GRAMMATICAL RELATIONS, REFLEXIVES AND PSEUDO-RAISING IN JAPANESE

by

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To my parents, Eiki Miura and Hiroko Miura

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Notes on gloss and abbreviations

[On glossing]

In terms of the typological adequacy, I will base the abbreviations on the Leipzig Glossing Rules with my own additions (available at [http://www.eva.mpg.de/]). Many of the data are directly cited from the preceding studies or adopted with some modification. In either case, the glossing style has been changed for paper-internal consistency.

Morpheme by morpheme glosses are given when the morphological makeup is crucial for the discussion; otherwise, a sloppy gloss is given. In the following pair, for example, the first type, (i), will be given when tense is being discussed as a crucial element; otherwise, the second one will be given instead. It should be kept in mind, therefore, that even though no segmentation is given, the unsegmented word is not necessarily a non-segmentable mono-morpheme.

i. Taroo-ga chooshoku-o tabe-ta
Taroo-NOM breakfast-ACC eat-PST
'Taroo ate breakfast.'

ii. Taroo-ga chooshoku-o tabeta
Taroo-NOM breakfast-ACC eat.pst
'Taroo ate breakfast.'

[Judgment]

Judgments of the linguistic data are crucial for discussion in linguistics. As mentioned above, many examples are cited from the preceding literature. I agree with the original judgment unless noted otherwise. Some examples are based on my own intuition as a native speaker of the language.

[On human NPs]

The following two names will be employed as consistently as possible: *Taroo* and *Hanako*. These are a male and female name respectively that are often considered typical Japanese first names, which is not necessarily true.

[Symbols and abbreviations]

*	ungrammatical
#	odd (possibly pragmatic rather than syntactic)
Ø	zero realization (this symbol is for expository/descriptive purposes only)
(int.)	'intended' meaning that the hypothetical (ungrammatical) sentence denotes
(lit.)	'literal' (or direct) translation
???	the hypothetical sentence is unintelligible (uninterpretable)

A	actor
ABL	ablative
ACC	accusative
agr	agreement
ALA	allative
ASP	aspect
A_T	actor of transitive verb
AUX_X	auxiliary X (where X is the original form in the language)
BEN	benefactive
CAUS	causative
CFP	clause-final particle
C_X	clause-linkage marker X (where X is the original form in the language)
CL	(numeral) classifier
COND	conditional
COM	comitative
COP	copula
DAT	dative
DCA	direct core argument
DCA_{INV}	direct core argument in inversion construction ('x' argument in [**pred'**(x, y)])
demA	demoted actor
DES	desiderative
d.n.a	does not apply
d-S	derived intransitive subject
EMP	emphatic
f	feminine
FQ	Floating Quantifier
FVV84	Foley and Van Valin 1984
FocP	focus particle
HR-CA	highest ranking core argument
HR-DCA	highest ranking direct core argument
HON	honorific

IMP	imperative
INST	instrumental
Int.mod	intention modality
LDP	left detached position
LR-DCA	lowest ranking direct core argument
LSC	layered structure of the clause
LOC	locative
m	masculine
MR	macrorole
N	neuter
neg	negative
NOM	nominative
npst	non-past (present)
NUC	nuclear
PASS	passive
pl	plural
pol	polite
pot	potential
PoCS	postcore slot
PrCS	precore slot
PRED	predicate
PST	past
RDP	right detached position
S	'subject' of intransitive predicates (i.e. [A,U])
SFP	sentence final particle
sg	singular
TOP	topic
U	undergoer
U_{INV}	undergoer in inversion construction ('y' argument in [**pred'**(x, y)])
U_T	undergoer of transitive verb
VV05	Van Valin 2005
VVLP97	Van Valin and LaPolla 1997
3	third person

Abstract

This thesis consists of two parts. The first part is a theoretical description of grammatical relations in Japanese (Chapter 3). The second part addresses three theoretical issues of two constructions discussed in the first part of the thesis, a reflexive construction (Chapter 4 and Chapter 5) and a pseudo-raising construction (Chapter 6).

In Chapter 3, grammatical relations of the Japanese language will be detailed. Though there are several studies which examined grammatical relations in Japanese in the past, all of them are neither comprehensive nor conclusive. This thesis attempts to give a more comprehensive and fresh look at the grammatical relations of Japanese. More than twenty constructions, including less discussed oblique 'subject' constructions, are examined in terms of Role and Reference Grammar (RRG) which has developed a fine-grained system to analyze grammatical relations.

In Chapter 4, a long-standing issue of the antilocality effect seen in the Japanese reflexive constructions is addressed. It is first shown that the antilocality effect of the Japanese reflexives has nothing to do with the notion of lexical reflexivity advocated in the literature. It is demonstrated that the antilocality of the Japanese reflexive is due to a peculiar subcategorization nature of the 'antilocal verbs'. That is, what we call 'antilocal verbs' do not allow metonymy and require NPs of certain meaning (quale). It is concluded that the antilocality effect is not specific to reflexive constructions and, accordingly, there is no need to posit a constraint on the behavior of the reflexive itself. For a formal treatment, RRG representation and qualia structure are employed.

In Chapter 5, an interpretive issue of the reflexive construction which has not been discussed before in the literature will be addressed. Two things will be demonstrated. First, the Japanese lexical reflexives (i.e. morphologically reflexive-marked) behave exactly as

expected from the universal principle of Condition R (Lidz 2000, 2001). Second, more importantly, it will be pointed out that the Japanese syntactic reflexives (i.e. unmarked verb + reflexive) do not show the behaviors expected from Condition R. It will be argued that the unexpected behavior of the Japanese reflexive is due to the interaction of two types of focus structure: focus by intensifier and focus by construction.

In Chapter 6, a construction hitherto classified as 'raising' will be examined. It will be claimed that the alleged 'raising' construction should be analyzed as a control construction. It is shown that the data given for a 'raising' analysis do not constitute evidence exclusively for a 'raising' analysis and there are many more pieces of evidence against a 'raising' analysis than reported before. Furthermore, the data which were presented against a control analysis turn out not to pose a genuine problem. The chapter will be concluded proposing a possible logical structure representation that subsumes the peculiarities of the construction as control.

Contents

Chapter 1 Introduction

1.1 Aims and claims of the thesis

Many linguists would agree that there are languages in which it is highly effective to employ grammatical relations such as 'subject' or 'object' for describing the grammar of the language. The most representative language of this type is English. It has long been controversial, however, whether such grammatical relations, especially 'subject', is cross-linguistically a viable universal notion.

There are two positions over the notion of 'subject' in the field: the Chomskyan and Keenanian tradition. In the former, heavily influenced by the Western logic (cf. Foley and Van Valin 1977), the notion itself is taken for granted and the structural (configurational) position is the center of their discussion (cf. McCloskey 1996). Though, over the past some four decades, the special position for 'subject', or the position 'subject' originates from, has been changed from outside of 'VP' to inside of 'VP' (e.g. Fukui 1985, Kitagawa 1986, Kuroda 1988), what they orient in their discussion is thus consistent. On the other hand, since Keenan's (1976) deconstruction of the notion of 'subject', the relativistic view, so to speak, has gained popularity especially among the linguists who work on non-European 'exotic' languages as well as European languages. It does not seem to be the case that such relativists' view on the notion of 'subject' which is expressed, for example, in Foley and Van Valin (1977, 1984), Dixon (1979, 1994), LaPolla (1990, 1993), Bhat (1991), Van Valin (1981,1993,2005), and Van Valin and LaPolla (1997), is unanimously held in the linguistic community as a whole.

Likewise, the notion of 'subject' has been long controversial among the Japanese linguists. There are two camps, those who maintain it is necessary to describe the language (e.g. Kuno

1977, Shibatani 1977, 1978, 1985a, 1990, Tsunoda 1991) and those who maintain it is not (e.g. Mikami 1960,1963, Kitahara 1981,1984, Tonoike 1988ab, 2004, Miyake 2004). Japanese is one of the best documented languages in the world; however, the data about the grammatical relations are sporadic in the literature. The observations are neither comprehensive nor conclusive since the papers generally do not aim for the pursuit of grammatical relations and the coverage of the examined linguistic constructions is rather limited even in the papers aimed at the characterization of grammatical relations (this will be detailed later). There are many constructions that are cross-linguistically claimed to exhibit grammatical relational phenomena, but relatively few constructions have been analyzed in the case of Japanese. In addition, the framework assumed in the past studies is rather obsolete in terms of the perspective of the current linguistic theory.

Thus one of the primary purposes of this thesis is to give a more comprehensive picture of the issue of grammatical relations in Japanese by scrutinizing many constructions that have not been examined in the past literature. This thesis is an attempt to deepen the analysis of the linguistic phenomena in Japanese that involve grammatical relations. As a result of the examination, I am defending the former position, represented by Kuno (e.g. 1977), Shibatani (e.g. 1977, 1985a) and Tsunoda (1991), that maintains it is necessary to have the notion of 'subject' in the description of the Japanese language. Along with defending the notion of 'subject,' I will offer a new and more sophisticated analysis by employing Role and Reference Grammar (Foley and Van Valin 1984, Van Valin and LaPolla 1997 and Van Valin 2005).

The other purpose of this thesis is to offer new analyses for the two constructions discussed in the first part (grammatical relations), a reflexive construction and a raising ('pseudo-raising') construction. Given the vast literature on the topic, it might be of some surprise to say that there are problems left for the Japanese reflexive *zibun*. There are two issues that have not

been seriously addressed in the past literature. One is the antilocality effect of the Japanese reflexive *zibun*. For example, *Ken cut himself* is a typical reflexive sentence in English, but the Japanese counterpart, **Ken-ga zibun-o kitta* (Ken-nom self-acc cut), is very bizarre. This is what is being called antilocality here, the phenomenon in which a reflexive cannot occur at the default 'object' position. Quite a few researchers have noticed the peculiarity, but they have left the issue open.

The second issue is related to the interpretive possibility of the reflexive. For example, in English, *Ringo Starr fell on himself* is an acceptable sentence under a certain circumstance (e.g. Ringo Starr falls on his statue in a wax museum). What is interesting is that the *Ringo* sentence denotes a transitive event by the reflexive construction. The Japanese counterpart cannot denote such a transitive event and is not acceptable for the intended meaning. As far as I am aware, no one has addressed this issue in the literature.

The last issue is related to the so-called 'raising' construction. As for the alleged 'raising' construction, it will be argued that there is no 'raising' construction in the language (contra Kuno 1976, Tanaka 2002). The construction will be termed 'p(seudo)-raising' instead. The nature of the construction, which has not necessarily been revealed in the past literature, will be examined. After discussing several compelling pieces of data against a 'raising' analysis, it will be claimed that the construction should be analyzed as a control construction.

1.2 Roadmap of the thesis

The following chapters are organized as follows. Chapter 2 introduces the basic architecture of the framework employed in this thesis, Role and Reference Grammar. Chapter 3 examines grammatical relations in Japanese, which is preceded by an introduction of the

theory of grammatical relations in RRG and the discussion of the previous studies on the subject. Chapter 4 deals with the antilocality effect of the reflexive construction. Chapter 5 argues for the focus-driven interpretation of the reflexive construction. Chapter 6 proposes a new analysis for the alleged 'raising' construction. In Chapter 7, overall findings and claims made in the current thesis will be summarized.

Chapter 2 Framework (RRG)

2.1 Overview

In this thesis, Role and Reference Grammar (RRG) is employed as an analytical framework. RRG was first systematically introduced in Foley and Van Valin (1984; FVV84 hereafter), following several precursors such as Foley and Van Valin (1977), Van Valin and Foley (1980), and Van Valin (1981). Since then, numerous papers have been published based on the framework (see Kopris 2003 for a comprehensive bibliography). Van Valin (1993) and Van Valin and LaPolla (1997; VVLP97 hereafter), especially the latter, were the major updates of the theory and the latest developments can be seen in Van Valin (2005; VV05 hereafter). RRG analyses applied to Japanese include, for example, Ohori (1992), Hasegawa (1992, 1996), Shimojo (1995), Kishimoto (1996), Toratani (1997, 1998, 2002), Imai (1998), Amazaki (2000, 2006) and Miura (2002).

Though there are some changes over the past some thirty years in the history of the theory, the basic conceptions and the architecture have remained the same. RRG is a monostratal, non-derivational theory with only one syntactic level. There is nothing like a derivational relationship between different syntactic representations of a single sentence. One more level RRG posits is a semantic representation called 'Logical Structure (LS)'. Logical Form (LF) in the Chomskyan tradition is a syntactic representation, but LS in RRG is explicitly a semantic level. The syntactic and the semantic level are linked via algorithms with discourse-pragmatic considerations. Though RRG is thus radically different from the 'mainstream' Chomskyan framework (e.g. Chomsky 1981, 1995), it is a branch of 'generative' grammars in the sense that it pursues a formal system that can generate all and only the grammatical sentences of the natural

language (see Van Valin 2001 for the historical background of the theory and comparison with other theories). Unlike theories like Head-driven Phrase Structure Grammar (Pollard and Sag 1994) or Radical Construction Grammar (Croft 2001), RRG explicitly seeks linguistic universals in its theoretical orientation as well as language-specific variations.

RRG can be said to be a member of Construction Grammar family (e.g. Goldberg 1995) which finds a theoretical significance on grammatical constructions. The notion of 'construction' drastically varies from theory to theory, however. There are two poles in linguistics on this notion, those who deny the significance of the notion and those who rely only on the notion. The representative of the former position is the Chomskyan tradition that simply views constructions as 'epiphenomenon' (e.g. Chomsky 1986) to seek ultimate (abstract) universals. The representative of the latter extreme can be Croft's Radical Construction Grammar. Croft's (2001: 283) position is like 'ultimate relativity' on the notion of constructions. He claims that there are no comparable constructions cross-linguistically. Dryer (1997, 2007) seems to be even more drastic in that he believes that all syntactic and morphological categories and rules are language-specific (Dryer 2007: 251). RRG practitioners generally endorse neither extremes as made explicit in Van Valin and Wilkins (1993) or Van Valin (2007).

RRG has tried to fulfill the various adequacies, i.e. the criteria a sound linguistic theory must meet (VVLP97). One of the adequacies I consider important is typological adequacy. If the cross-linguistic data were laid out in terms of the same typologically-oriented criteria, they could be compared more easily. In the long run, it is necessary for linguists to compare languages as precisely as possible in terms of a typologically-minded theory. Though the primary purpose of this thesis is not to carry out cross-linguistic research, data from other languages are employed for reference and comparison.

In the following subsections, the basic architecture of RRG which is relevant to the

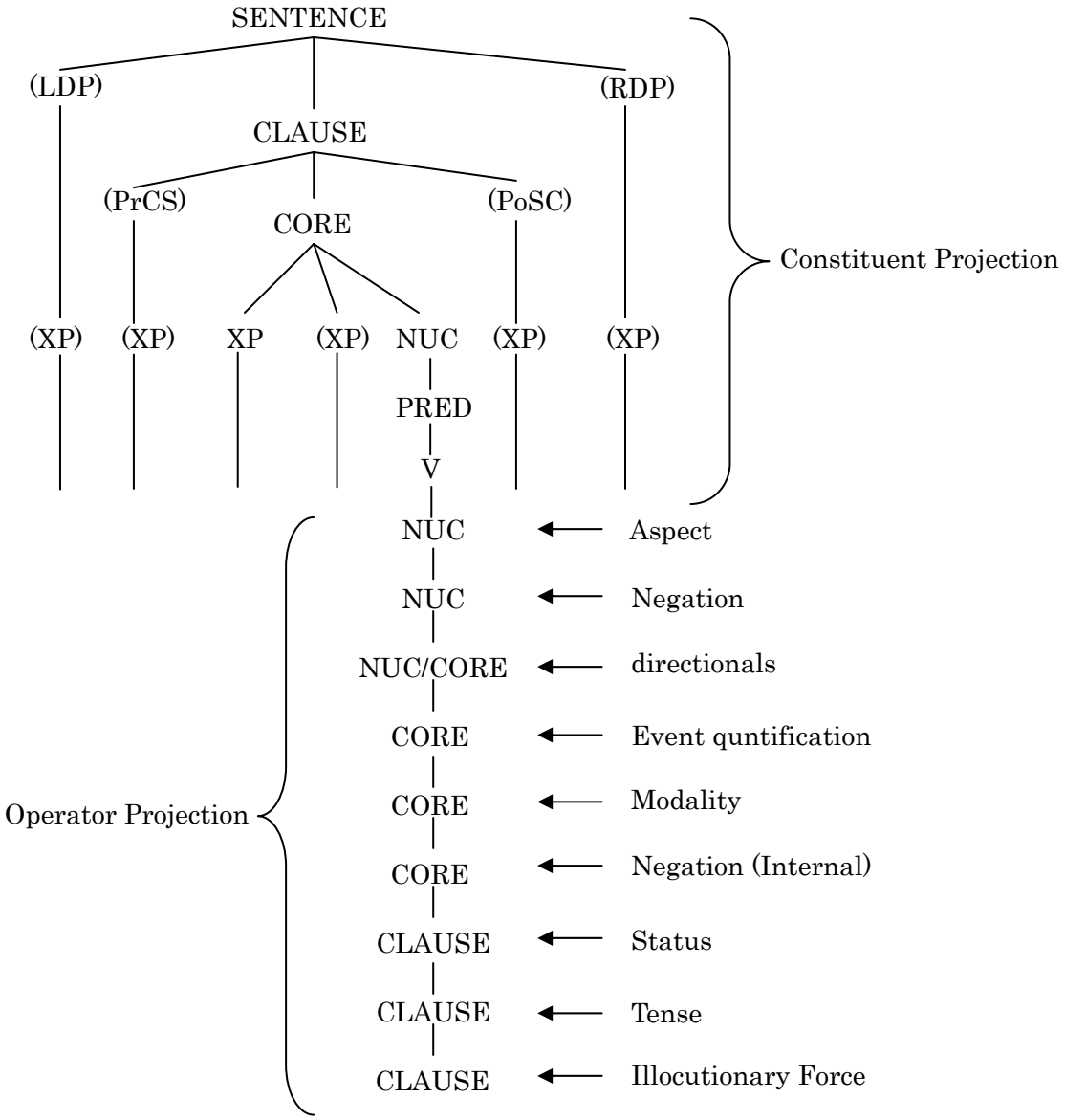
discussions developed in this thesis will be briefly introduced.

2.2 The layered structure of the clause (LSC)

RRG is a projection grammar and a clause structure, which is a central unit for syntactic theories, is formally represented by three projections: constituent projection, operator projection and focus structure projection. These three projections are all represented in a single structure called the layered structure of the clause (LSC). Constituent projection, the upper part in (1), is a structural representation for the morphosyntactic level and there are four basic syntactic units: sentence, clause, core and nucleus. These units are distinctive to each other in terms of the possible operators each unit can take. Operator projection, the lower part in (1), indicates the relation between each unit and the possible operators. The sentence level is the only exception in that there is no operator which works only for this level. As a consequence, the sentence level is distinctive only when there is some sentence-level phrase. For example, the *as-for* phrase in English (as in *As for Sam, I haven't seen him today*), is employed at the Left-Detached (or Right-Detached) Position or there are some sentence-level modifiers (i.e. adverbs). Focus structure projection is another representation for information structure of the clause (see below).

RRG does not admit inherent structural configurationality in any of the world languages and, as a natural consequence of this view, a flat structure representation is given to all the sentences (VVLP97: 329-330). Therefore, grammatical relations such as 'subject' as well as concurrent phrase structures such as a verb phrase, 'VP,' assumed in some other theories, are not structurally represented in LSC.

(1)



2.3 *Aktionsart*

The center of the theory is the verbal classification, especially based on the verbal aspect. Verbs can be classified in terms of its aspectual properties, or ***Aktionsart***. Basing itself upon Dowty-Vendler's theory of aspect, RRG has developed its own *Aktionsart* system. In addition to the traditional basic four-way classification (state, activity, achievement and accomplishment), two more *Aktionsart* types have been added in RRG, active accomplishment and semelfactive

(the latter was first introduced in VV05). The type of the verb can be diagnosed through various diagnostic tests. These diagnostic tests are language-specific. For example, in English, non-stative predicates denote habitual interpretaion in simple present tense (Dowty 1979, VV05). The person referred to as *John* in *John drives a bus* can be sleeping at the time of speech, for example. This is not true in *John is driving a bu*s under the primary interpretaion of the sentence. This is an example of language-specific test (English here). Regarding Japanese, Hasegawa (1996) and Toratani (1997, 2002) are two chief developers of the Japanese-specific diagnostic tests. In this thesis, their works are assumed for the aspectual classification of the Japanese verbs.

2.4 Logical structures and macroroles

Each *Aktionsart* type has one or two corresponding **Logical Structures** (LS). In other words, once the *Aktionsart* type of the verb is determined through the above diagnostic tests, its LS is automatically determined. The LS of each *Aktionsart* class is shown in (2). It looks like there are many variations in LS, but the LSs for STATE and ACTIVITY are two primitives and other types are realizations of them under specific aspectual types with an only exception of ACTIVE ACCOMPLISHMENT. In LS, the aspectual type is prefixed to the primitives as in INGR**do'/predicate'** ... , SEML **do'/predicate'** ... or BECOME **do'/predicate'**.

