stanford University.
- Inoue, Kazuko. 1976. *Henkeebunpoo to Nihongo Joo/Ge (Transformational Grammar and Japanese V.1/V.2)*. Tokyo: Taishukan.
- Jackendoff, Ray. 1983. *Semantics and Cognition*. Cambridge, Mass.: MIT Press.
- Jackendoff, Ray. 1990. *Semantic Structures*. Cambridge, Mass.: MIT Press.
- Joo Shori Shinkoo Jigyoo Kyookai Gijutsu Center. 1987. *IPAL Basic Verbs (Japanese Basic Verbs for Computers)*. Tokyo: Joo Shori Shinkoo Jigyoo Kyookai Gijutsu Center.
- Kaneda, Akihiro. 1993. 'Nijuu "hyooji genshoo-o megut-te---Hachijoojima Mitune hoogen-o rei-ni ("Double" coding phenomena---examples from Hachijoojima Mitune dialect)'. In Nitta, Yoshio (ed.) *Nihongo-no Kaku-o Megut-te (On Japanese Case)*. Tokyo: Kuroshio Publishers.
- Kindaichi, Haruhiko. 1954. 'Kokugodooshi no Ichibunrui. (A classification of Japanese Verbs)'. In Kindaichi, Haruhiko 1976 (ed.) *Nihongo Dooshi no Asupekuto (Aspect of Japanese Verbs)*. Tokyo: Mugi Shoboo.
- Kita, Sotaro. 1997. 'Japanese "motion verbs" without motion semantics'. A paper presented at the annual meeting of the Linguistics Society of America.
- Kitahara, Hiroo. 1996. 'Renyoooyoo hoo ni okeru kotai suuryoosi to naiyoo suuryoosi (Individual and Content Numerical Quantifiers)'. *Kokugogaku (Studies in the Japanese Language.)* 186. Tokyo: Kokugo Gakkai (The Society for the Study of Japanese Language).
- Kozinsky, Isaac and Maria Polinsky. 1993. 'Causee and patient in the causative of transitive: Coding conflict of doubling of grammatical relations?'. In Comrie, Bernard and Maria Polinsky (eds.) *Causatives and Transitivity*. Amsterdam: John Benjamins.
- Kuno, Susumu. 1973. *The structure of the Japanese Language*. Cambridge, Mass.: MIT press.
- Kuno, Susumu. 1983. *Shin Nihon Bunpoo Kenkyu (New Studies in Japanese Grammar)*. Tokyo: Taishukan.
- Kuroda, Shigeyuki. 1965. *Generative Grammatical Studies in the Japanese Language*. Doctoral dissertation, MIT, Cambridge, Mass.
- Kuroda, S.-Y. 1978. 'Case marking, canonical sentence patterns, and counter equi in Japanese (A



- preliminary survey). 'In Hinds, John and Irwin Howard (eds.) *Problems in Japanese Syntax and Semantics*. Tokyo: Kaitakusha.
- McCawley, N. A. 1972. ' On the treatment of Japanese passives. ' CLS 8, 256-270.
- Manning, Christopher D., Ivan A. Sag, and Masayo Iida. 1997. ' The lexical integrity of Japanese causatives. ' (from HPSG homepage.)
- Matsumoto, Yo. 1992. *On the Wordhood of Complex Predicates in Japanese*. Doctoral dissertation. Stanford University.
- McCawley, Noriko Akatsuka. 1972. ' On the treatment of Japanese passives. ' *Papers from the Eighth Regional Meeting, Chicago Linguistics Society*.
- McCawley, Noriko Akatsuka. 1976. Reflexivization : A transformational approach. In Shibatani, Masayoshi (ed.) *Japanese Generative Grammar: Syntax and Semantics v.5*. New York: Academic Press.
- Miyagawa, Shigeru. 1989. *Structure and Case Marking in Japanese: Syntax and Semantics V.22*. New York: Academic Press.
- Nakamura, Wataru. 1997. *A Constraint-based Typology of Case Systems*. Doctoral dissertation. State University of New York at Buffalo.
- O 'Grady, William. 1991. *Categories and Case: The Semantic Structure of Korean*. Amsterdam: John Benjamins.
- Okutsu, Keiichiroo. 1983. ' Suuryoosi idoo sairon (Quantifier float revised.). ' *Jinbungakuhoo 160*.
- Perlmutter, David M. 1984. ' Working 1s and Inversion in Italian, Japanese, and Quechua. ' In Perlmutter, David M. and Carol G. Rosen (eds.) *Studies in Relational Grammar 2*. Chicago: The University of Chicago Press.
- Perlmutter, David and Paul M. Postal. 1983. ' The relational succession law. ' In David M Perlmutter (ed.) *Studies in Relational Grammar 1*. Chicago: The University of Chicago Press.
- Plank, Frans (ed.) 1995. *Double case: Agreement by Suffixaufnahme*. New York: Oxford University Press.
- Roberts, Linda. 1995. ' Pivots, voice, and macroroles: from Germanic to universal grammar. ' *Australian Journal of Linguistics 15*:157-214.
- Shibatani, Masayoshi. 1976. ' Causativization. ' In Shibatani (ed.) *Japanese Generative Grammar (Syntax and Semantics 5)*. New York: Academic Press.
- Shibatani, Masayoshi. 1978. *Nihongo no bunseki (An analysis of Japanese)*. Tokyo: Taishukan.
- Shibatani, Masayoshi. 1988. Voice in Philippine languages. In Shibatani, Masayoshi (ed.) *Passive and Voice*. Amsterdam: John Benjamins.
- Shibatani, Masayoshi. 1990. *The Languages of Japan*. Cambridge: Cambridge University Press.
- Shibatani, Masayoshi. 1994. ' An integral approach to possessor raising, ethical datives, and adversative passives. ' *Proceedings to the annual meeting of the Berkeley Linguistics Society, 20th*: 461-486.
- Sugioka, Y. 1984. *Interaction of Derivational Morphology and Syntax in Japanese and English*. Doctoral dissertation, University of Chicago.
- Talmy, Leonard. 1995. ' Fictive motion in language and " ception ". ' In Bloom, Paul, Mary Peterson,