(2)

Aktionsart class	Logical structure
STATE	**predicate'**(x) or (x, y)
ACTIVITY	**do'**(x,[**predicate'**(x) or (x, y)])
ACHIVEMENT	INGR **predicate'**(x) or (x, y)
	INGR **do'**(x,[**predicate'**(x) or (x, y)])
SEMELFACTIVE	SEML **predicate'**(x) or (x, y)
	SEML **do'**(x,[**predicate'**(x) or (x, y)])
ACCOMPLISHMENT	BECOME **predicate'**(x) or (x, y)
	BECOME **do'**(x,[**predicate'**(x) or (x, y)])
ACTIVE ACCOMPLISHMENT	**do'**(x, [**predicate$_1$'**(x,(y))])&INGR**predicate$_2$'** (z, x) or (y)
CAUSATIVE	α CAUSE ß, where α, ß are logical structures of any type

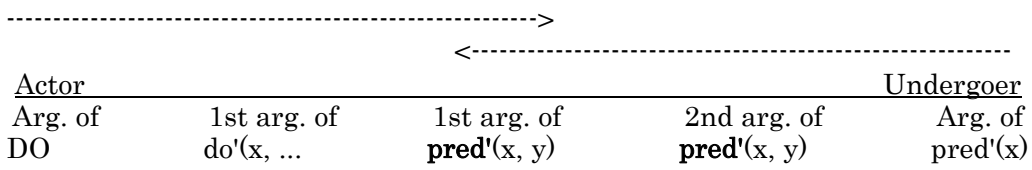
The semantic arguments at LS have some thematic value such as 'agent' or 'theme' as a function of the verbal meaning. It is well-known, however, that though the usefulness and importance of such thematic roles have been well recognized since Fillmore's case grammar, it was a serious concern how many of them linguistic theories need. A natural consequence was the proliferation of the thematic roles and terminological confusion. In order to solve this fundamental problem, in RRG, further generalized semantic roles, called **macroroles**, were introduced into the system to configure the syntax-semantics interface. The traditional (micro) thematic roles are subsumed under the macroroles and in many cases do not play a crucial role in the linking between syntax and semantics. Thus, RRG has successfully kept itself away from the long-standing problem of how many thematic roles should be posited in a linguistic theory.

2.5 Principles

The macroroles consist of two generalized roles, actor and undergoer. Actor subsumes the thematic roles traditionally called agent, experiencer and recipient, whereas undergoer subsumes recipient, stimulus, theme, and patient (VV05: 54). When the macroroles are assigned to the semantic arguments in an LS, there is a hierarchy called the Actor-Undergoer

Hierarchy, (3), and the assignment is executed based on a principle called the Default Macrorole Assignment Principle, (4). Thus, the assignment of the macroroles onto the semantic arguments in LS automatically follows from these principles.

(3) Actor-Undergoer Hierarchy



(4) Default Macrorole Assignment Principle

Number: the number of macroroles a verb takes is less than or equal to the number of arguments in its logical structure,
1. If a verb has two or more arguments in its logical structure, it will take two macroroles
2. If a verb has one argument in its logical structure, it will take one macrorole

Nature: for verbs which take one macrorole,
1. If the verb has an activity predicate in its logical structure, the macrorole is actor
2. Otherwise, the macrorole is undergoer

Many sentences have a special ('privileged') NP that holds some prominent syntactic status over the other NPs in the same sentence, namely what is traditionally called 'subject.' RRG dose not endorse the traditional approach to grammatical relations such as 'subject' and 'object' and the notion of 'subject', in particular, does not have any theoretical significance (hence single-quoted). RRG deconstructs the notion, employing a more fine-grained approach, and the NP with a special status (i.e. 'subject') is called a privileged syntactic argument (PSA) instead (see Chapter 3 for more detail on this). A PSA exhibits various special features and many syntactic behaviors hinge on this. For example, it typically receives nominative case in accusative-type languages in light of morphology. As for the syntactic aspects, for example, it

can be omitted in a conjunction reduction construction. For example, the hidden 'subject' of *talk* in *Tom met Mary and talked about John* must be *Tom*, cannot be *Mary*. Therefore, it is more important and must be specified over the other NPs. As mentioned above, however, such a privileged NP cannot follow from LSC since LSC does not have any structural indication (or asymmetry), unlike the tree structures in other generative theories. Therefore, in RRG, in order to specify such a PSA, there is another principle called the PSA selection hierarchy as in (5). It picks out as a PSA the highest ranking macrorole for accusative languages and the lowest ranking macrorole for ergative languages. In other words, when both actor and undergoer are available within a single sentence and there is no principle-overriding process, the actor functions as a PSA in accusative languages and the undergoer in ergative languages. Thus, the semantic arguments in LS are linked to syntactic positions and assigned some syntactic status via the two hierarchies and the one principle.

(5) PSA selection hierarchy

Arg. of DO	>	1st arg. of **do'**(x, ...	>	1st arg. of **pred'**(x, y)	>	2nd arg. of **pred'**(x, y)	>	Arg. of pred'(x)

<Default>
Accusative system: highest ranking direct core argument in terms of (5)
Ergative system: lowest ranking direct core argument in terms of (5)
<(Anti)Passive>
Accusative system: lowest ranking direct core argument in terms of (5)
Ergative system: highest ranking direct core argument in terms of (5)

2.6 Case assignment (Imai 1998)

Case assignment is another important morphosyntactic property every linguistic theory must address. Imai (1998) demonstrates that the case assignment rules for accusative languages (e.g. German and Icelandic) developed in VVLP97 cannot be directly applied to

Japanese and proposes Japanese-specific rules in (6). He employs a notion called 'pragmatic peak,' which is originally due to Zubin (1979). The 'pragmatic peak' is pragmatically the most salient argument in a clause and he develops his own theory under the same term. He defines the notion of 'pragmatic peak' as a sum of various factors such as figure in some figure-ground relations, discourse focus, an animate entity in an animacy hierarchy, a higher argument in logical structure, a higher macrorole in a macrorole hierarchy, and so forth (see Imai 1998 for details). Imai's case assignment rules in (6), including the notion of 'pragmatic peak,' are assumed in the current thesis.

(6) Case/postposition assignment rules for Japanese (Imai 1998: 20)

(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)

In order to see how the system reviewed thus far works, the linking scenario for the Japanese sentences in (7) is presented below. It is beyond the scope of this section to detail the linking algorithm for the Japanese constructions, so this is a rough sketch of the linking system.

(7) a. Hanako-ga Taroo-o tatai-ta
Hanako-NOM Taroo-ACC hit-PAST
'Hanako hit Taroo.'

b. Taroo-ga Hanako-ni tatak-are-ta
Taroo-NOM Hanako-by hit-PASS-PAST
'Taroo was hit by Hanako.'

What we need to do first is to diagnose the verb in the sentence (*tataku* 'hit' here). In terms of the Japanese tests that correspond to Van Valin's (2005: 35) diagnostic test 1 (progressive), test 2 (adverb), and test 6 (result state), the verb *tataku* 'hit' can be classified as a

semelfactive verb. When combined with *-teiru*, which is an aspectual marker, the resulting complex, *tatai-teiru*, produces iterative reading as predicted from test 1. The verb can cooccur with the adverbs that correspond to the English adverbs such as *vigorously* or *actively* that denote the manner or the dynamicity of the action (as in *tsuyoku tataku* 'hit powerfully'), which means this verb passes test 2. The verb is same as *hit* in English which is a contact verb and does not entail any change of state (cf. Levin 1993). A certain 'implied' result state, if any, can be cancelled as expected by a phrase like "nothing changed" in English. Therefore, there is no result state, which means it passes test 6 as well.

For the semelfactive verbs with two arguments, there are two possible LSs: SEML **do'**(x, [**pred'**(x, y)]) or SEML **pred'**(x, y) (see the table in (2)). Test 2 suggests that the verb is agentive so that the former LS is the one (the latter LS is for a state such as *glimpse*; cf. VV05: 47). In sum, (8a) is the LS for the simplex sentence in (7a).

(8) a. SEML **do'**(Hanako, [**hit'**(Hanako, Taroo)])

In terms of the Actor-Undergoer Hierarchy (3), the first argument of **pred'**(x, y), i.e. *Hanako*, is selected as an actor and the other second argument of the same **pred'**(x, y), i.e. *Taroo*, is selected as an undergoer. (8b) shows the stage in which the two macroroles are assigned to the arguments at LS.

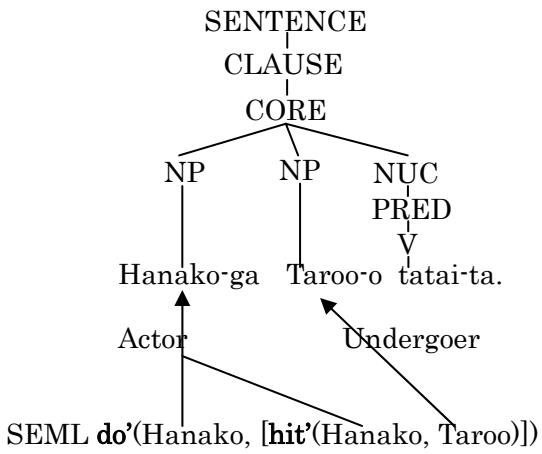
Actor Undergoer
| |
b. SEML **do'**(Hanako, [**hit'**(Hanako, Taroo)])

The voice type is active voice and therefore the default PSA selection in (5) applies, which means that the highest ranking direct core argument, the actor *Hanako*, is the PSA of the construction

(it should be noted again that the PSA status of this NP has no indication in LSC).

As for case-marking, the actor, *Hanako*, receives nominative case, because it is the higher-ranking macrorole core argument, by the rule (6A or 6P) of the case assignment principle whereas the undergoer, *Taroo*, receives accusative by the rule (6B) in the same principle. (9) shows the partial LSC and the linking from semantics to syntax for the active sentence in (7a). This is a grossly simplified explanation. The [NP NP V] scheme at the constituent projection is one of many 'syntactic templates' of Japanese. (See VV05 for the notion of 'syntactic templates' and 'syntactic template selection hierarchy' which regulates how an appropriate template is selected for the corresponding semantic representation at LS.)

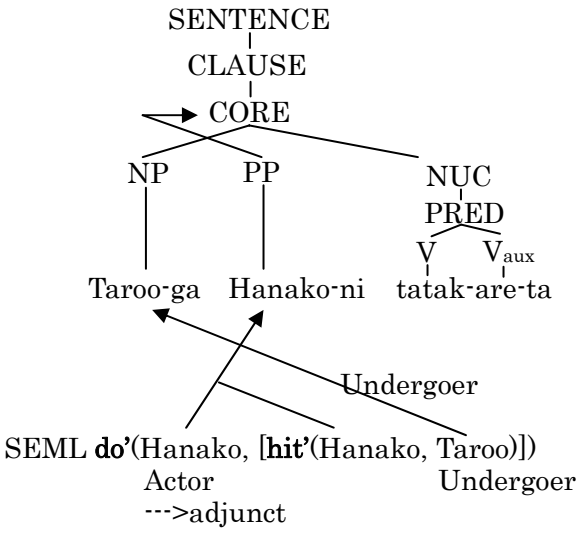
(9)



When the construction is passive as in (7b), the lower argument is selected as a PSA due to the PSA selection principle in (5). Therefore, the undergoer, *Taroo*, is assigned PSA status. The passive voice also indicates that the actor is suppressed to be an adjunct (non-macrorole) and it means that the second argument in LS, *Taroo*, is the only macrorole argument (undergoer). Therefore, it receives the nominative by the rule (6B). (10) shows the partial LCS and the linking from semantics to syntax for the passive sentence in (7b). The demoted actor, Hanako, is now demoted to an adjunct (not a core argument any longer) which modifies the core as

indicated by the arrow in the constituent projection.

(10)



2.7 Focus structure

Information structure is an area which is strongly associated with functionalism in linguistics and tends to be neglected in formal syntactic theories. Though it is a formal syntactic theory, RRG acknowledges the pervasive influence of discourse-pragmatics, especially on the linking between semantics and syntax, and the theory of information structure has been systematically incorporated. Among many pragmatic theories, the information structure in RRG is extended primarily based on Lambrecht's (1986, 1994, 2000) information structure theory. In the information structure theory of RRG, there are three important notions: information unit, domain, and focus structure types.

Information unit [IU] is a basic unit that focus is potentially assigned. In the case of simple clause, each syntactic phrasal category, such as NP, constitutes a basic information unit. In the case of complex clauses, however, what counts as such an information unit poses a more

significant issue. Even within the same category of subordination, for example, the internal element of the subordinate clause that is functioning as an argument can be potentially assigned focus whereas it is difficult to challenge the internal element of the subordinate clause that is functioning as a modifier. The following examples in (11) and (12), adopted from VV (2005: 213-215), indicate this distinction. Thus, the unithood for focus assignment does not always coincide with syntactic categories.

(11) A: Did Kim tell Pat [that he will arrive at the party LATE]?
B: No, EARLY.

(12) A: Did Pat see Kim, [after she arrived at the party late]?
B: No, Sally.
B': No, before.
B'': ??No, early.

The next relevant notion is the issue of focus domain. Given the cross-linguistic fact that many languages have a constraint on a syntactic position for a possible focus assignment, two domains, 'potential focus domain' [PFD] and 'actual focus domain' [AFD], are distinguished. In some languages, for example, the preverbal position is limited to a topical argument and, as a consequence, a wh-word, which is necessarily a focal element, cannot appear in that position (see VV05: 75 for more detail). In Japanese, focus may be assigned on any position within a clause though the markedness varies depending on where the focus is assigned. Therefore, the potential focus domain is projected over a whole clause in the case of a simple clause whereas the actual focus domain is projected over only the units the actual focus is assigned in a particular utterance (see the figures in 13).

The other distinction is focus structure types. There are three basic focus types: predicate focus, sentence focus and narrow focus. The first type, predicate focus, is the default focus

pattern in canonical active sentences. In this focus pattern, 'subject' is topical and the rest of the sentence conveys new information which is focal. Thus, this focus pattern corresponds to the traditional 'topic-comment' structure. Figure 1 in (13) represents the focus structure projection for the default focus pattern of the sentence in (7a). The second type is sentence focus. In this focus type there is no presupposed part and therefore no topical argument in the sentence. The very beginning of some story or an answer to questions like *What happed?* takes this focus structure pattern. Figure 2 in (13) is the focus structure projection of this pattern. All the information units of the sentence are under both potential focus domain and actual focus domain. The last type is narrow focus. Narrow focus is sometimes also termed as 'argument focus' (Lambrecht 1994), but I will follow VV(2005: 71; fn3) since, as he points out, not only arguments but adjuncts receive this type of focus. In addition, given the existence of sublexical focus as in *We only saw stalagMITes in the cave, no stalagTITes* (Krifka 2007: 31; see also Artstein 2004), this seems to be further preferred. Figure 3 in (13) shows this narrow focus pattern. Only the PSA argument is focused in this particular example. Focus is prosodically realized, as marked by capital letters, in the sentences with a canonical word order.

(13) Predicate focus (default), Sentence focus and Narrow focus

Figure 1.

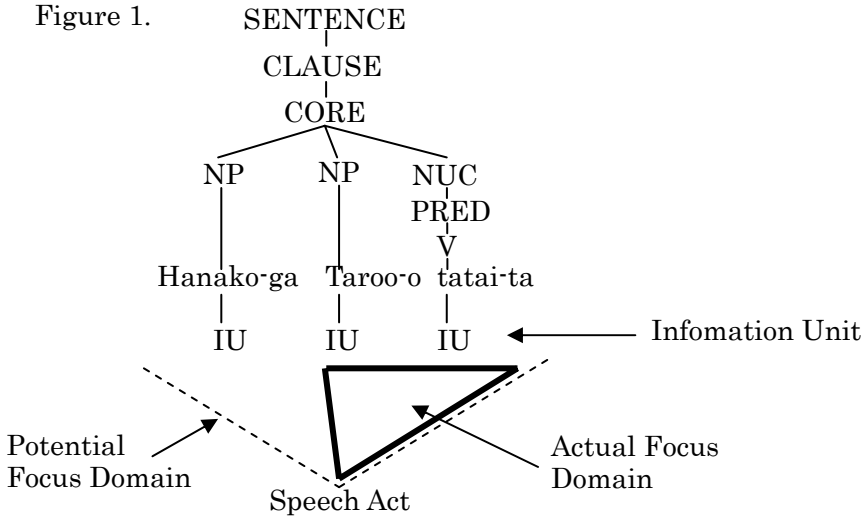


Figure 2.

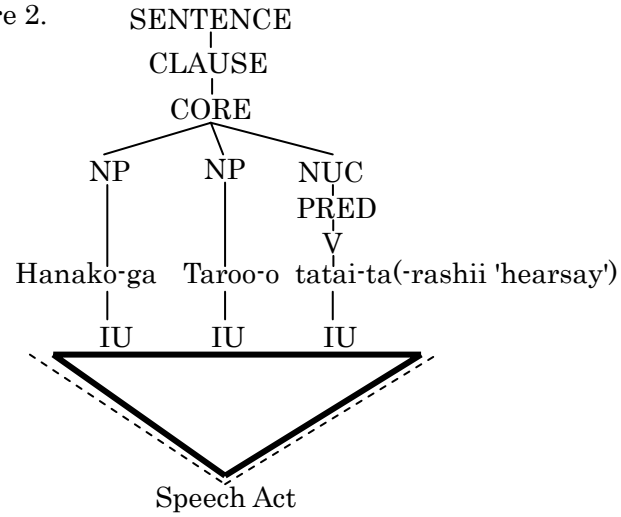
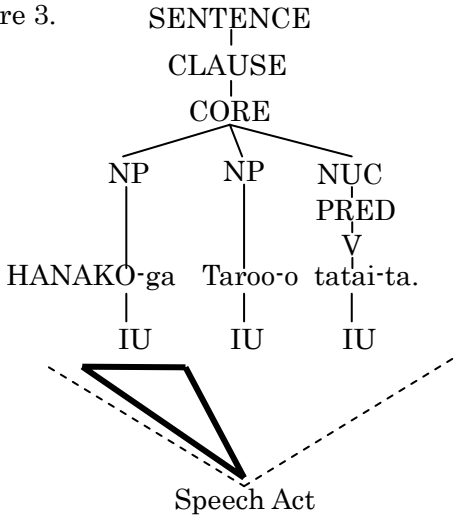


Figure 3.



Focus structure is known to affect the type of referring expressions that fill a variable position in LS. In other words, extensionally the same entity (referent) can be realized as an indefinite NP (when it is most focal) or a zero form (when it is most topical), among various other coding possibilities, depending on their status in the discourse. In Chapter 4, focus structure is shown to have a great impact on the interpretive possibility at the semantic level in addition to

such discourse-pragmatic context.

In this section, the very basic architecture of RRG was laid out. In this thesis, almost all the sentences examined in detail will be simple sentences; therefore, the brief introduction in this section should suffice to familiarize the readers. In the next chapter, one of the primary themes of this thesis, grammatical relations in Japanese, will be explored.

Chapter 3 Grammatical Relations

3.1 Non-universality and construction-specificity

One of the central tenets in RRG is that grammatical relations are cross-linguistically not uniform. This is especially true for the notion of 'subject.' This has been a very consistent claim since the beginning of the theory (see Foley and Van Valin 1977, 1984; Van Valin 1977). In RRG, grammatical relations are considered construction-specific as well. Therefore, it is expected that even within a single language, some constructions have an NP that exhibits 'subject' properties while others do not. Thus, the notion of 'subject' has been doubly relativized, so to speak, in that it is not only language-specific but also construction-specific. Thus the system adopted in RRG is ideal since not only cross-linguistic variations but also intra-linguistic variations within a single language can be equally captured and compared. In the traditional sense, 'subject' means 'subject' of the whole grammatical system of a particular language. 'Subject in English' or 'subject in Japanese' does not make much sense in the current framework since different constructions can potentially exhibit different 'subject' properties. For example, Van Valin (1981) found that there are five different 'subject' patterns in Jakaltec, a language in Guatemala. Even in English, which is believed to show strong (i.e. consistent) 'subject' properties (e.g. Li and Thompson 1976, Tsunoda 1991), the 'subject' of some constructions can be best characterized in terms of the semantic rather than syntactic features (e.g. so-called object-control construction).