- Lynn Nadel, and Merrill Garrett (eds.) *Language and Space*. Cambridge, Mass.: MIT Press.
- Teramura, Hideo. 1982. *Nihongo no sintakusu to imi I (Japanese Syntax and Meaning 1)*. Tokyo: Kurosio shuppan.
- Toratani, Kiyoko. 1997. *Typology of Split Intransitivity: Lexical Aspect and the Unaccusative Hypothesis in Japanese*. Unpublished ms. Department of Linguistics, State University of New York at Buffalo.
- Tsujimura, Natsuko. 1996. *An introduction to Japanese Linguistics*. Cambridge, Mass.: Blackwell.
- Van Valin, Robert D. Jr. and David Wilkins. 1996. 'The case for "effector": case roles, agents, and agency revisited.' In Shibatani, Masayoshi and Sandra A. Thompson (eds.) *Grammatical Constructions: Their Forms and Meaning*. Oxford: Clarendon Press.
- Van Valin, Robert D. Jr. and William A. Foley. 1980. 'Role and Reference Grammar.' In Moravcsik, Edith. A. and Jessica R. Wirth (eds.) *Current Approaches to Syntax: Syntax and Semantics 13*. London: Academic Press.
- Van Valin, Robert D. Jr. 1991. 'Another look at Icelandic case marking and grammatical relations.' *Natural Language and Linguistic Theory* 9. 145-194.
- Van Valin, Robert D. Jr. 1993. 'A synopsis of Role and Reference Grammar.' In Van Valin, Robert D. Jr. (ed.) *Advances in Role and Reference Grammar*. Amsterdam: John Benjamins.
- Van Valin, Robert D. Jr. and Randy J. Lapolla. 1997. *Syntax: Structure, Meaning, & Function*. Cambridge: Cambridge University Press.
- Vendler, Zeno. 1957.(1967.) *Linguistics in Philosophy*. Ithaca. : Cornel Univ. Press.
- Wierzbicka, Anna. 1979. 'The Japanese "adversative passive" in a typological context (Are grammatical categories vague or multiply polysemous?)' Paper in Linguistics 12: 111-62, 1988. In Wierzbicka, Anna. *The Semantics of Grammar*. Amsterdam: John Benjamins.
- Yang, Byong-Seon. 1994. *Morphosyntactic Phenomena of Korean in Role and Reference Grammar*. Doctoral dissertation. State University of New York at Buffalo.
- Yasui, Minoru (ed.) 1987. *The Taishukan Explanatory Dictionary of Contemporary English Grammar*. Tokyo: Taishukan.
- Zubin, David. 1979. 'Discourse function of morphology.' In T. Givon (ed.) *Discourse and Syntax*: 469-504. New York: Academic Press.

This paper is the excerpt from an unpublished manuscript submitted to the Department of Linguistics, State University of New York at Buffalo.