Regarding grammatical relations, there are two issues independent of each other, existence and strength. If a language has at least one construction which shows 'subject' properties, it can be said that the language has 'subject'. Therefore, in order to claim that a language has

grammatical relations, it suffices to show that the language has at least one construction that exhibits 'restricted neutralization' (see below). On the other hand, it is a different question to what extent the grammatical relation is 'strong' (or consistent) in the given language. In other words, how many constructions consistently exhibit the 'subject' properties (of the same pattern) in the language (VV05: 99). In some languages there are many constructions that exhibit 'subject' properties whereas in other languages there are few constructions. Therefore, in the first matter (existence), the notion of 'subject' is a categorical issue whereas it is a matter of degree in the second. It must be noted, however, that what is meant by 'degree' is totally different from the so-called 'prototype approach' (e.g. Shibatani 1985ab, Lakoff 1987) to grammatical relations. As pointed out in VVLP(1997: 280), the prototype approach cannot define the precise nature of the grammatical relations such as pivot and controller (see below), though the approach is obviously useful for arguing about the relative markedness of different semantic values for the relation, which can lead to cross-linguistically observable categorical changes, for example, from passive voice to other voice constructions (cf. Shibatani 1985b, Haspelmath 1990).

In RRG, the types of 'subject' are characterized in terms of the neutralization patterns of the following roles: [A], [U], [A_T], [U_T], [d-S] and [DCA]. [A] and [U] are an actor argument and an undergoer argument of an intransitive verb respectively. These two roles apply to intransitive verbs only. Many languages (or constructions), however, do not make a distinction between [A] and [U] and the single argument of an intransitive verb is treated in the same way. In this case, the single argument is represented by [S], regardless of whether it is [A] or [U]. [A_T] and [U_T] are an actor argument and an undergoer argument of a transitive verb respectively. [d-S] is a derived intransitive 'subject' (e.g. the undergoer 'subject' argument of a passive construction in the case of accusative-type languages). [DCA] is a non-macrorole direct core

argument.

There is a continuum in the neutralization patterns of the above roles. One of the two poles of the continuum is a construction in which there is only neutralization between theses roles without any restriction. The relative clause construction in English is a typical example of this. As seen in the array of examples in (14), any role can be relativized without any restriction (Keenan and Comrie 1977, Croft 1990: 108, VVLP97, VV2001: 47). (It must be noted that, throughout this thesis, the symbol 'Ø' in the examples does not have any theoretical significance and it is for expository purposes only.)

(14)

a.	I talked to the person$_i$ [who Ø$_i$ was running along the river]	[A]
b.	I talked to the person$_i$ [who Ø$_i$ fell down in front of me]	[U]
c.	I talked to the person$_i$ [who Ø$_i$ bought the house on the corner]	[A$_T$]
d.	I talked to the person$_i$ [who the police interviewed Ø$_i$]	[U$_T$]
e.	I talked to the person$_i$ [who Ø$_i$ was arrested by the police]	[d-S]
f.	I talked to the person$_i$ [to whom the police sent a summons Ø$_i$]	[DCA]
g.	I talked to the person$_i$ [whose Ø$_i$ house burned down]	genitive
h.	I talked to the person$_i$ [who Chris is taller than Ø$_i$]	comparative
...	...	...
...	...	...

If all of the constructions in a particular language X exhibit this type (i.e. only neutralization without restriction), it can be reasonably concluded that the language does not have grammatical relations at all. According to LaPolla (1990, 1993), Chinese is such a language. He examined eight constructions in the language and found no restriction in any of the constructions he examined. He concluded that 'subject' is not a necessary notion for Chinese and therefore the notion of 'subject' cannot be universal. If we attempt to represent the total neutralization consistently seen in Chinese or the relative clause constructions in English, a representation like the following would be given: [S,A$_T$,U$_T$,d-S,DCA,etc]. Obviously, however, this is an almost meaningless representation since this is not informative at all. This type of construction is,

therefore, simply characterized as 'pivotless' instead.

At the other end of the continuum is the construction type whose 'subject' is restricted and can be characterized by just one of the roles above, typically [A] or [U]. In other words, there is no neutralization among the roles and the type of NP can only be semantically determined. In such constructions, the 'subject' can be specified by, for example, [A] or [U] only. It is necessary to posit an additional category such as 'subject' only when it is necessary. If a syntactic slot is exclusively occupied by either an actor ([A]) or an undergoer ([U]), it is not necessary to posit a new category 'subject' that subsumes both actor and undergoer. In English, the constructions with a *persuade*-type verb show this feature. As shown in (15), the controller in this construction is always the undergoer and therefore, this control relation can be not syntactically but semantically determined. It is impossible to determine the relation syntactically since the controller in (15a) is 'objet,' whereas that in (15b) is 'subject'.

(15) a. Mary persuaded Chris$_i$ [Ø$_i$ to study hard].
controller **pivot**
[U]

b. Chris$_i$ was persuaded by Mary [Ø$_i$ to study hard].
controller **pivot**
[U]

Cross-linguistically, it is well-known that many of the constructions in so-called active languages exhibit this restrictiveness (e.g. Acehnese; see Durie 1988a, 1988b).

In RRG, the neutralization types located between these two poles are characterized as 'restricted neutralization (for syntactic purposes)' and recognized as grammatical relations. The neutralization between the roles is a necessary condition for grammatical relations, but it is not a sufficient one. It must be restricted, as in, for example [S,A$_T$,d-S] or [S,U$_T$]. Such restrictiveness constitutes a sufficient condition to admit a grammatical relation for a certain

construction. (16) is a good example of this restricted neutralization. In both (16d) and (16e), the macrorole of the missing argument is an undergoer and therefore, the difference in acceptability cannot be attributed to semantics. It is necessary to resort to a syntactic notion like 'subject' in the traditional linguistics ('pivot' in our terms). The neutralization pattern for the pivot of this construction is thus [S,A_T,d-S] excluding [U_T]. This is a typical example of the 'restricted neutralization' (VVLP 1997).

(16) a. Mary wants [$Ø_i$ to be taller].
[U] = undergoer of intransitive verb

b. Mary wants [$Ø_i$ to swim in the river].
[A] = actor of intransitive verb

c. Mary wants [$Ø_i$ to study Russian].
[A_T] = actor of transitive verb

d. Mary wants [$Ø_i$ to be interviewed by the linguistics department].
[d-S] = undergoer of transitive verb with voice modulation

e. *Mary wants [the linguistics department to interview $Ø_i$].
[U_T]
= undergoer of transitive verb without voice modulation

It should be allowed to refer to a certain privileged argument as 'subject' in a sloppy manner just for convenience's sake, but obviously it would miss these precise features of the special argument if we seriously characterized the privileged argument by the traditional notion of 'subject'.

3.2 Pivots, controllers and privileged syntactic arguments (PSA)

There are three important notions used to characterize grammatical relations in terms of

the RRG perspective: controller, pivot and privileged syntactic argument (PSA). Pivot is, typically but not exclusively, a missing argument in complex constructions. Controller is a linguistic element that induces another grammatical phenomenon in the same sentence such as agreement or, more literally, controls another element in the same sentence as in control constructions or reflexive constructions. Pivot and controller are subsumed under PSA. In other words, PSA is a cover term for both pivot and controller (VVLP97: 281).

There are three construction patterns in terms of controller and pivot: (1) those that have both controller and pivot, (2) those that have a pivot only, and (3) those that have a controller only. The three examples in (17) illustrate the three possibilities respectively. In (17a), the missing pivot in the linked unit must be controlled by the controller. In (17b), there is no such control relation and the argument of the predicate in the linked unit is realized as a matrix argument. In (17c), the controller argument induces agreement on the predicate.

(17) a. Mary$_i$ wants [Ø$_i$ to study Russian].
controller **pivot**

b. Mary$_i$ seems [Ø$_i$ to be tired].
pivot

c. Mary always { *praise / praises } Chris.
controller

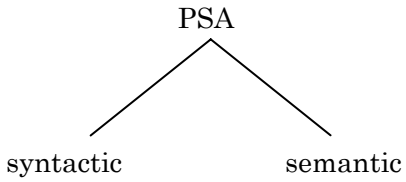
The notion of controller and pivot are further subcategorized into four types in terms of their semantic or syntactic nature: (1) syntactic pivot, (2) semantic pivot, (3) syntactic controller, and (4) semantic controller. Syntactic pivots and syntactic controllers are the ones that exhibit the restricted neutralization introduced in the previous section. On the other hand, semantic pivots and semantic controllers are the ones that can be formulated only in terms of a certain role such as [A] or [U]. For example, in the so-called 'object'-control construction in (15),

repeated below, regardless of its syntactic status, whether it is 'object' as in (15a) or 'subject' as in (15b), the undergoer argument, *Chris*, always controls the pivot (a 'missing argument' here) in the linked unit. The control relation has nothing to do with the status of the grammatical relation the controller has ('subject' or 'object'). This is an example of a semantic controller. The syntactic and semantic PSAs can be diagramed as in Diagram 1 below.

(=15) a. Mary persuaded Chris$_i$ [Ø$_i$ to study hard].
controller **pivot**
[U]

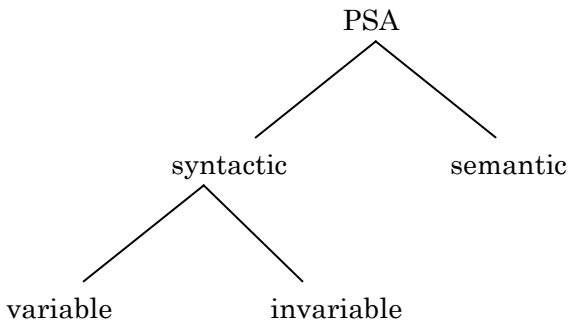
b. Chris$_i$ was persuaded by Mary [Ø$_i$ to study hard].
controller **pivot**
[U]

Diagram 1



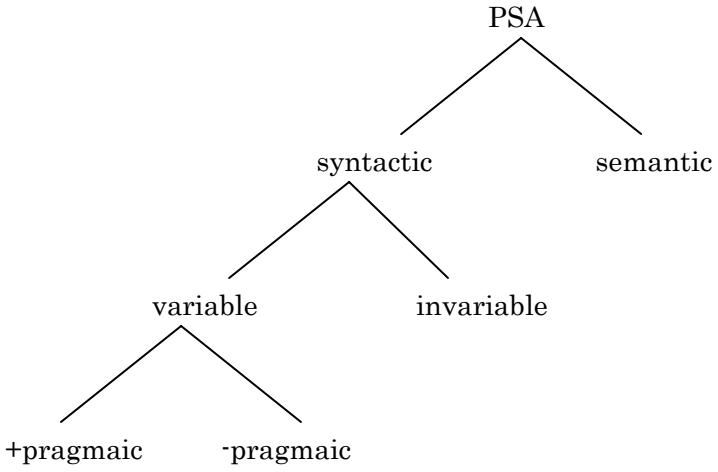
There is one more criteria used to subcategorize PSAs, variability. When a pivot or a controller neutralizes more than two roles (for example, [S,A$_T$,d-S] for a certain construction in an accusative-language), there is some variability and the neutralization of this type is called a variable PSA (see VV05: 102 for more details on this notion). The subcategories of PSA can be now diagramed as in Diagram 2.

Diagram 2



In a PSA of this pattern, one of the roles must be necessarily chosen in a given output sentence. While the choice can be influenced by discourse-pragmatics in some constructions, discourse-pragmatics has no bearing on the choice in other constructions. Therefore, such a variable PSA is further subcategorized into two types in terms of whether the choice can be affected by discourse-pragmatics or not. The type in which discourse-pragmatics has great impact on the choice is called a pragmatic PSA and the other type is called non-pragmatic or, simply, a syntactic PSA. Diagram 3 is the final representation which indicates all the subcategories of PSAs.

Diagram 3



The examples in (18), adopted from VV(2005: 103), show that pragmatics (topichood) is a

necessary condition for the missing pivot in the linked unit. In English, it is typically the case that 'subject' is a topical argument in canonical constructions with the default information structure (i.e. predicate focus). In (18b), the potential controller, *John*, is not a topical argument due to the inversion construction (sentence focus). The contrast between (18a) and (18b) thus demonstrates that pragmatic status (topichood) is a necessary condition to guarantee the right interpretaion of the pivot in the linked unit. Therefore, it is a pragmatic pivot in this construction.

(18) a. John$_i$ walked into the room and Ø$_i$ spoke to Pat immediately.
b. *Into the room walked John$_i$ and Ø$_i$ spoke to Pat immediately.
c. Into the room walked John$_i$ and he$_i$ spoke to Pat immediately.

In the case of the *want*-construction in (16), repeated below, there is no room for such pragmatic influence comes in to play some role for the choice. For example, the [d-S] pivot in (16d) is not the one induced by some discourse-pragmatic influence. This is the only structurally possible choice as shown by the contrast with (16e). Thus, the type of the pivot is syntactically variable, but pragmatics has no bearing on the choice.

(=16) a. Mary wants [Øi to be taller].
[U]
b. Mary wants [Ø$_i$ to swim in the river].
[A]
c. Mary wants [Ø$_i$ to study Russian].
[A$_T$]
d. Mary wants [Ø$_i$ to be interviewed by the linguistics department].
[d-S]
e. *Mary wants [the linguistics department to interview Ø$_i$].
[U$_T$]

The following contrast in (19), adopted from Lambrecht (1986), and (20) should further clarify the point being made. The answer part to a wh-question is necessarily a focus, so *John* in (19B) is pragmatically a focus (the NPs in capital letters are intended to indicate that they are under focus). The status of *John* in (19B) as a focal element in the answer makes it impossible to control the missing pivot in the linked unit (Lambrecht 1986: 123). There is no such pragmatic requirement (or blockage) on controlling the missing pivot in the case of *want*-construction as in (20B).

(19) A: Who married Rosa?
B: *JOHN$_i$ married her but Ø$_i$ didn't really love her.

(20) A: Who wants to study Russian?
B: MARY wants [Ø$_i$ to study Russian].

The pivot in the conjunction reduction construction is not just a syntactic but a pragmatic pivot whereas the pivot in the *want*-construction is a (non-pragmatic) syntactic pivot. Thus, there are two types among variable PSAs, one in which the choice is affected by discourse-pragmatics and one in which discourse-pragmatics has no bearing on the choice.

In this section, the system used to analyze grammatical relations in RRG was laid out. Before preceding to the actual analysis of the grammatical relations in Japanese, the previous studies will be discussed in the next section.

3.3 Previous studies of grammatical relations in Japanese

There is a large volume of study into the notion of 'subject' in Japanese. The groups of people who developed arguments for and against the notion in the past can be classified into the following four categories: (1) traditional grammarians, (2) Mikami, (3) generative grammarians,

and (4) Kuno, Shibatani and Tsunoda (KST, hereafter). As far as I am aware, there is no preceding study that is comparable to the attempt in this thesis both in quantitative and qualitative aspects; however, among the above four groups, KST's approach is the closest one to the position taken in this thesis. In what follows, the problems and/or characteristic features of each group will be summarized.

3.3.1 Traditional grammarians

First of all, it should be noted that those who are called 'traditional grammarians' here do not constitute a homogeneous or exhaustive group of scholars. A group of people who work within traditional Japanese linguistics and publish their studies almost exclusively in Japan is referred to as such and the boundary of the group is fuzzy.

The problems in the analyses by some of the traditional grammarians are already pointed out in Shibatani (1977, 1978) or Tsunoda (1991). A fundamental problem is that very often there is no clear distinction between the levels of grammar such as the semantic, syntactic, pragmatic or morphological level. In other words, the mixing of the levels is the most serious problem in previous studies by the traditional grammarians. In some studies (e.g. Kato 1973), cases (nominative) and grammatical relations ('subject') are not clearly distinguished. In others (e.g. Watanabe 1971), the pragmatic level (topic) and the grammatical relation level ('subject') are identified. In Asano (1964), for example, the semantic level (agent), the morphological level (case) and the grammatical relation level ('subject') seem to be not separated clearly. There are sentences in which these different levels happen to coincide (or align) on a single NP in the sentence, but it is a mere coincidence and such alignment is generally not guaranteed. What is concurrent with the above mixing problem is that many traditional grammarians do not have a clear definition for the notion of 'subject'. Kato (2004) points out that it seems that this

situation has not been changed even now.

The distinction of these levels is one of the primary considerations in the RRG framework employed in this thesis. Furthermore, we have a clear definition of grammatical relations (i.e. restricted neutralization of the roles) and it is not a notional one either. Thus, the advantage of the current thesis over the studies by the aforementioned traditional grammarians seems clear.

3.3.2 Mikami

The scholar who is most well-known in the debate over the notion of 'subject' in Japanese must be Akira Mikami (e.g. 1960, 1963). He advocated abolishing the notion of 'subject' in the grammar of Japanese since it is not just useless but even harmful, he claims. Mikami's ideas have been so influential that there are some relatively recent Japanese linguists who do not posit 'subject' in their grammatical description following Mikami (e.g. Masuoka and Takubo 1989).

Mikami claims that a nominative-marked argument, which is usually regarded as 'subject' in Japanese, is merely a complement of the verb and does not hold a special status over the other NPs in the same sentence. Though his arguments do not seem to withstand the strict linguistic analysis practiced nowadays, his insights have been incorporated, as a precursor of some sort, into the idea called the 'VP-internal subject hypothesis' in the Chomskyan tradition (e.g. Fukui 1985, Kuroda 1988).

Mikami's claim is based on the definition that 'subject' is an NP that governs the predicate. He claims that in Japanese, there is no such 'privileged' argument which is exclusively tied to the predicate. Thus, one of the primary reasons Mikami was against positing 'subject' in Japanese amounts to the fact that Japanese lacks agreement (Mikami 1963: 67). Mikami admits that the nominative case is more important than other cases though they are all equally complements of the predicate (1963: 144). Some of Mikami's arguments are well compatible

with modern linguistic theories. For example, he points out that the topic-marker, *wa*, is sentential and nominative, *ga*, is clausal (1963: 95-97). His arguments on 'subject', however, do not seem to be tenable, as refuted by KST (see section 3.3.4).

3.3.3 Generative grammar

In the generative tradition, 'subject' is thought to hold a special position on the syntactic structure, i.e. a position where it is originally generated before it is 'moved'. There have been two 'subject' positions. One is the traditional SPEC(IP) and the other is the relatively recent SPEC(VP), or the position proposed in the 'VP-internal Subject Hypothesis' mentioned above. Tateishi (1994) offers a third possibility. He rejects both 'SPEC(IP) hypothesis' and 'SPEC(VP) hypothesis' and claims the theta-marked 'subject' is generated at SPEC(Agr), which is contrary to the dominant view since Japanese lacks so-called agreement on 'phi-features'. The reason Tateishi posits SPEC(Agr) is honorification, so his positing Agr, or AgrP, means that he seriously treats honorifics as an agreement system, which is still somewhat controversial. Tateishi even concludes that Japanese is more 'configurational' than thought before.

What is concurrent with the above configurational definition of 'subject' is the notion of 'VP'. The debate over the notion of 'configurationality' amounts to whether the language has a verb phrase, 'VP', or not. Though the generative grammarians were proposing a flat structure for Japanese at the early stage of the history (e.g. Inoue 1976, Shibatani 1978), since Saito's (1985) MIT dissertation, the debate over the 'configurationality' in Japanese has been argued (or assumed) again. As Kuno (1977) and Shibatani (1985a) had already pointed out, however, the 'configurationality' and grammatical relations such as 'subject' are not necessarily linked to each other, though these two issues are often treated like two sides of a coin.

In RRG, 'VP' is not considered a universal feature of natural languages and 'VP' emerges as

a consequence of information structure which is universal (VVLP97: 19, 217). As already mentioned in the introduction of the theory, RRG does not posit any special structural position for the privileged syntactic argument (PSA). As for the 'VP-internal subject hypothesis' or analogue, which has been entertained in the generative literature, there is no structurally comparable counterpart in RRG. The same data used in the generative literature are examined in this thesis, but there is no theoretically comparable claim or counter-claim that can be made. RRG proposes an alternative view which is compatible with the same data the generative grammarians use.

3.3.4 Kuno, Shibatani and Tsunoda

The claim and arguments that are comparable to those developed in this thesis have been addressed by three linguists, Kuno (1973a,b, 1977), Shibatani (1977, 1978, 1985a, 1990) and Tsunoda (1991). All of them are against the position, represented by Mikami, that the notion of 'subject' is not necessary for Japanese. The basic data and argumentations they develop are similar, though there are some minor differences.

KST demonstrate that there is an NP that exhibits special morphosyntactic properties over the other NPs in the same sentence. The morphosyntactic phenomena they used to argue against Mikami include honorification, reflexive-binding, the floating quantifier, the nominative-genitive conversion and so forth (every item listed here will be discussed later). They are all well aware of the importance of distinguishing different linguistic levels and, through the examination of these phenomena, they clarified many things which were entangled in the preceding studies. For example, they most explicitly claimed that the 'privileged' properties are independent of case-marking (for example, Japanese has a nominative 'object', dative 'subject' and genitive 'subject'). It seems obvious that their approach is superior to that

of other traditional grammarians.

In the late 70's, Kuno and Shibatani complemented each other in the debate for the necessity of 'subject,' citing each other's studies. After that, while Kuno shifted his research focus to other areas in syntax, Shibatani published some papers on grammatical relations changing the analytical framework. Shibatani (1977) is an analysis of grammatical relations in terms of Relational Grammar. Shibatani (1978) offers a transformational generative analysis of grammatical relations. Shibatani (1985a) proposes a prototype analysis which has clear cognitive linguistic orientation. Though he has presented analyses thus using different frameworks, Shibatani's basic arguments and data are very consistent in those studies.

Among his aforementioned works, Shibatani (1985a) covers the widest range of the phenomena that pertain to grammatical relations, though the examination of each item is very brief and there are many major constructions that are not covered (e.g. 'raising' constructions). Shibatani (1985a) characterizes the Japanese 'subject' in terms of the following eight properties. First, it is marked by nominative, *ga*. Second, it occurs at the sentence-initial position. Third, it induces honorification. Fourth, it works as the antecedent of the reflexive. Fifth, it is Ø-marked in a coordinate structure or works as the antecedent of such a Ø-marked argument in the linked unit. Sixth, it is Ø-marked in the complement sentence which requires the same NP as the one in the matrix sentence (i.e. control). Seventh, it allows the conversion between *no* (genitive) and *ga* (nominative). Eighth, so-called 'arbitrary PRO', or PROarb, can occur at its position.

As far as I am aware, this (Shibatani 1985a) is the most comprehensive treatment until Tsunoda (1991). However, Shibatani does not have any distinctions like pivot and controller. His analysis does not show the exact nature of the 'subject,' that is, whether it is semantic, syntactic or pragmatic in nature. Most importantly, what he seeks is a global concept like

'subject in Japanese', which is not compatible with the philosophy taken in this thesis. Thus, his analysis is very preliminary in terms of the current standpoint, though all the observations above are significant for the study on the grammatical relations of Japanese. The same criticism applies to Kuno's (e.g. 1977) study as well.

Tsunoda's (1991) analysis is extended based on Shibatani (1985a). In his study, three differences (advantages) can be pointed out over the studies by Kuno and Shibatani. First, he is most explicit on the necessity of the clear distinction between linguistic levels when an analysis of grammatical relations of a particular language is carried out. He points out that much of the confusion about the notion of 'subject' comes from the mixing-up of the linguistic levels and claims that four levels must be distinguished: grammatical relations, case relations, topic-focus relations and thematic relations. What Tsunoda calls topic-focus relations and thematic relations roughly correspond to information structure and macrorole in RRG respectively. Second, Tsunoda is the only one who refers to the 'strength' (or consistency) of grammatical relations in addition to the existence or necessity thereof. He claims that there are three phenomena (honorification, reflexive-binding and the floating quantifier) in which only a single NP can trigger a syntactic process and therefore 'subject' is a necessary notion for Japanese, but the Japanese 'subject' is not as 'strong' as that of English (he detects eight properties for 'subject' in English). Third, Tsunoda claims that it is necessary to distinguish intransitive 'subject' and transitive 'subject' since some phenomena such as possessor raising hinge on this distinction. These are the points not explicitly mentioned in other studies.

As for the problems of Tsunoda's study the same criticism made for Shibatani and Kuno also applies to Tsunoda's work. In addition, three more problems can be raised. First, he uses 'subject' deletion in imperatives as a 'subject' property of English, but he does not examine the corresponding Japanese imperatives. As discussed later, also in Japanese, the 'subject' of

imperative constructions is usually deleted. His arguments are thus somewhat arbitrary and lack rigidity. Second, he also analyzes the 'object' in terms of the following four features: 'object' (1) can induce honorific-marking on the predicate, (2) can be paradigmatically substituted with a reflexive pronoun, (3) can be 'subject' in passive (i.e. [d-S] in our terms) and (4) can launch a floating quantifier. He concludes that the Japanese 'subject' has three features, as mentioned above, whereas 'object' has four features. His (tentative) conclusion amounts to the claim that 'object' has more 'privileged' status than 'subject' in Japanese. Third, Tsunoda investigates the issue distinguishing transitive and intransitive, but he does not distinguish two subtypes of intransitive (i.e. actor and undergoer) and the different verb classes are treated in the same manner.

Thus, Tsunoda's work has several advantages over the studies by Kuno and Shibatani, but his study has its own problems as well.

3.3.5 Differences between the previous research and the current thesis

As mentioned in the previous sections, the preceding works that are comparable to the current study are the ones by KST. The differences between the current thesis and their studies are summarized below. There are differences in both quantitative and qualitative aspects.

The number of constructions examined is rather limited in KST's studies. In the most comprehensive study by Shibatani (1985a), the number of the grammatical processes examined is eight items or so, as mentioned in the previous section. In this thesis, more than twenty constructions are examined in total. This is a quantitative difference.

More importantly, there are several qualitative differences. All the qualitative shortcomings in KST's works seem to follow from one thing: lack of a clear definition of 'subject'. None of the studies by KST was carried out based on the idea that grammatical relations are

construction-specific. What is sought in their studies is a global concept like 'subject in Japanese'. Without the construction-specific view, the opponents to the notion of 'subject' can raise supposed counter-examples that involve a different construction and do not constitute a valid counter-example (e.g. the behavior of the reflexive in a psyche-verb construction which is known to show some peculiar behaviors). Such examples are merely irrelevant to the construction-specific view. A global concept like 'subject in Japanese' must be stated, if possible, as a result of the examination of each construction. Otherwise, one cannot compare the nature of the constructions and cannot contribute to the fine-grained typological comparison which must be studied after the examination of specific languages (constructions).

In order to carry out such a construction-specific analysis, it is necessary to employ well-defined and fine-grained theoretical primitives. Though KST claim that there is an NP that has privileged status over the other NPs in the same sentence, the nature of the privileged NP is not clear. Their examinations are coarse since they do not employ a fine-grained system like the one in RRG. As a consequence, KST do not have any observations on the exact nature of the 'privileged' NP (i.e. PSA), whether it is syntactic, semantic or pragmatic in its nature. In RRG, 'subject' is decomposed into pivot and controller and they are further subclassified into six types as introduced in section 3.1 and 3.2. It is also not clear at all in their studies what it means for a construction (or a language) not to exhibit grammatical relations. In RRG, even the constructions that do not show grammatical relations (i.e. restricted neutralization) can be categorized into either a "restriction only" or "neutralization only" type. In other words, literally, all the constructions can be classified into one type or another and specifically described in the grammar of the language. Furthermore, though the importance is frequently noted, information structure is scarcely examined in relation to grammatical relations and the past discussions are largely limited to the morphosyntactic behaviors. Even if the conclusions

reached should be the same between the studies with and without examining the information structure level, it must be explicitly demonstrated that information structure is irrelevant to the process under consideration. Otherwise, the argumentation is insufficient and inconclusive.

It was argued that the past studies, especially by KST, are insufficient in both quantitative and qualitative aspects in terms of the current standpoint. The advantages of the approach taken in the current thesis is clear.

3.4 Grammatical relations in Japanese

In this section, both coding properties and behavioral properties are examined in order. In the former, one agreement phenomenon and seven case-related issues will be examined. In the latter, more than twenty constructions will be discussed.

3.4.1 PSA-agreement

3.4.1.1 Agreement

Agreement is a grammatical phenomenon by which the appearance of an item in a sentence causes another element in the same sentence to appear in a particular form (cf. Corbett 2006). In English, for example, third person singular 'subject' uniquely triggers the "-s" ending on the verb as shown by the difference between (1a) and (1b). Though (1a) alone cannot tell us which NP, Mary or Chris, controls the agreement, (1b) tells us that it is the first preverbal NP that triggers such agreement. (1c) indicates that the agreement induced by the preverbal NP is not sensitive to the macrorole status since *Mary* in (1a) is the actor but *Chris* in (1c) the undergoer. Thus, it seems that the type of the agreement under consideration is syntactic rather than semantic.

(1) a. Mary always { *praise / praises } Chris.

b. Mary and Kevin always { praise / *praises } Chris.

c. Chris { is / *are } always praised by Mary and Kevin.

However, there are at least three possible levels to which such a grammatical phenomenon can be sensitive: semantic, syntactic and pragmatic. In order to ascertain that the process is really syntactic, it must be demonstrated that the agreement is not sensitive to the pragmatic level (i.e. topicality) as well.

The following mini-discourse in (2), taken from VVLP97, shows that the agreement in English is not sensitive to pragmatics (topicality). The answer part in (2A), *The Giants*, corresponds to the wh-part in the question which is in focus. The answer is not a presupposed element and therefore cannot be a topic. It is a focused element and the focal NP is triggering the agreement. Thus, it can be concluded that the agreement in English is uniquely triggered at the syntactic level, not semantic or pragmatic level.

(2) Q: Who is winning the ball game?

A: The Giants are/*is/*be winning.

Though agreement is often regarded as a syntactic process, there are agreement types controlled by semantics as well (see Dowty and Jacobson 1989, Pollard and Sag 1994 for such a semantic approach to agreement). In the following example in (3), what controls the target of the agreement is the meaning intended rather than some syntactic information. The nouns that denote a group of entities such as *family*, *faculty*, or *sheep* behave in this way. It is also well-known that there are so-called active languages (cf. Merlan 1985) such as Acehnese (Durie 1988a, 1988b) in which agreement is sensitive to a semantic (macrorole) opposition, actor and

undergoer, rather than a syntactic position.

(3) The committee { is/are } easy to talk with.

Furthermore, there are some languages in which agreement is conditioned by pragmatics (topicality) as well. The target of the agreement is allegedly controlled by a topic NP in such languages. According to Polinsky and Comrie (1999), Tsez is such a language. Tsez has a long distance agreement in which the matrix verb is controlled by an NP in a linked clause. The matrix verb 'know' in (4a) shows gender IV agreement with the whole linked clause, which is absolutive (PST.PTCT, NMLZ and PRS mean past participle, nominalizer and present respectively). This is the standard agreement pattern with which other examples are compared. In (4b), the matrix verb agrees with the nominal of gender III, 'bread', inside the linked clause. They claim that this second agreement pattern is conditioned by topicality. In (4c), the controller, "bread', is focus-marked by the marker, *-kin*, and therefore it cannot be a topic. In this case, as shown on the verb, the gender IV agreement appears on the matrix verb.

(4) a. eni-r [už-ā magalu b-āc'-ru-ɬi]
mother(II)-DAT boy(I)-ERG bread(III)[ABS] III-eat-PST.PTCP-NMLZ[ABS]
r-iy-xo
IV-know-PRS
'The mother knows that the boy ate the bread.'

b. eni-r [už-ā magalu b-āc'-ru-ɬi]
mother(II)-DAT boy(I)-ERG bread(III)[ABS] III-eat-PST.PTCP-NMLZ[ABS]
b-iy-xo
III-know-PRS
'The mother knows that the boy ate the bread.'

c. eni-r [už-ā magalu-**kin**
mother(II)-DAT boy(I)-ERG bread(III)[ABS]-**FOC**
b-āc'-ru-ɬi] { r-iy-xo / *b-iy-xo }
III-eat-PST.PTCP-NMLZ[ABS] { IV-know-PRS / III-know-PRS }
'The mother knows that the boy ate the BREAD.'

Thus, the gender III agreement in (4b) seems to be topicality-conditioned. This is further confirmed by the following two examples. In (4d), the gender II controller, 'book', is overtly marked by the topic marker, *-gon*, and it triggers the gender II agreement on the matrix verb. On the other hand, when some other element in the linked unit, 'boy' here, is topic-marked by the (secondary) topic marker, *-n*, the gender II agreement is not triggered on the matrix verb any longer, as shown in (4e). Their evidence for the topicality-conditioned (long-distance) agreement seems very robust.

d. eni-r [už-ā t'ek'-**gon** t'et'r- āsi
mother(II)-DAT boy(I)-ERG book(II)[ABS]-**TOP** read-RES
yāɬ-ru-ɬi] { y-iy-xo / *r-iy-xo }
be-PST.PTCP-NMLZ { II-know-PRS / IV-know-PRS }
'The mother knows that, as for the book, the boy is reading it.'

e. eni-r [už-ā-**n** t'ek' t'et'r- āsi
mother(II)-DAT boy(I)-ERG-**TOP** book(II)[ABS] read-RES
yāɬ-ru-ɬi] { r-iy-xo / *y-iy-xo }
be-PST.PTCP-NMLZ { IV-know-PRS / II-know-PRS }
'The mother knows that, as for the boy, he is reading a book.'

In this section, it was briefly reviewed that agreement phenomena range from the semantic to the pragmatic (information structure) level. Therefore, in order to claim that a certain agreement process or analogue is syntactic, it must be demonstrated that the process is uniquely controlled at the syntactic level, not by other levels such as semantic, pragmatic or morphological levels such as cases (not discussed here). In the next section, it will be examined which level the agreement in Japanese, i.e. honorifics, is sensitive to.

3.4.1.2 Honorific Agreement in Japanese

Regarding the honorifics in Japanese, there are a large volume of studies, both synchronic and diachronic, in traditional Japanese linguistics as well as theoretical (generative) linguistics

(e.g. Harada 1976a, Shibatani 1977, 1990, Toribio 1990, Namai 2000, Boeckx and Niinuma 2004, Niinuma 2005, Bobaljik and Yatsushiro 2006, and Boeckx 2006, to name just a few). There are many honorific constructions including idiosyncratic ones, but the following two constructions in (5) are very productive and often discussed as showing the grammatical relations of the language. When an NP which denotes a socially superior person (SSP hereafter) appears at a certain syntactic position, the predicate takes a particular (honorific) form. (5a) is an example of the 'subject' honorifics in which the boxed 'subject' is triggering the shaded honorific form, *o ... ni-naru*, on the verb. (5b) is an example of the 'object' honorifics. The doubly underlined 'object' is triggering the honorific form marked by the broken line, *o ... suru*, on the verb.

(5) PSA honorific agreement and non-PSA honorific agreement

a. Tanaka-sensee-ga guraundo-o o-hashiri-ni-natta
Tanaka-teacher-NOM ground-LOC HON-running-DAT-became
'Prof. Tanaka ran on the ground.'

b. Taroo-ga Tanaka-sensee-o o-tasuke-shita
Taroo-NOM Tanaka-teacher-ACC HON-helping-did
'Taroo helped Prof. Tanaka.'

Though they are traditionally called 'subject' honorifics and 'object' honorifics in the literature, in order to be terminologically consistent in this thesis, I will call them PSA honorific agreement and non-PSA honorific agreement respectively (cf. Matsumoto 1997). This change is not only a mere terminological change but it has some advantage over the traditional ones, especially in the latter non-PSA agreement. This is because the 'object' honorific agreement is somewhat a misleading term since the honorifics of this type show agreement with the NPs of various roles other than '(direct) object', or undergoer, especially in the case of three-place predicates.

The examples in (6) indicate that the phenomenon above reasonably falls under the

category of the agreement system. In both examples, the controller is not an NP that denotes an SSP, assuming *Taroo* is not someone to whom deference should be shown. Thus there is no acceptable agreement relation between the controller and the predicate form. It should be noted that in (6b) there is an SSP NP at the PSA position, *Tanaka-sensee*; however, it can never trigger the non-PSA agreement since it stands as a PSA in this case.

(6) a. #Taroo-ga guraundo-o o-hashiri-ni-natta
Taroo-NOM ground-LOC HON-running-DAT-became
'Taroo ran on the ground.'

b. #Tanaka-sensee-ga Taroo-o o-tasuke-shita
Tanaka-teacher-NOM Taroo-ACC HON-helping-did
'Prof. Tanaka helped Taroo.'

Honorific agreement is not obligatory agreement, unlike the typical agreement in English. The use of it is a matter of speaker's choice, i.e. optional. This is often a diverging point whether the honorifics count as an agreement system or not. For example, Boeckx and Niinuma (2004) and Bobaljik and Yatsushiro (2006) respectively argue for and against the honorifics as agreement. Korean is in a similar situation (cf. Pollard and Sag 1994, Choi 2003). I treat the honorifics as agreement since the (syntactic) rules of the honorifics are not arbitrary but highly constrained, as shown below, and the optionality of its use is irrelevant to the discussion of the linguistic structure[1].

Shibatani (1977), presumably for the first time, argued for the notion of 'subject' in Japanese using the data from the honorifics. Though Shibatani's arguments have been generally accepted in the theoretical linguistic community, he does not examine the pragmatic level. This is also true of his more recent studies (e.g. Shibatani 1985a, 2001) though the

[1] Kuroda (1988) inroduces a two-way typology, forced agreement languages and non-forced agreement languages, and considers English and Japanese as a representative of each category.

importance is sometimes noted in his studies. Especially, as reviewed in the previous section, an agreement system could be sensitive to any linguistic level from semantics to pragmatics. In this sense, his argumentation is insufficient even though the conclusions reached may be the same (cf. Tsunoda 1991).

In the next two sections, the PSA-agreement on the intransitive predicate and that on the transitive predicate will be separately discussed in order because intransitive and transitive constructions are different, especially in information structure-related issues.

3.4.1.3 PSA-agreement (intransitive predicates)

In PSA agreement, there are two subtypes: *o*-Vinf-*ni-naru* and V-*rareru*. They are sometimes called *naru*-honorifics and *reru*-honorifics. When an NP that denotes an SSP such as teacher or doctor, though not limited to these, appears as a PSA, the honorific agreement is triggered on the predicate. The verb in *naru*-honorifics is in the continuative form, which is an inflection for the verbal element that follows, as in ***hashiri****-sugiru* 'run too much (lit. run-exceed)'. So it is originally a verb, but this inflected form can function as a noun in a very productive manner. The *reru*-honorifics is morphologically the same as the passive morpheme. The examples of each type are given in (7).

(7) [A]

a. Tanaka-sensee-ga guraundo-o o-hashiri-ni-natta (= 5a)
Tanaka-teacher-NOM ground-ACC HON-running-DAT-became
'Prof. Tanaka ran on the ground.'

b. Tanaka-sensee-ga guraundo-o hashir-are-ta
Tanaka-teacher-NOM ground-ACC run-HON-PST
'Prof. Tanaka ran on the ground.'

Though the PSAs in (7) are actors, the intransitive sentences whose PSA is an undergoer

trigger the same PSA-agreement as shown in (8). This is a clear indication of the neutralization of the two macroroles for a syntactic purpose, [S], which is a necessary condition to recognize a grammatical relation in a language. To meet the sufficient condition, it must be shown that there are no other elements that can trigger the agreement.

(8) [U]

a. Tanaka-sensee-ga eki-ni o-tsuki-ni-natta
Tanaka-teacher-NOM station-LOC HON-arrival-DAT-became
'Prof. Tanaka arrived at the station.'

b. Tanaka-sensee-ga eki-ni tsuk-are-ta
Tanaka-teacher-NOM station-LOC arrive-HON-PST
'Prof. Tanaka arrived at the station.'

In each sentence in (9), there is an SSP, i.e. a potential controller of the honorific agreement. Their semantic roles are recipient, location, comitative and source respectively. As shown, however, they never trigger the PSA-agreement. None of the examples are acceptable. The controller is limited to the nominative-marked macrorole argument and this means that the neutralization is restricted.

(9) a. [recipient]
#Taroo-ga Tanaka-sensee-no-tame-ni o-hashiri-ni-natta
Taroo-NOM Tanaka-teacher-GEN-sake-DAT HON-running-DAT-became
'Taroo ran for Prof. Tanaka.'

b. [location]
#Taroo-ga Tanaka-sensee-no-ie-de o-taore-ni-natta
Taroo-NOM Tanaka-teacher-GEN-house-LOC HON-falling-DAT-became
'Taroo fell in Prof. Tanaka's house.'

c. [comitative]
#Taroo-ga Tanaka-sensee-to eki-ni ik-are-ta
Taroo-NOM Tanaka-teacher-with station-LOC go-HON-PST
'Taroo went to the station with Prof. Tanaka.'

d. [source]
#Taroo-ga Tanaka-sensee-kara o-hanare-ni-natta
Taroo-NOM Tanaka-teacher-from HON-separating-became
'Taroo kept away from Prof. Tanaka.'

Thus far, the process seems to show restricted neutralization for a syntactic purpose, [S]. As we saw in the previous section, however, there are some agreement systems that are sensitive to the pragmatic level such as topicality (as in Tsez); therefore, it must be demonstrated that the process in question is not induced by such an information structure level. We can see this through (wh-)question-answer pairs since the answer to a wh-question is necessarily focused. In English, 'subject' is generally the topic and the topicality is not marked in a morphologically overt way. In this regard, it is relatively easier to see the topic-focus status of arguments in Japanese since there is a morphologically overt marker for the topic, *wa*. Though it might be too well-known to reintroduce this topic-particle, *wa*, the behavior is very briefly reviewed since this test will be used throughout the rest of the paper (cf. Kuno 1973a).

The mini-discourse in (10) shows how the topic marker works. The wh-question part in (10A) and the answer part in (10B) are both in focus, so the topic marker cannot occur in these environments to fulfill its default function, i.e. topic-marking, which is intended here, though the particle has 'contrastive' use as well[2].

(10) A. dare-{ ga/*wa } hashitta-no?
who-{ NOM/TOP } ran-SFP
'Who ran?'

B. Taroo-{ ga/*wa } hashitta-yo
Taroo-{ NOM/TOP } ran-SFP
'Taroo ran.'

Given the basic observation above in (10), the mini-discourse in (11) demonstrates that the PSA-agreement under consideration is not topic-driven since the focal answers in (11B) and (11B') trigger the PSA agreement. Thus, it is not a pragmatic notion like topic that uniquely

[2] It must be noted, however, that in B's utterance, a 'topic' reading is not possible as shown in the example but a 'contrast' reading, usually accompanied by some additional stress or intonation break (pause), is possible (i.e. grammatical under this reading). What is meant by the 'contrast' reading is that the speaker B asserts that s/he knows about Taroo's running but does not know about anyone else or implies that someone else did not run.

induces the PSA-agreement.

(11) A: dare-ga hashitta-no?
who-NOM ran-SFP?
'Who ran?'

B: { Tanaka-sensee/#Taroo }-ga o-hashiri-ni-natta-yo
{ Tanaka-teacher/Taroo }-NOM HON-running-DAT-became-SFP
'Prof. Tanaka ran.'

B': { Tanaka-sensee/#Taroo }-ga hashir-are-ta-yo
{ Tanaka-teacher/Taroo }-NOM run-HON-PST-SFP
'Prof. Tanaka ran.'

As is naturally expected from the above observation, the SSP controller can be realized also in the cleft construction, which is a typical focus construction. The agreement relation still remains the same and, as shown in (12b), it must be the PSA-agreement, not non-PSA-agreement, that appears on the predicate.

(12) a. [PSA-agreement]
o-hashiri-ni-natta-no-wa { Tanaka-sensee/#Taroo }-da
HON-running-DAT-became-Cno-TOP { Tanaka-teacher/Taroo }-COP
'It was Prof. Tanaka/Taroo who ran.'

b. [#non-PSA agreement]
#o-hashiri-shita-no-wa Tanaka-sensee-da
HON-running-did-Cno-TOP Tanaka-teacher-COP
'It was Prof. Tanaka who ran.'

'Subject' can be a topic at the same time (in English, this is generally the case). Suppose (13a) continues after (11B) or (11B') in the discourse. (13a) shows that the topic-marked (topicalized) 'subject' can control the PSA-agreement as well. (13b) shows, again, that the agreement must be the PSA-agreement. What controls the PSA-agreement is the syntactic relation ('subject') hidden under the topic-maker in the current example, (13a). Recall that the (long-distance) agreement in Tsez was uniquely triggered by topicality whereas it is not the case

in the PSA-agreement in Japanese. See (14) for the morphological relations between case and the topic marker when they are combined.

(13) a. shikamo Tanaka-sensee-wa sugoku hayaku o-hashiri-ni-natta-yo
furthermore Tanaka-teacher-TOP very fast HON-running-DAT-became-SFP
'… Furthermore, Prof. Tanaka ran very fast.'

b. …#shikamo Tanaka-sensee-wa sugoku hayaku o-hashiri-shita-yo
… furthermore Tanaka-teacher-TOP very fast HON-running-did-SFP
'… Furthermore, Prof. Tanaka ran fast.'

(14) a. *ga-wa > Ø-wa
nom-top (nom)-top

b. *o-wa > Ø-wa
acc-top (acc)-top

c. ni-wa
dat-top

d. kara-wa
abl-top
...
...

It was demonstrated that the PSA honorific agreement is independent of both semantic roles and pragmatics (topicality), so the agreement seems to be a syntactic process. In the case of intransitive sentences, however, there is only one case possibility, i.e. the nominative case *ga*; therefore it is not clear that the agreement is triggered by grammatical relation (i.e. 'subject') or the case (nominative) at this point. It will be clarified that it is a grammatical relation, not case, in the next section[3].

[3] It is known by the work of Imai (1998) that the dative 'subject' construction is a macrorole intransitive construction; however, this construction will be discussed in the next section on transitives, following the traditional 'transitive' analysis by Kuno (1973a).

3.4.1.4 PSA-agreement (transitive predicates)

In the previous section, we observed PSA agreement with intransitive sentences. The data examined strongly suggest that it is a syntactic process. The PSA-honorifics work in the same way irrespective of the transitivity of the predicate. The following sentences in (15) are the examples of the transitive sentences with PSA-honorifics on the predicate.

(15) a. Tanaka-sensee-ga hon-o o-yomi-ni-natta
Tanaka-teacher-NOM book-ACC HON-reading-DAT-became
'Prof. Tanaka read a/the book.'

b. Tanaka-sensee-ga hon-o yom-are-ta
Tanaka-teacher-NOM book-ACC read-HON-PST
'Prof. Tanaka read a/the book.'

The sentences in (16) contain an SSP argument as non-PSA undergoer. It is shown that such non-PSA SSP arguments cannot trigger the PSA-agreement (*naru-* and *reru-*honorifics). As a result, the agreement conflict happens between the controller and the agreement on the predicate. This indicates that the PSA-agreement is uniquely triggered by the nominative-marked PSA.

(16) a. #Taroo-ga Tanaka-sensee-o o-tataki-ni-natta
Taroo-NOM Tanaka-teacher-ACC HON-hitting-DAT-became
'Taroo hit Prof. Tanaka.'

b. #Taroo-ga Tanaka-sensee-o hihan-s-are-ta
Taroo-NOM Tanaka-teacher-ACC criticism-do-HON-PST
'Taroo criticized Prof. Tanaka.'

The observations on the restricted neutralization of the roles in the previous section (intransitives) holds true for the transitive predicates as well. In each sentence in (17), a potential SSP controller is expressed as a recipient, location and comitative phrase, respectively. They can never control the PSA-agreement on the predicate. Thus, the neutralization [S,A$_T$] is

confirmed.

(17) a. [recipient]
#Taroo-ga Tanaka-sensee-ni purezento-o o-kai-ni-natta
Taroo-NOM Tanaka-teacher-DAT present-ACC HON-buying-DAT-became
'Taroo bought a present for Prof. Tanaka.'

b. [location]
#Taroo-ga Tanaka-sensee-no-ie-de gohan-o o-tabe-ni-natta
Taroo-NOM Tanaka-teacher-GEN-house-LOC meal-ACC HON-eating-DAT-became
'Taroo had a meal at Prof. Tanaka's house.'

c. [comitative]
#Taroo-ga Tanaka-sensee-to hon-o o-kaki-ni-natta
Taroo-NOM Tanaka-teacher-COM book-ACC HON-writing-DAT-became
'Taroo wrote a book with Prof. Tanaka.'

It is somewhat unusual for a socially superior person to be affected by a socially inferior person so that, presumably due to this pragmatic reason, it is generally difficult to make passive honorific sentences; however, (18b) is a possible example of the PSA honorific agreement with passive voice that corresponds to the active counterpart in (18a) (cf. Shibatani 1978). The unacceptability in (18c) indicates that the SSP controller has to be at PSA position. Thus, it can be concluded that the restricted neutralization is now [S,A_T,d-S].

(18) a. Taroo-ga Tanaka-sensee-o tataita
Taroo-NOM Tanaka-teacher-ACC hit
'Taroo hit Prof. Tanaka.'

b. Tanaka-sensee-ga Taroo-ni o-tatak-are-ni-natta
Tanaka-teacher-NOM Taroo-by HON-hit-PASS-DAT-became
'Prof. Tanaka was hit by Taroo.'

c. #Taroo-ga Tanaka-sensee-ni o-tatak-are-ni-natta
Taroo-NOM Tanaka-teacher-by HON-hit-PASS-DAT-became
'Taroo was hit by Prof. Tanaka.'

Furthermore, pragmatics (topicality) does not affect the PSA-agreement as shown in (19).

The following mini-discourse demonstrates that the focal SSP controller in (19B) can trigger the PSA agreement on the verb, which invalidates the possibility of topic-driven agreement. (20) is an example of a cleft construction in which the SSP controller appears at the focal position. Only the PSA-agreement is triggered as in intransitive predicates.

(19) A: dare-ga omocha-o katta-no?
who-NOM toy-ACC bought-SFP?
'Who bought the present?'

B: { Tanaka-sensee/#Taroo }-ga (omocha-o) o-kai-ni-natta-yo
{ Tanaka-teacher/Taroo }-NOM (toy-ACC) HON-buying-DAT-became-SFP
'Prof. Tanaka/Taroo bought (the toy).'

(20) omocha-o o-kai-ni-natta-no-wa { Tanaka-sensee/#Taroo }-desu
toy-ACC HON-buying-DAT-became-Cno-TOP { Tanaka-sensee/Taroo }-COP
'It was Prof. Tanaka/Taroo who bought the toy.'

In the case of transitive constructions, there is one more factor to be considered, word order. In Japanese, word order is relatively free, so in the case of transitive clauses there are several non-canonical word order possibilities known as scrambling (Saito 1985, 1992). Such scrambling, which generally causes changes in information structure, does not affect the agreement relation. The default focus position in a transitive construction of SOV languages is preverbal position (e.g. Kim 1988). In (21a) the controller is now in the focus position and still triggers the agreement, which further confirms that topicality is irrelevant. In (21b), though the other NP, 'toy', which is undergoer, is explicitly topic-marked, the agreement relations remain the same (unlike Tsez).

(21) a. omocha-o { Tanaka-sensee/#Taroo }-ga o-kai-ni-natta
toy-ACC { Tanaka-teacher/Taroo }-NOM HON-buying-DAT-became
'It was Prof. Tanaka/Taroo who bought the toy.'

b. omocha-wa { Tanaka-sensee/#Taroo }-ga o-kai-ni-natta
toy-TOP { Tanaka-teacher/Taroo }-NOM HON-buying-DAT-became
'As for the toy, Prof. Tanaka/Taroo bought it.'

A topic-marked NP can also trigger the PSA-agreement as in the intransitive sentences observed in the previous section. Suppose the following utterance in (22) continued after (19B) above. *Tanaka-sensee* can even be covert (i.e. ellipted), triggering the agreement on the verb, since it is the most topical NP. It should be stressed again that it is the grammatical relation that triggers the agreement. In (22), the subjecthood of the NP is merely overcovered by the topic-marker.

(22) … shikamo Tanaka-sensee-wa omocha-o mittsu-mo
furthermore Tanaka-teacher-TOP toy-ACC three.CL-EMP
o-kai-ni natta-yo
HON-buying-DAT-became-SFP
'… furthermore, Prof. Tanaka bought as many as three (toys).'

So far it has been demonstrated that the PSA-honorific agreement shows restricted neutralization that is not affected by pragmatics, so the type of controller is the variable syntactic controller, [S,A_T,d-S]. Before concluding this section, however, it must be further noted that the PSA agreement is not induced by (nominative) case, either. It has already been shown that an NP marked by a non-nominative element such as the topic particle, *wa*, can control the agreement. In addition to the topic particle, the dative-marked 'subject' in the so-called dative 'subject' construction can control the PSA agreement.

Though a PSA is typically marked by the nominative case in accusative-languages to which Japanese belongs, cross-linguistically there are many constructions that mark a PSA with non-canonical (i.e. non-nominative) case such as dative (e.g. Aikhenvald et al. 2001, Bhaskararao et al. 2004). Icelandic is the best known example of this (e.g. Van Valin 1991). The stative

predicates that denote ability, possibility, psychological state, physiological state and so forth typically show such non-canonical case configurations. Japanese has several constructions that fall under this category (e.g. Shibatani 1977, 2001, Kishimoto 2005) one of which is the dative-nominative case configuration sometimes called an inversion construction (e.g. Kuno 1973, Perlmutter 1984, Imai 1998). (23) demonstrates that the dative-marked SSP argument is controlling the PSA agreement on the predicate. These predicates are M(acrorole)-intransitive and the only macrorole, undergoer, is assigned to the preverbal nominative NP (see Imai 1998 for the details of the case-assignment in Japanese). That is, the SSP argument is a non-macrorole direct core argument which is functioning as a PSA.

(23) a. Tanaka-sensee-ni bessoo-ga o-ari-ni-naru
Tanaka-teacher-DAT cottage-NOM HON-existing-DAT-become
'Prof. Tanaka has a cottage.'
LS: **have'**(T-sensee, bessoo) [MR1]

a'. #Taroo-ni …
Taroo-DAT

b. Tanaka-sensee-ni chuugokugo-ga o-wakari-ni-naru
Tanaka-teacher-DAT Chinese-NOM HON-understand-DAT-become
'Prof. Tanaka understands Chinese.'

b'. #Taroo-ni …
Taroo-DAT

Thus, it was demonstrated that the PSA-honorific agreement is independent of semantics, pragmatics (topicality) and morphology (i.e. case types). Given the data observed above, it can be reasonably concluded that the agreement system is syntactic and the restricted neutralization is [S,A_T,d-S,DCA_{inv}] (or [~U_T]). The type of the PSA agreement controller is the variable syntactic controller. (24) is a summary of the result of this section.

(24)

Construction	Controller	Neutralization
the PSA honorific agreement	Variable syntactic controller	[S,A_T,d-S, DCA_{inv}] (or [~U_T])

Before proceeding to the next section, it should be noted that, as for the neutralization pattern, there is one more possible generalization. The neutralization pattern above (i.e. [S,A_T,d-S,DCA_{inv}]) can also be stated as 'highest ranking direct core argument.' [S] is a single argument and therefore it is naturally the highest DCA. [A_T] is the highest DCA of the transitive structure, given the actor-undergoer hierarchy. In the case of [d-S], the actor is demoted to an adjunct and therefore not a DCA; hence the undergoer which is realized as [d-S] is the highest DCA. [DCA_{INV}] is also the highest argument at LS of a stative predicate (i.e. the first argument at LS: "x" in **pred'**(x, y)). The abbreviation for the neutralization pattern should be something like [HR-DCA]. This generalization seems important especially for the linking algorithms of the language, though it is beyond the scope of this thesis.

In the following sections, another coding property, case, will be discussed. The primary focus is put on the PSA marked by various non-canonical (i.e. non-nominative) cases which have not been so often argued in the literature.

3.4.2 Case

Japanese is an accusative-type language and therefore a PSA receives the nominative case in a canonical situation. However, there are several non-canonically case-marked PSAs. In this section, such non-canonical cases are examined to see what kind of PSAs they are.

3.4.2.1 Non-canonical PSA (locative, instrumental and ablative)

In the modern Japanese, a PSA is typically marked by the nominative, though there are

some constructions in which a PSA is marked, for example, by the dative, as briefly mentioned above (e.g. Kuno 1973, Shibatani 1977). Some researchers claim that, in addition to such a dative PSA, Japanese has non-canonical PSAs marked by the ablative (Tsunoda 1991, Kishimoto 2005), the locative (Tsunoda 1991, Kondo 2006) and the instrumental (Kondo 2006, Kishimoto 2005). These non-canonically marked PSAs have been scarcely detailed in the literature.

There is one thing that must be stressed before the examination. These non-canonical cases are case-conversion phenomena. There is no verb that exclusively requires one of these oblique cases on its PSA. As observed later, there is always a corresponding nominative counterpart. Therefore, our primary concerns here are the following two questions: (1) whether they exhibit (or retain) 'subject' properties (2) under what kind of restricted neutralization pattern they are licensed to appear as s PSA.

Ablative, locative and instrumental are generally oblique argument markers. In the following pairs from (25) to (27), the sentences in (a) are the examples in which each case is used to mark an oblique NP. On the other hand, the sentences in (b) are the ones in which the same non-nominative case is allegedly working as 'subject'. The (b) sentences are examples modified based on the data in the preceding literature mentioned above. In the case of the locative and instrumental, the same morpheme, *de*, is employed.

(25) [locative]

a. **Osaka-de** ookina kaji-ga atta
Osaka-loc big fire-NOM happened
'There was a big fire in Osaka.'

b. **Osaka.sho-de** sono-jiken-o soosa-shiteiru
Osaka.station-LOC DET-case-ACC investigation-be.doing
'It is the Osaka police who are investigating the case.'

(26) [instrumental]

a. Hanako-ga **naihu-de** ringo-o muita
Hanako-NOM knife-inst apple-ACC peeled
'Hanako peeled the apple with a knife.'

b. **kodomotachi-de** sensee-o sagashita
children-INST teacher-ACC looked.for
'It was the children who looked for the teacher.

(27) [ablative]

a. Hanako-ga **Taroo-kara** tegami-o moratta
Hanako-NOM Taroo-from letter-ACC received
'Hanako received a letter from Taroo.'

b. **Taroo-kara** sono-hanashi-o hajimeta
Taroo-from that-story-ACC began
'It was Taroo who began the story.'

Non-canonically case-marked PSAs show some peculiarities compared with a canonical (nominative) PSA. First of all, it is necessary to examine whether the alleged PSAs marked by the non-canonical case in the (b) sentences can count as such. The simplest test should be to see whether another argument which can potentially work as a PSA can be inserted in the (b) sentences. If the sentence allows such an additional argument, which is presumably a true PSA, it suggests that the non-canonical cases are working for its original function (oblique-marker) rather than functioning as a PSA. As the following data in (28) indicate, ablative and instrumental do not allow an additional argument while locative allows one.

(28) [locative]

a. Osaka.sho-de sho.in-ga sono-jiken-o soosa-shiteiru
Osaka.police-LOC police.staff-NOM DET-case-ACC investigation-be.doing
'At the Osaka police the staff is investigating the case.'

[instrumental]

b. *kodomotachi-de oyatachi-ga sensee-o sagashita
children-INST parents-NOM teacher-ACC looked.for
'???'

[ablative]

c. *Taroo-kara Hanako-ga sono-hanashi-o hajimeta
Taroo-from Hanako-NOM that-story-ACC began
'???'

Given the data in (28) above, it is reasonable to say that the ablative and instrumental

arguments are both working as a PSA, though it is unknown at this point what kind of 'subject' properties they have. On the other hand, it is doubtful that the locative-marked NP holds PSA status since it can explicitly have another canonically marked PSA, 'police staff'.

Though it is possible to exclude the locative case from the group, however, there is one more criterion to be considered here, 'indispensability' (Keenan 1976). In general, a PSA is a core element in the sentence and therefore it cannot be eliminated under normal circumstance without changing the intended meaning. In (28a), when the nominative-marked NP is deleted, which results in (25b), still the same meaning can be retained as a whole, but not vice versa. If the locative NP is deleted, the meaning of the sentence is completely different.

I would like to introduce two relevant notions here: 'dependency' (Shibatani 2001) and, the more commonly known, 'metonymy'. The first notion, dependency, is quite similar to the above notion of 'indispensability' by Keenan (1976). Shibatani introduces the notion of 'dependency' when he accounts for what he calls 'double subject' constructions whose case configuration is [NOM [NOM predicate]] or [DAT [NOM predicate]] (i.e. a dative 'subject' construction) which will be discussed later below. (29a) looks well-formed, but not quite, Shibatani claims. That is because (29a) lacks the 'domain' that the truth-condition of the proposition ('head's being big') is evaluated against. He argues that the first NP in (29b), what he calls 'large subject', supplies such a domain. He calls 'dependency' this relation between the first nominative NP ('large subject') and the 'clause' left behind, which consists of the second NP ('small subject') and a predicate. The locative phrase in (28a), thus, seems to exhibit a similar indispensable relation comparable to the 'large subject' in (29b) since, without being specified, the 'police staff' can be any police staff of any police station, which is not originally intended in the sentence.

(29) a. Atama-ga ookii
head-NOM big
'It is heads that are big.'

b. Ken-ga atama-ga ookii.
Ken-NOM head-NOM big
'Ken's head is big. / Ken has a big head.'

Regarding the other notion, metonymy, it is widely known by now that it is prevalent in the grammatical structure, as in the notion of 'metonymic clipping' in Van Valin and Wilkins (1993, 1996), as well as various linguistic expressions based on our cognitive abilities (Lakoff and Johnson 1980, Lakoff 1987 among many others). It seems that the 'locative' PSA is comparable to the so-called 'metonymic subject'. In (30), what is extensionally referred to by *the White House* and *Pyongyang* is not the place itself but the person or people typically associated with the place, namely the president of the U.S., the leader of DPRK, or some high-level officials in each government. In addition, it is obvious that in the English examples, *the White House* and *Pyongyang* hold the PSA status since they trigger agreement on the verb.

(30) a. The White House announces the beginning of a new war every year.

b. Pyongyang always refuses to accept the plans from the U.S.

Based on these two considerations ('dependency' and 'metonymy'), I will also include the locative NP in the same non-canonical PSA group as other ablative and instrumental cases, following previous researchers' original suggestions, though a slight difference can be detected among the three cases, as just discussed.

Before examining each case, it must be noted again that all of the non-canonical cases can be substituted with the nominative as shown in (31). There is no verb that uniquely requires one of these non-canonical oblique cases on its PSA. Therefore, these are case-conversion

phenomena like the nominative-genitive conversion discussed in section 3.4.2.5. This means that the non-canonical case-marking is not an obligatory process, but rather a marked choice, presumably under some semantic or pragmatic factors.

(31) [locative]

a. Osaka.sho-{ de/ga } sono-jiken-o soosa-shiteiru
Osaka.station-{ LOC/NOM } DET-case-ACC investigation-be.doing
'The Osaka police are investigating the murder case.'

[instrumental]

b. kodomotachi-{ de/ga } sensee-o sagashita
children-{ INST/NOM } teacher-ACC looked.for
'The children looked for the teacher.'

[ablative]

c. Taroo-{ kara/ga } sono-hanashi-o hajimeta
Taroo-{ from/NOM } that-story-ACC began
'Taroo began the story.'

There are many peculiarities in the non-canonical PSAs, as demonstrated below. However, accordingly as the non-canonically marked NPs exhibit the 'subject' properties, they should be recognized as possible PSAs in the language. In what follows, the 'subject' properties of the three cases will be discussed in order.

[Locative]

Both Tsunoda (1991) and Kondo (2005) point out that the type of NP that can be marked by the locative is limited to a place NP that denotes some organization or the like where people do activities of some sort. It seems there is no possible intransitive sentence with this PSA, including both lexical and derived ones. This is shown in (32a) and (32d). Thus there is no neutralization and the macrorole that the locative PSA can carry is actor only. The pivot is a semantic pivot, [AT].

(32)

[*S]
a. d.n.a

[A_T]
b. **Osaka.sho-de** sono-satsujin.jiken-o soosa-shiteiru
Osaka.station-LOC DET-murder.case-ACC investigation-be.doing
'The Osaka police are investigating the murder case.'

[*U_T]
c. d.n.a

[*d-S]
d. *sono-satsujin.jiken-de (Osaka.sho-{ ni / niyotte }) soosa-s-are-teiru
DET-murder.case-LOC (Osaka.police-by) investigation-do-PASS-ASP
'(int.) The murder case is being investigated by the Osaka police.'

In addition to the 'indispensability' (or 'dependency') property discussed above, the locative PSA can trigger the PSA honorific agreement and control the reflexive binding as in (33a) and (33b) respectively. (33a') and (33b') show that scrambling does not affect these control relations.

(33) a. kaisha-zentai-de shisetsu-o go-riyoo-ni-natta
company-whole-LOC facility-ACC HON-use-DAT-became
'The whole company used the facility.'

a'. shisetsu-o kaisha-zentai-de go-riyoo-ni-natta

b. Osakasho-de zibuntachi-no-fushoozi-o choosa-shiteiru
Osaka.police-LOC selves-GEN-scandal-ACC investigation-be.doing
'The Osaka police are investigating their (own) scandal.'

b'. zibuntachi-no-fushoozi-o Osakasho-de choosa-shiteiru

The floating quantifier also exhibits the expected pattern for the [A_T] PSA. When two possible hosts compete for a quantifier, [A_T] generally does not win the competition (see section 3.4.3.9 on the floating quantifier). As shown in (34a) and (34b), the numeral 'three' in (34c) which is placed between the two NPs, can originate from either an actor NP or an undergoer NP. It is natural to interpret the numeral as modifying the undergoer NP, *jiken* 'case, affair'. Let me refer to this behavior as 'Avoid [A_T]'. (34d) indicates that scrambling such as fronting the

numeral to the sentence-initial position makes it relatively easier to interpret the numeral as modifying the locative [AT] PSA, but still the other interpretation remains robust in which the numeral is modifying the undergoer.

(34) a. mittsu-no-keisatsu.sho-de jiken-o soosa-shiteiru
three.CL-GEN-police.station-LOC case-ACC investigation-be.doing
'The three police stations are investigating the case.'

b. keisatsu.sho-de mittsu-no-jiken-o soosa-shiteiru
police.station-LOC three.CL-GEN-case-ACC investigation-be.doing
'The police station is investigating three cases.'

c. keisatsu.sho-de mittsu jiken-o soosa-shiteiru
police.station-LOC three.CL case-ACC investigation-be.doing
'The police station is investigating three cases.'
#'The three police stations are investigating a case.'

d. (mittsu) keisatsu.sho-de (mittsu) jiken-o (mittsu) soosa-shiteiru

It was confirmed that the locative PSA exhibits three 'subject' properties, the PSA-agreement, the reflexive binding and the behavior of the floating quantifier typically associated with an [AT] PSA. However, there is no neutralization of the roles and the pivot type is semantic, [AT]. Thus, locative case can be licensed only for [AT].

[Instrumental]

Though the locative and instrumental cases are morphologically the same, these two should be separated, as originally suggested in Kondo (2005)[4]. The locative case is severely constrained, but the instrumental case can be more widely employed. The biggest difference is the type of the NP with which the case can appear. While the locative is limited to locational nouns (due to an obvious reason), the instrumental can take human NPs.

[4] In 'instrumental' PSA, the NPs that denote plural entities are an unmarked choice and, if the PSA is singular, the singularity must be explicitly marked by an additional element such as adjective or adverb (Kondo 2006, Kishimoto 2005).

Though, as shown in (35), the instrumental can be used as a PSA of intransitive sentences unlike the locative, the semantic role must be actor. If an undergoer-PSA intransitive predicate such as 'fall down' or 'slip' is used with the instrumental PSA, the event denoted is coerced into some agentive or intentional one. The [d-S] undergoer cannot appear with this case, as in (35c). Thus, there is no semantic neutralization for syntax and the type of the pivot is semantic, [A(T)].

(35) [A/*U]

a. kodomotachi-de { hashitta/taoreta }
children-inst { ran/fell.down }
'The children ran/fell down.'

[AT]

b. **kodomotachi-de** sensee-o sagashita
children-INST teacher-ACC looked.for
'The children looked for a/the teacher.'

[*d-S]

c. *sensee-de kodomotachi-{ ni/niyotte } sagas-are-ta
teacher-INST children-by look.for-PASS-PST
'The/A teacher was looked for by the children.'

[*UT]

d. d.n.a

It was shown above that there is a difference between the locative and instrumental cases. The locative can mark only [AT] whereas the instrumental can mark [A] as well as [AT]. It might be of interest to note that the instrumental case can even mark a demoted actor ([demA]) in a passive construction as in (36b), though [d-S] in the same sentence must be marked by the nominative.

(36) a. senseegata-(dake)-**de** kaigi-no-un'ei-o okonatta
teachers-(only)-inst conference-GEN-management-ACC did
'(Only) the teachers did the management of the conference.'

b. kaigi-no-un'ei-**ga** senseegata-(dake)-**de** okonaw-are-ta
conference-GEN-management-NOM teachers-(only)-INST do-PASS-PST
'The management of the conference was done by the teachers (only).'

(38a) shows that the instrumental NP can control the PSA-agreement. Under certain circumstances, an oblique NP such as comitative or ablative case can trigger non-PSA agreement (*o*-X *suru* 'hon-verb do') on the predicate of a canonical transitive or three-place predicate construction. An example is shown in (37). However, (38b) demonstrates that it is not the case in the structure in question. The instrumental case can trigger the PSA-agreement only. (38c) indicates that it can control the reflexive binding as well.

(37) [non-PSA agreement]
Taroo-ga { Tanaka-sensee/*Hanako }-kara hon-o o-kari-shita
Taroo-nom {Tanaka-teacher/Hanako }-from book-acc HON-borrowing-did
'Taroo borrowed a book from Prof. Tanaka/Hanako.'

(38) [PSA-agreement]
a. senseegata-de sono-mondai-o go-kentoo-ni-natta
teachers-INST DET-problem-ACC HON-examination-DAT-became
'The teachers examined the problem.'

[#non-PSA-agreement]
b. #senseegata-de sono-mondai-o go-kentoo-shita
HON-examination-did

[reflexive]
c. kodomotachi-de zibuntachi-no-sensee-o sagashita
children-INST selves-GEN-teacher-ACC looked.for
'The children looked for their teacher.'

The floating quantifier shows exactly the expected behavior, 'Avoid [A$_T$]'. The numeral expression, 'three', in (39c) can potentially originate from either NP as shown in (39a) and (39b), but it clearly orients the undergoer NP (see the translation). It should be noted again that the effect scrambling causes is negligible and it does not drastically change the control relation. (39d) shows this.

(39) a. sannin-no-kodomotachi-de sensee-o sagashi-teiru
three.CL-GEN-children-INST teacher(s)-ACC look.for-ASP
'The three children are looking for (the) teacher(s).'

b. kodomotachi-de sannin-no-sensee-o sagashi-teiru
children-INST three.CL-GEN-teacher(s)-ACC look.for-ASP
'The children are looking for the three teachers.'

c. kodomotachi-de sannin sensee-o sagashi-teiru
children-INST three.CL teacher(s)-ACC look.for-ASP
'The children are looking for three teachers.'
#'The three children are looking for three teachers.'

d. (sannin) kodomotachi-de (sannin) sensee-o (sannin) sagashi-teiru

In sum, the instrumental PSA shows no (or very partial) neutralization and the type of the pivot is a semantic pivot, [A(T)]. Under this neutralization type, an instrumental PSA can be licensed. It was further demonstrated that the instrumental PSA exhibits three 'subject' properties, the PSA-agreement, the reflexive binding and the behavior of the floating quantifier typically associated with [AT] PSA.

[Ablative]

It must be first noted that the ablative pivot construction has two readings that could be termed 'ordinal' and 'directional'. There are some semantic differences between these two readings. The former reading indicates that the actor of the sentence was the first to carry out the action and presupposes that there were other people who performed the same action, whereas the latter reading indicates which side of the two participants initiated the action. The two readings roughly correspond to the two translations in (40b).

(40) [S]
a. Taroo-kara { hashitta/taoreta }
Taroo-from { ran/fell.down }
ordinal: 'Taroo was the first to run/fall down.'
directional: ???
[AT]
b. Taroo-kara Hanako-o yonda
Taroo-from Hanako-ACC called
ordinal: 'Taroo was the first to call Hanako.'
directional: 'It was Taroo who called Hanako.'

[d-S]
c. Hanako-kara Taroo-ni yob-are-ta
Hanako-from Taroo-by call-PASS-PST
ordinal: 'Hanako was the first to be called by Taroo.'
directional: ??? / *'It was Hanako who was called by Taroo.'

[*U_T]
d. d.n.a

In the case of intransitives, the directional reading does not obtain, as in (40a), since there is only one participant in the event denoted by the intransitive predicate and therefore there is no one else the activity is directed toward. The [U] in (40a), *taoreta* 'fell down,' can be literally [U] unlike the instrumental PSA in which [U] is necessarily coerced into an agentive or purposeful participant. That is, the ablative-marked PSA does not need to be an agentive participant.

The directional reading does not also obtain in passive constructions and the same interpretation as the intransitive can be seen in the passive construction in (40c). Furthermore, there is a semantic difference between active and passive counterparts. In (40b), while there are several callers in addition to *Taroo*, the callee, *Hanako*, is constant. On the other hand in (40c) while the caller, *Taroo*, is constant, there are several callees in addition to *Hanako*. There is a presupposition that the participant denoted by PSA is (first) one of the members of a certain group. Thus, though it is possible to make a passive sentence with the ablative PSA as in (40c), there is some semantic difference from the active counterpart.

In sum, there is neutralization on the ablative PSA. The type of PSA is a variable syntactic pivot, [S,A_T,d-S] in the case of the ordinal reading. Under the directional reading, there is no neutralization and the pivot is a semantic pivot, [A_T]. Ablative can be assigned to a PSA under these conditions. The subjecthood of such an ablative PSA will be examined below.

Regarding the PSA-agreement and reflexive binding, exactly the same behaviors as in the

other two cases can be observed. Though ablative-marked NPs can trigger non-PSA agreement in certain circumstances, for example in three-place predicates (see 37), the ablative PSA in question can trigger the PSA-agreement only, never the non-PSA agreement, as demonstrated in (41a) and (41b). (41c) is an example in which the ablative PSA is controlling the reflexive binding.

(41) [PSA-agreement]

a. Tanaka-sensee-kara sono-hanashi-o o-hajime-ni-natta
Tanaka-teacher-from that-story-ACC HON-beginning-DAT-became
ordinal: 'Prof. Tanaka was the first to begin the story.'
directional: 'It was Prof. Tanaka who began the story.'

[non-PSA-agreement]

b. #Tanaka-sensee-kara sono-hanashi-o o-hajime-shita
HON-beginning-did

[reflexive]

c. Taroo-kara zibun-no-koto-o hanashi-hajimeta
Taroo-from self-GEN-matter-ACC talking-began
ordinal: 'Taroo was the first to begin talking about himself.'
directional: 'It was Taroo who began talking about himself.'

As Tsunoda (1991) gives up making an example of a floating quantifier launched from the ablative PSA, indeed it seems almost impossible to construct an example. However, the following is a possible analogue, though the PSA NP is slightly different from the expressions examined above. An additional phrase, *-no-hoo* '-GEN-direction', is attached inside the PSA NP. With this phrase, the sentence has the directional reading only and the overall sentential meaning is made clearer. Again, as expected, 'Avoid [A$_T$]' can be seen in (42c). (42a) and (42b) indicate the numeral in (42c), 'three', could originate from either NP. The same observation as in the other cases can be made on the scrambling effect (i.e. only negligible effect) as in (42d).

(42) a. **sannin**-no-sensee-no-hoo-kara gakusee-o yonda
three.CL-GEN-teacher-GEN-direction-from student-ACC called
'It was the three teachers who called the student.' (directional)

b. sensee-no-hoo-kara **sannin**-no-gakusee-o yonda
teacher-GEN-direction-from three.CL-GEN-student-ACC called
'It was the teacher who called the three students.' (directional)

c. sensee-no-hoo-kara **sannin** gakusee-o yonda
teacher-GEN-direction-from three.CL student-ACC called
#'It was the three teachers who called the student.' (directional)
'It was the teacher who called the three students.' (directional)

d. (**sannin**) sensee-no-hoo-kara (**sannin**) gakusee-o (**sannin**) yonda

So far, the neutralization/restriction and the 'subject' properties of the three non-canonically marked PSAs were examined. Lastly, it is examined how they behave at the pragmatic level. The following three mini-dialogues demonstrate that the pragmatic level is irrelevant to the case marking. The answer part, (B), in each pair is in focus and the non-canonically marked PSA (answer part) is a possible (i.e. natural) answer, in addition to the answer canonically marked by the nominative.

(43) [Locative]
A: doko-ga jiken-o soosa-shiteiru-no?
where-nom case-acc investigation-doing-sfp
'Who is investigating the case. (lit. Where is ...)'

B: Osakasho-de yatteimasu-yo
Osaka.police-loc doing(pol)-sfp
'The Osaka police are investigating it.'

[Instrumental]
A: dare-ga sore-o yaru-no?
who-nom that-acc do-sfp
'Who's doing it?'

B: senseegata-de s-are-ru rashii-yo
teacher.pl-inst do-HON-npst hearsay-sfp
'I heard the teachers are going to do it.'

[Ablative]
A: docchi-ga docchi-o yonda-no?
which-nom which-acc call.out-sfp?
'Which side called out which side?'

B: Tanaka-sensee-(no-hoo)-kara karera-o yonda rashii-yo
Tanaka-teacher-(gen-direction)-from 3.pl.m-acc called.out hearsay-sfp
'I heard it was Prof. Tanaka who called them out.'

In this section, three non-canonically marked PSAs were examined. Though each of them has its own peculiarities, they exhibit some of the 'subject' properties such as PSA-agreement, the reflexive binding and the expected behavior of the floating quantifier (i.e. Avoid[A_T]). It can be concluded that they count as a PSA of the language and can be licensed according to the neutralization pattern found for each case. Below, (44), is a summary of the results in this section.

(44)

Case	PSA properties	Pivot type	(Non-)Neutralization
Locative:	Agr, Refx, FQ	semantic	[A_T]
Instrumental:	Agr, Refx, FQ	semantic	[$A_{(T)}$]
Ablative (ordinal):	Agr, Refx, ?FQ	variable syntactic	[S,A_T,d-S]
Ablative (directional):	Agr, Refx, FQ	semantic	[A_T]

It should be noted again that though the neutralization patterns are formulated in terms of the usual roles such as [A], [A_T] or [d-S] in (44), these should be regarded as licensing conditions for each oblique case since there is no verb that exclusively requires one of these oblique cases as its PSA. Furthermore, in the case assignment system of RRG, actor is never linked to an oblique argument except the demoted actor in a passive construction. Given these considerations for linking, the generalization should be stated as 'highest ranking core argument.' This generalization covers all the neutralization patterns above, even [d-S] in Ablative (ordinal).

3.4.2.2 Dative-marked PSA

As already mentioned in the preceding sections, Japanese has a 'dative subject' construction (e.g. Kuno 1973, Shibatani 1977, 2001, Perlmutter 1984, Imai 1998, Kishimoto 2005), sometimes also called an inversion construction. It is well-known that oblique 'subjects' like this are cross-linguistically found (e.g. Aikhenvald et al. 2001, Bhaskararao et al. 2004). The dative in the inversion construction exhibits the same 'subject' properties as the nominative 'subject' in many constructions as shown in the second half of this chapter. The basics of the construction are summarized in this section.

The data in (45) indicate that the dative-marked argument exhibits the 'subject' properties. The PSA-agreement (honorifics) was already discussed in the preceding sections (a relevant example is repeated below as 45a). (45b) and (45b') show that while the dative-marked PSA can control the reflexive, the preverbal nominative (undergoer) cannot. The floating quantifier in (45c) is more likely to be controlled by the preverbal nominative-marked undergoer. It is unlikely for the FQ to be controlled by the DCA_{inv}. (Though the dative-marked PSA is not an actor argument, this is an analogue of "Avoid [A_T]".) These are well-known 'subject' properties of the dative PSA repeatedly confirmed in the literature (e.g. Shibatani 1977, 1985, 2001, Imai 1998, Kishimoto 2005). Thus, both coding and behavioral properties suggest that the dative-marked argument functions as a PSA.

(45) [PSA-agreement]

a. Tanaka-sensee-ni bessoo-ga o-ari-ni-naru
Tanaka-teacher-DAT cottage-NOM HON-existing-DAT-become
'Prof. Tanaka has a cottage.'

a'. #Taroo-ni …
Taroo-DAT

[reflexive]
b. Taroo$_i$-ni zibun$_i$-no-musuko-ga wakara-nai
Taroo-dat self-gen-son-nom can.understand-neg
'Taroo cannot understand his son.'

b'. *zibun$_i$-no-musuko-ni Taroo$_i$-ga wakara-nai
self-gen-son-dat Taroo-nom can.understand-neg
'His son cannot understand Taroo.'

[floating quantifier]
c. sensee-ni **sannin** gakusee-ga hitsuyoo-da
teacher(s)-dat 3.CL student(s)-nom necessity-cop
likely: 'The teacher needs three students.'
unlikely: 'Three teachers need a student.'

The data in (46) are the result of the examination in terms of the roles. There is no semantic neutralization on the dative-marked PSA. The dative PSA is limited to non-macrorole arguments, [DCA], in inversion constructions (i.e. more accurately, [DCA$_{inv}$]). As shown in (46d'), word order does not matter.

(46) [*S]
a. *Taroo-ni { hashitta/korogeta }
Taroo-dat { ran/slipped.down }
'(int.) Taroo ran/slipped down.'

[*A$_T$]
b. *Taroo-ni Hanako-o hometa
Taroo-dat Hanako-acc praised
'(int.) Taroo praised Hanako.'

[*d-S]
c. *Hanako-ni Taroo-ni homer-are-ta
Hanako-dat Taroo-by praise-pass-pst
'(int.) Hanako was praised by Taroo.'

[DCA$_{inv}$]
d. Taroo-ni roshiago-ga hanas-e-ru
Taroo-dat Russian-nom speak-pot-npst
'Taroo can speak Russian.'

d'. roshiago-ga Taroo-ni hanas-e-ru

Such dative 'subject' constructions are limited to the stative predicates that denote the

following meanings: possession/existence, psychological states, physiological states, visual/audio perceptions, necessity/desiderative states, potentiality/ability. The thematic roles of the NPs are determined by the verbal semantics. Some examples are shown in (47). The classification is based on Shibatani (2001).

(47) [possession/existence]

a. Taroo-ni kodomo-ga sannin iru
Taroo-dat children-nom three.CL be/exist
'Taroo has three children.'

[psychological state]

b. Hanako-ni Tanaka-sensee-ga osoroshii
Hanako-dat Tanaka-teacher-nom fearful
'Hanako is fearful of Prof. Tanaka.'

[visual/audio perceptions]

c. Taroo-ni ashioto-ga kikoeta
Taroo-dat footstep-nom heard
'Taroo heard footsteps.'

[necessity/desiderative state]

d. Taroo-ni okane-ga hitsuyoo-da
Taroo-dat money-nom necessity-cop
'Taroo needs money.'

[potential/ability]

e. Taroo-ni roshiago-ga hanas-e-ru
Taroo-dat Russian-nom speak-pot-npst
'Taroo can speak Russian.'

It was shown that the dative 'subject' in Japanese exhibits 'subject' properties. However, it does not have semantic neutralization but is limited to a non-macrorole direct core argument in an inversion construction, [DCA_{inv}].

As repeatedly emphasized in this section, it should be noted that the dative-marked argument, i.e. [DCA_{inv}], can be substituted with the nominative. Nominative case is thought to be typically induced by information structure (narrow focus, or 'pragmatic peak' in Imai's (1998) terminology). When the dative is substituted with the nominative, the resulting construction is

the same as so-called double (multiple) nominative construction on the surface. This is, however, different from the double (multiple) nominative constructions ('possessor raising') discussed below since while the first and the second nominative in the dative subject (inversion) construction do not have any necessarily associative relation in the world such as possession-relation or part-whole relation, the two nominatives in the double (or multiple) nominative construction need to have such a relation as observed below.

3.4.2.3 Multiple-nominative construction (possessor 'raising' construction)

Possessor raising is a cross-linguistically observed phenomenon (e.g. Shibatani 1994) and is very often seen on [U_T]. For the reason of the preference to [U_T], it is suggested that there is a strong inference relation between possessor and possessee (VVLP97: 308). That is, when some property is affected, the possessor of the property is also affected by the event. The affectedness relation is most clearly manifested in the constructions that involve body-parts. Some English examples are cited below (adopted from Ikegami 1993). In (48a'), the possessor in (48a) is matrix-coded ('raised') leaving (or 'demoting') the original host NP as an oblique core argument. The 'raised' argument in (48a') has acquired undergoer status and it can be further promoted to the PSA position in a passive construction as in (48c).

(48) a. John struck Bill's head.
a'. John struck Bill on the head.
b. Bill's head was struck (by John).
c. Bill was struck on the head (by John).

Japanese does not have an [U_T] modulation type of possessor 'raising' construction in a productive manner (unlike Korean, for example), but has productive possessor 'raising'

construction on PSAs. It is called a 'double (or multiple) nominative construction' since more than one nominative, which has a possessor-possessee relation (though not limited to this relation), appears in a single sentence. The following examples in (49) are from Imai (1998). In (49b), the genitive-marked argument in (49a) is 'raised' to the matrix clause and functions as a direct core argument.

(49) a. Hanako-no-me-ga aoi
Hanako-gen-eye-nom blue
'Hanako's EYES are blue.'

b. Hanako-ga me-ga aoi
Hanako-nom eye-nom blue
'HANAKO's eyes are blue.'

This is what Kuno (1973) called 'subjectivization'. While in (49a) there is only one nominative 'subject', there are two nominative 'subjects' in (49b). As Kuno demonstrated, this 'subjectivization' can be repeated insofar as some 'aboutness' relation among the arguments is satisfied (cf. Takami and Kamio 1996). The possessor-possessee relation, as in (49), is one of the most typical cases of such an 'aboutness' condition. The examples in (50) are based on Kuno's original examples (slightly modified).

(50) a. Bunmeikoku-**no**- dansei-**no**- heikin-zyumyoo-ga mizikai
civilized.countries-GEN- male-GEN- average-life.span-NOM short
'Civilized countries' men's average life span is short.'

b. Bunmeikoku-**no**- dansei-ga heikin-zyumyoo-ga mizikai
civilized.countries-GEN- male-NOM average-life.span-NOM short
'Men in civilized countries are such that their average life span is short.'

c. Bunmeikoku-ga dansei-ga heikin-zyumyoo-ga mizikai
civilized.countries-NOM male-NOM average-life.span-NOM short
'It is in civilized countries that men are such that their average life span is short.'

In the case of the [U_T] modulation type, the 'raised' argument can receive undergoer status, as in the English examples (48a', 48c); however, the 'subjectivized' argument becomes a direct core argument but does not receive macrorole status, nor PSA status (cf. Shibatani 1977). The host NP remains as a PSA. The usual three tests demonstrate this. In the PSA-agreement, as shown by the difference in the acceptability between (51a) and (51b), it is the host NP that controls the predicate (honorific) form. (51c) shows that the reflexive can be only bound by the host NP. The floating quantifier orients the preverbal undergoer, though (51d) does not constitute a strong piece of evidence since semantically the 'raised' argument, *Taroo*, cannot be modified, i.e. quantified, by the numeral (though the quantification is not impossible if there are three persons named *Taroo* as shown in the last translation). However, the fact that exactly the same behavior (undergoer-orientation) can be seen on the FQ strongly suggests that the syntactic configuration has not been changed, whether the possessor argument is marked by genitive or nominative.

(51) [PSA-agreement]

a. Taroo-ga go-ryooshin-ga roshiago-ga yoku o-deki-ni-naru
Taroo-nom hon-parents-nom Russian-nom well hon-can.do-dat-become
'Taroo's parents can speak Russian well. (lit. ... parents can do Russian)'

b. #Taroo-ga kodomo-ga roshiago-ga yoku o-deki-ni-naru
Taroo-nom child-nom Russian-nom well hon-can.do-dat-become
'Taroo's child can speak Russian well. (lit. ... child can do Russian)'

[reflexive]

c. Taroo$_i$-ga okusan$_j$-ga umaku **zibun**$_{*i/j}$-o hyoogen-dekiru
Taroo-nom wife-nom well self-acc expression-can.do
'Taroo's wife can express herself well. '

[FQ]

d. Taroo-ga sensee-ga **sannin** deshi-ga iru
Taroo-nom teacher-nom three.CL student-nom be
likely: 'Taroo's teacher has three students.'
unlikely: 'Taroo's three teachers have a student/students.'
more unlikely: 'Three Taroos' teachers have a student/students.'

Case markers are generally polyfunctional and sometimes diachronically change their functions. The case-marker, *ga*, which is now established as nominative in modern Japanese, functioned as genitive in Old Japanese and as such, the genitive *ga* can be still seen in several examples even in modern Japanese. Some examples are shown in (52).

(52) a. kimi-ga-yo
emperor-gen-generation
'the Emperor's rule' (the title of the national anthem of Japan)

b. wa-ga-ya
1.sg-gen-house
'my house'

Given this fact, it can be suspected whether *ga* is being used as genitive, rather than nominative, in the construction in question. The following examples from Imai (1998), however, clearly illustrate that the 'subjectivized' (or 'raised') argument is a matrix-coded core argument, not an embedded element any longer. In (53b), the adverb that modifies the matrix predicate, 'blue', can be put between the matrix-coded possessor and the preverbal nominative possessee. This adverb placement is impossible in the true genitive construction, as in (53a).

(53) a. *Mary-no totemo me-ga aoi
Mary-GEN really eye-NOM blue
'??'

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

So far the examples were largely limited to a stative predicate, but this construction can be used with dynamic predicates as well. Kishimoto (2005) claims that (54b) is awkward but it seems possible. Though it is expected, as Kishimoto's hedge (awkwardness) implies, that there may be some native speakers that do not judge (54b) as fully acceptable, I agree with Kishimoto's

judgment (acceptable). It is at least far from ungrammatical. In addition to the syntactic difference (i.e. being promoted to a DCA), the nominative 'raised' argument is focal, as Imai (1998) points out ('pragmatic peak' in his terminology). The awkwardness, I assume, simply comes from the fact that the discourse context in which the possessor needs to be in focus is somewhat difficult to imagine.

(54) [A_T]

a. Taroo-no-okusan-ga petto-o kawaigatteiru
Taroo-gen-wife-nom pet-acc be.caressing
'Taroo's wife is caressing the pet.'

b. (#)Taroo-ga okusan-ga petto-o kawaigatteiru
Taroo-nom wife-nom pet-acc be.caressing
'Taroo's wife is caressing the pet'
'It is Taroo whose wife is caressing the pet.'

Shibatani (1985a) very briefly uses this construction as a piece of evidence to argue for the necessity of the notion of 'subject' for Japanese grammar, but the analysis of this construction in terms of grammatical relations is not often seen in the literature. The following examples show the neutralization pattern of the PSA that can undergo the 'subjectivization' (or 'raising') phenomenon. In my judgment, [d-S] seems to show the same acceptability level as [S] and [A_T]; however, [DCA_{INV}] seems to be degraded.

(55) [S]

a. Taroo-no-imooto-ga { hashitta/koronda }
Taroo-gen-sister-nom { ran/slipped.down }
'Taroo's sister ran/slipped down.'

a'. Taroo-ga imooto-ga { hashitta/koronda }
Taroo-nom sister-nom { ran/slipped.down }
'It is Taroo whose sister ran/slipped down.'

[A_T]

b. Taroo-no-imooto-ga Hanako-o hometa
Taroo-gen-sister-nom Hanako-acc praised
'Taroo's sister praised Hanako.'

b'. Taroo-ga imooto-ga Hanako-o hometa
Taroo-nom sister-nom Hanako-acc praised
'It is Taroo whose sister praised Hanako.'

[d-S]
c. Taroo-no-imooto-ga Hanako-ni homer-are-ta
Taroo-gen-sister-nom Hanako-by praise-pass-pst
'Taroo's sister was praised by Hanako.'

c'. Taroo-ga imooto-ga Hanako-ni homer-are-ta
Taroo-nom sister-nom Hanako-by praise-pass-pst
'It was Taroo whose sister was praised by Hanako.'

[DCA_{inv}]
d. Taroo-no-imooto-ni roshiago-ga wakaru
Taroo-gen-sister-dat Russian-nom can.understand
'Taroo's sister can understand Russian.'

d'. (#)Taroo-ga imooto-ni roshiago-ga wakaru
Taroo-nom sister-dat Russian-nom can.understand
'(int.) It is Taroo whose sister can understand Russian.'

Both Shibatani (1985a) and Kishimoto (2005) claim that the 'subjectivization (raising)' is impossible from 'object.' In (56), adopted from Shibatani (1985a) with modification, it is shown that while [U_T] cannot raise the possessor, [d-S] can. (57), adopted from Kishimoto (2005), is the further confirmation of the same constraint on [U_T]. As demonstrated above, the possessor can be 'raised' from [A_T], but that interpretation results in a nonsensical sentence in this particular example in (57b) (assuming "Hanako's Taroo" is nonsensical). It is possible to read the sentence in (57b) as "both Hanako and Taroo are caressing a dog (by turns)", but it is not the meaning intended here.

(56) [*U_T]
a. keesatsu-ga Hanako-no/*ga otoosan-o oshoku-de tsukamaeta
police-nom Hanako-gen/nom father-acc scandal-for arrest.pst
'The police arrested Hanako's father for the scandal.'

[d-S]
b. Hanako-no/ga otoosan-ga keesatsu-ni oshoku-de tsukamaerareta
Hanako-gen/nom father-nom police-by scandal-for be.arrested.pst
'Hanako's father was arrested by the police for the scandal.'

(57) a. Hanako-ga Taroo-no-petto-o kawaigatteiru
Hanako-nom Taroo-gen-pet-acc be.caressing
'Hanako is caressing Taroo's dog.'

[*U_T]
b. *Hanako-ga Taroo-ga petto-o kawaigatteiru
Hanako-nom Taroo-nom pet-acc be.caressing
*'Hanako's Taroo is caressing the dog.' (nonsensical)
'(int.) Hanako is caressing Taroo's dog.'

In sum, the double nominative construction shows neutralization on the 'raising possibility', [S,A_T,d-S,(DCA_{inv})]. The pivot type is not just syntactic but a pragmatic pivot given the possible information structure differences suggested in the English translations of the 'raised' examples (I used an *it*-cleft construction for the translation)[5].

3.4.2.4 Zero-particle PSA

It has long been noted that the case markers are frequently dropped in colloquial Japanese (cf. Kuno 1973b, Shibatani 1985a, Shimojo 2005). It is not simply an optional phenomenon, but there are even cases in which a zero-particle is obligatory, as first noted by Onoe (1987). The fact that it is limited to colloquial Japanese might imply that the phenomenon is only pragmatically controlled; however, this is not a syntactically constraint-free phenomenon. Kato (1997) examines various uses of each case-marker and their zero-particle counterpart since case is generally polyfunctional. His conclusion is that the zero-particle shows a highly limited distribution. Only nominative and accusative can be ellipted under any use and, in addition, only location-related particles could be ellipted as well. The following array of data in (58), based on Kato (1997), shows the basic distribution.

[5] The analysis and the conclusion in this section are almost exclusively limited to the 'alienable' possession construction. In the case of the 'inalienable' possession construction, the 'raised' nominative-marked possessor shows some of the subject properties as shown in (i) below.

(i) $Mary_i$-ga me-ga $zibun_i$-no-imooto-yori ookii
Mary-nom eye-nom self-gen-sister-than big
'Mary's eyes are bigger than her younger sister's.' ('It is Mary whose eyes are bigger than her younger sister's.')

(58) (nominative)

a. kesa pasokon-{ ga/ Ø } koware-chatte
this.morning PC-{ nom/Ø } broke-to.my.regret
'This morning my PC broke to my regret.'

(accusative)

b. kuruma-no-kagi-{ o/Ø } sagashiterun dakedo
car-gen-key-{ acc/Ø } be.looking.for though
'(I) am looking for my car key, though.'

(allative)

c. kyoo daigaku-{ ni/Ø } itta ?
today university-{ to/Ø } went
'(Did you) go to the university today?'

(locative)

d. mon-no-tokoro-{ de/Ø } jiko-ga atta mitaida-zo
gate-gen-place-{ at/Ø } accident-nom happened seems-SFP
'It seems there's been an accident at the gate.'

(?locative)

e. kyooshitsu-{ ni/?Ø } iru-yo
class.room-{ at/Ø } be-SFP
'(He) is in the class room.'

(*dative)

f. kono kukkii-o Hanako-{ ni/*Ø } agenasai
this cookie-acc Hanako-{ dat/Ø } give.imp
'Give this cookie to Hanako.'

(*comitative)

g. Taroo-{ to/*Ø } itta-yo
Taroo-{ com/Ø } went-SFP
'(I) went with Taroo.'

(*ablative)

h. Taroo-{ kara/*Ø } tegami-o moratta-yo
Taroo-{ from/Ø } letter-acc received-sfp
'(I) received a letter from Taroo.'

(*instrumental)

i. aka.pen-{ de/*Ø } kakuna
red.pen-{ inst/Ø } write.neg.imp
'Don't write in red!'

Kageyama (1993) claims that it is more likely that [U(T)] arguments undergo case dropping whereas [A(T)] arguments resist it. The following array of data from (59) to (61) is from Kageyama.

(59) [U]

a. Tanaka-san-{ ga/Ø } nakunatta-no shiranakatta
Tanaka-Mr.-{ nom/Ø } died-Cno did.not.know
'(I) didn't know that Mr. Tanaka died.'

b. kootsuujiko-{ ga/Ø } okoru-no mitakotoaru ?
traffic.accident-{ nom/Ø } happen-Cno have.seen
'Have (you) seen a traffic accident happen?'

(60) [*A]

a. terebi-de chuukakuha-{ ga/*Ø } demo-suru-no mita-yo
TV-loc extremists-{ nom/Ø } demonstration-do-Cno saw-SFP
'I saw on TV the extremist group demonstrating.'

b. oshiego-{ ga/*Ø } katsuyaku-suru-no-o miru-no-wa tanoshii
student-{ nom/Ø } activity-do-Cno-acc see-Cno-top fun
'It is joyful to see my students taking an active part.'

(61) [U_T]

a. kodomotachi-ga hon-{ o/Ø } yomu-no mitakotonai
children-nom book-{ acc/Ø } read-Cno have.not.seen
'I haven't seen my children reading.'

[*A_T]

b. kodomotachi-{ ga/*Ø } hon-o yomu-no mitakotonai
children-{ nom/Ø } book-acc read-Cno have.not.seen
'I haven't seen my children reading.'

Kageyama further observes the same 'Avoid [A_T]' as seen in a floating quantifier construction (cf. Shibatani 1985a). In the following example, (62), the argument without a case particle is interpreted as an undergoer rather than an actor, as indicated in the two potential English translations. The judgment here is due to Kageyama's original observation. Though I do not think it is impossible or ungrammatical to interpret the structure in the latter interpretation, it is necessary to have an intonational break or a pause after 'woman' to have the second interpretation, which implies that 'woman' is a clause-external LDP element in this case. As for the first reading, no such a break or pause is needed. This suggests that it is a clause(core)-internal argument.

(62) a. kono josee-Ø shitteru-no-wa dare-desu-ka
this woman-Ø know-Cno-top who-cop-Q
'Who knows this woman?'
*'Who does this woman know?'

The following is the title of a recent news article found on the Internet. The first reading (python-eating golf ball) in which 'python' is not an actor but an undergoer is grammatically more natural than the other reading, however unrealistic the former reading is. In reality, the second interpretation is obviously what was intended by the author of the article.

b. [nishikihebi-Ø nomikonda] goruhu booru
python-Ø swallow golf ball
likely: 'a golf ball which swallowed a python'
unlikely: 'a python which swallowed a golf ball'

Thus, Kageyama's observation on [A$_T$] (i.e. 'Avoid [A$_T$]' in our term) seems to be reasonable and robust; however, there are those who suspect the constraint on [A$_{(T)}$]. The examples in (63) are the ones Kato (1997) made modifying Kageyama's original examples. The difference is that the zero-particle argument is a matrix argument in Kato's examples in (63) below while the zero-marked arguments in Kageyama's examples in (60) are all arguments in embedded clauses.

(63) a. eki-no-mae-de chuukakuha-Ø demo-shiteta-yo
station-gen-front-loc extremists-Ø demonstration-be.doing.pst-sfp
'The extremist group was demonstrating in front of the station.'

b. sensee-no-oshiego-Ø katsuyaku-shitemasu-ne
teacher-gen-students-Ø activity-be.doing$_{polite}$-sfp
'Your students are playing an active part.' (lit. 'Teacher's students are ...')

Thus, Kato tries to attribute the unacceptability in (60) to the fact that the zero-particle is in the embedded structure since the zero-particle is unlikely to happen in the embedded structure[6]. However, in all the examples in (60) by Kageyama, all the zero-particles equally occur in the same ('embedded') structure. Thus, embeddedness should not be a crucial factor for

[6] Two comments are in order. First, the notion of 'embedded' used by Kato or other Japanese linguists is not the same as that in RRG. Though I do not go into the detail here, further elaboration is needed on this in the future study. Second, it is generally true that embedded structure has constraint on the occurrence of the particles. For example, generally, the topic-marker *wa* cannot be used in an embedded structure.

the difference in the acceptability. Besides, though Kato suspects Kageyama's 'unaccusativity hypothesis' that an undergoer-PSA is much more likely to occur with a zero-particle, many of Kato's examples are such undergoer-PSA sentences (*kowareru* 'break(intransitive)', *magaru* 'bend(intransitive)', *huru* 'fall', *aru* 'be/exist', etc). Kato seems to be demonstrating, without intending to do so, that Kageyama's intuition is on the right track that [U], rather than [A], is a better candidate for the zero-particle.

The following is a summary of the data relevant to our discussion. As mentioned above, Kato (1997) claims that nominative and accusative can be realized without a case particle under any circumstances; however, as noted by Kageyama (1993), it is difficult to make up a sentence in which [A_T] is realized with a zero-particle in an embedded structure. Though Kageyama's judgment (as unacceptable) may be too strong, I agree with his basic intuition. Kato agrees that Kageyama's [$A_{(T)}$] examples in an embedded structure are awkward (and therefore Kato made up the sentences without an embedded structure which are acceptable).

It seems that the zero-particle behaves differently depending on whether it occurs as a matrix element or an embedded element. As shown in the array of data in (64), there seems to be no 'subject'-'object' opposition in the matrix clause. The zero-particle is, more or less, restricted to direct core arguments (except a recipient argument in a three-palace predicate; see 58f), but the expected accusative pattern, i.e. [S,A_T,d-S,(DCA_{inv})] vs. [U_T] opposition, is not seen.

(64) [U]

a. kesa pasokon-{ ga/Ø } koware-chatte
this.morning PC-{ nom/Ø } broke-to.my.regret
'This morning my PC broke to my regret.'

[A]

b. eki-no-mae-de chuukakuha-{ ga/Ø } demo-shiteta-yo
station-gen-front-loc extremists-{ nom/Ø } demonstration-be.doing.pst-sfp
'The extremist group was demonstrating in front of the station.'

[A_T]
c. Taroo-{ ga/Ø } mata mado-o watta-yo
Taroo-{ nom/Ø } again window-acc broke-sfp
'Taroo broke a window again.'

[U_T]
d. Taroo-ga terebi-{ o/Ø } keshita-yo
Taroo-nom TV-{ acc/Ø } turned.off-sfp
'Taroo turned off the TV.'

[d-S]
e. Taroo-{ ga/Ø } tsuini Hanako-ni nagu-rare-ta-yo
Taroo-{ nom/Ø } finally Hanako-by hit-pass-pst-sfp
'Finally Taroo was hit by Hanako.'

[DCA_{inv}]
f. Taroo-{ ni/Ø } roshiago-ga yomeru-yo
Taroo-{ dat/Ø } Russian-nom can.read-sfp
'Taroo can read Russian.'

In the following examples, the zero-particle arguments are in the same type of embedded structure. The examples other than [d-S] and [DCA_{inv}] are from Kageyama (1993), including the judgment.

(65) [U]
a. Tanaka-san-{ ga/Ø } nakunatta-no shiranakatta
Tanaka-Mr.-{ nom/Ø } died-Cno did.not.know
'(I) didn't know that Mr. Tanaka died.'

[*A]
b. terebi-de chuukakuha-{ ga/*Ø } demo-suru-no mita-yo
TV-loc extremists-{ nom/Ø } demonstration-do-Cno saw-SFP
'I saw on TV an extremist group demonstrating.'

[U_T]
c. kodomotachi-ga hon-{ o/Ø } yomu-no mitakotonai
children-nom book-{ acc/Ø } read-Cno have.not.seen
'I haven't seen my children reading.'

[*A_T]
d. kodomotachi-{ ga/*Ø } hon-o yomu-no mitakotonai
children-{ nom/Ø } book-acc read-Cno have.not.seen
'I haven't seen my children reading.'

[d-S]
e. Taroo-{ ga/Ø } (Hanako-ni) nagur-are-ru-no mita-yo
Taroo-nom Hanako-by hit-pass-npst-Cno saw-sfp
'I saw Taroo hit by Hanako.'

[DCA_{inv}]
f. Taroo-{ ni/Ø } roshiago-ga yomeru-tte shiranakatta-yo
Taroo-{ dat/Ø } Russian-nom can.read-Cte did.not.know-sfp
'I didn't' know that Taroo can read Russian.'

There is some undergoer-orientation in the neutralization. In other words, the zero particle in the embedded structure targets the roles lower on the hierarchy. My conclusion is [$U_{(T)}$,d-S,DCA_{inv}] (or [~$A_{(T)}$]).

Before concluding this section, it is necessary to make certain two points: (1) whether the zero-marked NPs retain the same PSA status; (2) whether information structure is relevant to the zero-marking. To address the first question, the following data indicate that the zero-particle arguments retain the same PSA status as the non-zero PSA counterpart. The PSA-agreement is not affected by the presence or absence of the case particle as in (66a). In (66b), a complex reflexive compound, *zi.taku* 'own home', is used and the reflexive must be bound by *Tanaka-san*. In (66c), the FQ orients the preverbal undergoer argument as expected.

(66) [PSA-agreement (honorifics)]
a. Tanaka-sensee-{ ga/Ø } o-nakunari-ni-natta-no shiranakatta-yo
Tanaka-teacher -{ nom/Ø } hon-death-dat-became-Cno did.not.know-sfp
'(I) didn't know that Prof. Tanaka died.'

[reflexive]
b. Tanaka-san-{ ga/Ø } zi.taku-de nakunatta-yo
Tanaka-Mr. -{ nom/Ø } self.house-loc died-sfp
'Mr. Tanaka died at home.'

[floating quantifier]
c. sensee-{ ni/Ø } sannin joshu-ga iru-yo
teacher-{ dat/Ø } 3.CL assistant-nom be-sfp
likely: 'A/The teacher has three assistants.'
unlikely: 'Three teachers have a assistant/assistants.'

Regarding the second information structure issue, the following mini-dialogue invalidates the possibility that the zero-particle is uniquely triggered by pragmatics such as topicality. The answer part in (67B) is in focus, but can trigger the zero-particle, though the focus is weakened by the 'defocusing' function of the zero-particle (Kato 1997, Shimojo 2005). By selecting the zero-particle, the speaker B can avoid committing himself/herself to the claim that the knife he/she is referring to is the only one that cuts well (i.e. the so-called exhaustive listing reading of *ga*; cf. Kuno 1973a).

(67) A: dore-{ ga/*Ø } kir-e-ru?
which-{ nom/Ø } cut-pot-npst
'Which one cuts well?'

B: kono naihu-{ ga/Ø } kir-e-ru-yo
this knife-{ nom/Ø } cut-pot-npst-sfp
'This knife cuts well.'

Two comments are in order. First, this example in (67) also demonstrates that the 'defocusing' function of the zero-particle and topic(alization) are orthogonal to each other. In other words, defocusing does not necessarily lead to topicalization, (i.e. weakening of focus at best). Second, the zero-particle in (67A) is asterisk-marked, but it should be noted that while it is unacceptable when the zero-particle is interpreted as an undergoer PSA (i.e. middle voice), it is acceptable when it is interpreted as non-PSA undergoer, i.e. the interpretation that corresponds to the following translation: 'which one can you cut?'. (This is an expected behavior from the observation for (62).)

Obviously, much more work is needed in this area, but my conclusion is that the neutralization pattern is [S,A_T,U_T,d-S,DCA_{inv}] (i.e. basically restricted to direct core arguments with some exceptions such as locative) for matrix clauses and [$U_{(T)}$,d-S,DCA_{inv}] (or [~$A_{(T)}$]) for embedded clauses.

3.4.2.5 Genitive-marked PSA

There is a case alternation phenomenon that only occurs in an embedded clause. The alternation is between the nominative, *ga*, and the genitive, *no*, and often referred to as *ga*/*no*-conversion in the literature (Harada 1971, 1976b, Inoue 1976ab, Shibatani 1978, Nakai 1980, Watanabe 1996, Ochi 2001, Hiraiwa 2001, among others). (68) shows the two environments where the alternation occurs: relative clause and gapless clause.

(68) a. Relative clause (external head)
[Taroo-{ ga/no } Ø katta] hon
Taroo-{ nom/gen } bought book
'the book which Taroo bought'

b. Gapless clause
[gasorin-{ ga/no } yasuku naru] kanoosee
gasoline-{ nom/gen } cheap become possibility
'the possibility that gasoline will become cheaper'

Though the above name ('*ga*/*no*-conversion') implies that this is a mere case-alternation process between the nominative and the genitive, the following two examples indicate this is rather the process that involves grammatical relations and occurs on the (embedded) PSA. The two examples in (69) show that while the accusative (undergoer) does not have this alternation, the dative-marked PSA can exhibit the same alternation process as the nominative PSA (in this sense, '*ga*/*no*' conversion or 'nominative/genitive' conversion might be a misnomer).

(69) [*U_T]
a. [hon-{ o/*no } katta] hito
book-{ acc/gen } bought person
'the person who bought a/the book'

[DCA_{inv}]
b. [Taroo-{ ni/no } wakaru] hoogen
Taroo-dat/gen can.understand dialect
'the dialect that Taroo can understand'

This process is only observed in embedded clauses and never occurs in non-embedded clauses as shown in (70) irrespective of the roles.

(70) [*S]

a. Taroo-{ ga/*no } hashitta/koketa
Taroo-{ nom/gen } ran/slipped
'Taroo ran/slipped.'

[*A_T]

b. Taroo-{ ga/*no } Hanako-o hometa
Taroo-{ nom/gen } Hanako-acc praised
'Taroo praised Hanako.'

[*d-S]

c. Hanako-{ ga/*no } Taroo-ni homer-are-ta
Hanako-{ nom/gen } Taroo-by praise-PASS-PST
'Hanako was praised by Taroo.'

[*DCA_{inv}]

d. Taroo-{ ni/*no } sono-hoogen-ga wakaru
Taroo-{ dat/gen } that-dialect-nom can.understand
'Taroo can understand the dialect.'

The following data show the neutralization pattern of the PSA that shows the case-alternation possibility, [S,A_T,d-S,DCA_{inv}] (or [~U_T]).

(71)

[A]

a. [Taroo-{ ga/no } hashitta] kooen
Taroo-{ nom/gen } ran park
'the park where Taroo ran'

[U]

b. [Taroo-{ ga/no } ochita] ana
Taroo-{ nom/gen } fell hole
'the hole where Taroo fell'

[A_T]

c. [Taroo-{ ga/no } tabeta] piza
Taroo-{ nom/gen } ate pizza
'the pizza that Taroo ate'

[*U_T]
d. [hon-{ o/*no } katta] hito (= 69a)
book-{ acc/gen } bought person
'the person who bought a/the book'

[d-S]
e. [gakusee-{ ga/no } homer-are-ta] sensee
student-{ nom/gen } praise-PASS-PST teacher
'the teacher by whom the student was praised'

[DCA_{inv}]
f. [Taroo-{ ni/no } wakaru] hoogen
Taroo-{ dat/gen } can.understand dialect
'the dialect that Taroo can understand'

Regarding the 'subject' properties of the genitive 'subject', the following data demonstrate that the genitive marked NPs pass the basic tests which the (Japanese) PSAs are supposed to pass: (72a) the PSA-agreement, (72b) the reflexive-binding and (72c) the ability to launch a floating quantifier. It should be noted that the [A_T] argument, *gakusee* in (72c), is not an ideal controller of FQ (recall 'Avoid [A_T]'), as already discussed, but it does not mean it cannot be the host of FQ. Though a floating quantifier from a genitive argument is controversial as shown in (72c') (cf. Shibatani 1977, Nakai 1980), I agree with Watanabe's judgment that (72c), adopted from Watanabe (1996; fn31), is acceptable.

(72) [PSA-agreement]
a. [Tanaka-sensee-no **o**-kai-**ni-natta**] hon
Tanaka-teacher-GEN HON-buying-DAT-became book
'the book that Prof. Tanaka bought'

[reflexive]
b. [Hanako-no **zibun**-ni kashita] choosen
Hanako-GEN self-DAT imposed challenge
'the challenge that Hanako imposed on herself'

[FQ]
c. [gakusee-no **minna** katta] hon
student-GEN all.people bought book
'the book that all the students bought'

c'. #[gakusee-no **sannin** katta] hon
student-GEN three.CL bought book
'the book that three students bought'

As for the case alternation, the pragmatic level such as topicality is irrelevant as the following mini-discourse in (73) demonstrates. In (73A), the wh-part is marked by the genitive case and in (73B), the focal answer part, 'Prof. Tanaka', is also marked by genitive. Though the nominative, which typically marks focus, might sound better in (73B), the genitive-marked NP is far from unacceptable. Thus, it is clear that the alternation is not a process uniquely triggered by topicality[7].

(73) A: sore-wa [dare-no itta] koto-desu-ka?
that-top who-GEN said thing-cop-Q
'Who said that?'

B: [Tanaka-sensee-no iw-are-ta] koto-desu
Tanaka-teacher-GEN say-HON-PST thing-cop
'It is what Prof. Tanaka said.'

The genitive-marked PSA exhibits the same 'subject' properties as the honorific construction, [S,A_T,d-S,DCA_{inv}] (or [~U_T]).

3.4.2.6 Summary of the section

In this section, two coding properties were examined, agreement and case. All the phenomena were demonstrated to show some robust 'subject' properties. In order to examine the subjecthood, three tests were employed: PSA-agreement, reflexive-binding and the floating

[7] There is a difference in scope relation between the nominative and the genitive PSA as first discussed in Miyagawa 1993 and followed by Ochi 2001. This is presumably induced by a difference in information structure each case uniquely causes. As was suggested at the end of the previous section on the zero-particle, there is some difference between the nominative and zero particle or genitive. Genitive might also have a defocusing function of some sort, though this is higly speculative at this point.

quantifier. The two tables in (74) and (75) are summaries of the results of the examinations.

[agreement]

(74)

Construction	Controller	Neutralization
the PSA honorific agreement	Variable syntactic controller	[S,A_T,d-S,DCA_{inv}] (or [~U_T]) (or [HR-DCA])

[case] (case-conversion)

(75)

Case	Pivot type	(Non-)Neutralization	
Locative	semantic	[A_T]	
Instrumental	semantic	[$A_{(T)}$]	
Ablative (ordinal)	variable syntactic	[S,A_T,d-S]	(or [HR-DCA])
Ablative (directional)	semantic	[A_T]	
Dative	semantic	[DCA_{inv}]	
Multiple-nom	variable syntactic	[S,A_T,d-S,(DCA_{inv})]	(or [HR-DCA])
Zero (matrix)	variable syntactic	[S,A_T,U_T,d-S,DCA_{inv}]	(or [DCA])
Zero (embedded)	variable syntactic	[$U_{(T)}$,d-S,DCA_{inv}]	(or [~$A_{(T)}$] or [LR-DCA])
Genitive	variable syntactic	[S,A_T,d-S,DCA_{inv}]	(or [~U_T] or [HR-DCA])

It should be noted again that there is no verb in Japanese that exclusively takes one of the non-nominative cases as its PSA. In this sense, the case-related phenomena discussed above can be all regarded as case conversion phenomena (conversion with the nominative). As observed, however, the subjecthood is clearly retained (i.e. PSA) even when an argument at LS is realized taking a non-nominative case. The neutralization patterns for the non-nominative cases in (75) should be understood as licensing conditions for each non-nominative case to be realized as a PSA.

In the RRG linking system (or case assignment rules; e.g. VVLP 1997: 359), however, an actor is never linked to an oblique case on the surface; therefore, the alternative generalizations ('highest raking (direct) core argument', or [HR-(D)CA]) need to be stated to regulate the aspect

of linking. The motivation for a non-nominative case to be realized as a PSA, instead of nominative, is left open also in this thesis.

The two summaries in (74) and (75) indicate that while some of the phenomena share exactly the same neutralization pattern, for example, the PSA agreement and the genitive PSA, others have their own unique pattern. These subtle differences and commonalities can be captured only by employing the fine-grained analytical system of RRG. It should be obvious by now that the notion of 'subject in Japanese' is not a useful concept. In the following section, the behavioral properties will be examined.

3.4.3 Constructions

Each construction examined in this section has been studied extensively, but my discussion is limited to the aspects related to grammatical relations. Where there is some relevance to the Japanese data, data from other languages are introduced for comparison.

3.4.3.1 Imperatives

Imperatives are the sentence type directed to an addressee and the contextually salient second person 'subject' is usually covert. Some examples from English are shown in (1).

(1) a. Run!
b. Be brave!
c. Get an ambulance!

It seems that since Dixon (1979, 1994), it has been often assumed that the controller of the imperative construction is, almost universally, an invariant one, [S,A_T]. It is true that every imperative assigns some agentive meaning to the omitted argument. Palmer (1994: 111) claims that it is not 'agent' (i.e. [$A_{(T)}$] in our term) but 'subject' that is deleted. In English, it seems, the omitted NP can be an undergoer as in the examples below in (2). If so, the role of the omitted argument should be [d-S] and the controller type is a variable syntactic controller (i.e. [S,A_T,d-S]). However, the omitted PSA is always second person and there is no [U_T]-[d-S] alternation without changing the meaning (truth-value). [d-S] imperatives exist, but [d-S] does not exist in the ordinary sense of the notion since the function of [d-S] is somewhat different compared with more canonical [d-S] constructions.

(2) a. Don't be fooled.

b. Be seated.

c. Please be advised/informed/reminded that ...

Imperatives subsume a wide range of expressions, especially if one includes various modal expressions, so that it is not always easy to demarcate the subcategories as imperative or not (see Potsdam 1996 for English imperatives and Mauck et al. 2005 for a cross-linguistic survey). One of the subvariety of imperative constructions that has drawn linguists' attention is imperatives with an overt third person 'subject'. It has been pointed out that in English, imperatives can have a quantificational third person 'subject' as in (3a) or a contrastive third person 'subject' as in (3b), though it should be arguable whether the sentence-initial NP counts as a 'subject' or not. Mauck et al. (2005), for example, claims that the third person 'subject' in (3b) is not a vocative because each of them binds the pronoun (vocatives can bind only second person).

(3) a. Everyone gather round!

b. Jane hang up her coat, Michael put away his lunch box, and Rebecca pick up the toys!

One more potential way to have a third person 'subject' is to derive one via a voice construction in which the second person 'subject' (addressee) is grammatically demoted or [U$_T$] is promoted to a [d-S] argument (or some combinations thereof). Though we can see some semantic relation in (3a) above between the canonical imperative 'subject' (i.e. single addressee) and the third person 'subject', *everyone* (i.e. multiple addressees), the derived imperative is totally different. Since Keenan's (1976) documentation, it is very well-known that such imperative formation via voice is seen in Malagasy. Given the existence of passive whose

undergoer is not promoted to a PSA, it needs to be demonstrated that the third person NP is actually promoted. In (4b), the third person NP, 'rice', has nominative status and it seems reasonable to conclude that it is promoted to a PSA.

(4) a. Sasa-o ny lamba! (Manaster-Ramer 1995: 205)
wash-PASS.IMP ART clothes
'Wash the clothes!'

b. A-rosó-y ny vary. (Keenan&Manorohanta 2001: 70)
PASS-advance-IMP the rice
'Serve the rice(NOM).' (lit. 'be-served the rice')

According to Mauck et al. (2005), Sanskrit is another language that has such a passive imperative construction. As the fact that the NPs are marked by the nominative case suggests, it seems that the NPs in (5) are promoted to a PSA via passive voice.

(5) a. Tyajyataam ayam tarus
abandon-IMP.PASS.3sg this-NOM tree-NOM
'Let this tree be abandoned.'

b. Idam suvarNakankaNam grhyataam
this-NOM.sg gold-bracelet-NOM.sg grab-IMP.PASS.3sg
'Let this gold bracelet be taken.'

It was reviewed above that imperative constructions can involve grammatical relations. Now let us turn to Japanese. Japanese verbs have an inflected form for imperatives. So, for example, the citation (declarative) forms in (6a) are *hashiru* 'run' and *neru* 'sleep.' The omitted NP is an actor in (6a) and an undergoer in (6b). As in (6c), [AT] can be omitted as well. There is restricted neutralization like English and the type of the controller is invariable syntactic controller, [S,AT]. The omitted NP is always an addressee and, as for the passive construction in (6d), the same argument as mentioned above for English applies.

(6) [S]

a. hashire (< hashiru)
run(imp)
'Run!'

b. nero (< neru)
sleep(imp)
'Sleep!'

[AT]

c. ano-otoko-o tsukamaero (< tsukamaeru)
that-man-ACC catch(imp)
'Catch that man!'

([d-S])

d. damas-are-ru-na
deceive-PASS-NPST-NEG(imp)
'Don't be fooled!'

Exactly the same imperative construction with an overt third person 'subject' as in the English examples in (3) can be formed in Japanese, as shown in (7). In (7b), the topic-marker, *wa*, works for contrast.

(7) a. zen'in shuugoo
everyone gather.round
'Everyone gather round!'

b. Taroo-wa zibun-no-ie(-ni) Hanako-wa zibun-no-gakko-ni modore
Taroo-top self-gen-home(-to) Hanako-top self-gen-school-to return(imp)
'(lit.) Taroo, return to self's house, and Hanako, (return), to self's school!'

There are passive imperative-like constructions in Japanese, though they are rather archaic in the modern grammar. The Japanese auxiliary verb *-rareru*, which is most often associated with passive and glossed as such in the literature, has an inflected form for imperatives, *-rareyo*. Some examples are shown in (8). This is, however, a honorific use of the same morpheme and therefore, for example, any adversative meaning does not arise even when it is combined with an intransitive verb as in (8b).

(8) a. kore-o tabe-rareyo
this-ACC eat-HON(imp)
'Eat this (polite).'

b. koko-de nemu-rareyo
here-LOC sleep-HON(imp)
'Sleep here (polite).'

c. sonomama-de ar-areyo
the.state-Cte be-HON(imp)
'Remain as you are now (polite).'

The function of the morpheme here is, I assume, to defocus the covert PSA (second person addressee) without demoting it. There being no demotion means that there is no slot for the promotion of the undergoer. Valency is not thus affected and therefore, this construction can be used regardless of the transitivity of the verb as shown in (8b) and (8c). This is one of the strategies developed in the language to show deference for the person referred to by the PSA through 'indirectness' (defocusing). It has been claimed that the Malagasy passive imperative construction has a similar semantic or pragmatic (or socio-cultural) motivation. In the case of Malagasy, however, as clearly indicated in the gloss (4b), the remaining NP, *vary* 'rice', receives the nominative case which a PSA typically receives. Probably, the same deference effect is achieved by total demotion and/or promotion in Malagasy (and possibly also in Sanskrit)[8].

In sum, the imperatives in Japanese are similar to the ones in English. Though some voice-related passives can be observed, they are not comparable to those found in the languages such as Malagasy or Sanskrit which clearly have passive imperatives by a syntactic operation. The Japanese imperatives have an (invariable) syntactic controller, [S,A$_T$,(d-S)].

[8] Keenan (1976) claims that the passive imperative is preferred over the corresponding active imperative due to some sociolinguistic reason. According to Manaster-Ramer (1995), however, the passive imperatives have nothing to do with politeness in modern Malagasy. On the contrary, they could be considered even rude. "Diachronically, it may be that politeness conventions lie at the root of the syntax of imperatives in Malagasy, but this has no relevance to the modern grammar. Moreover, I have learned from an anonymous referee that (3) [example number] is actually by no means considered polite by Malagasy speakers, and may in fact be read as 'quite rude.'" (Manaster-Ramer (1995: 207)

3.4.3.2 Reflexives

It is another typical behavioral property of PSAs to control a reflexive. (9a) is a typical English reflexive construction in which the reflexive is controlled by the 'subject'. It cannot be controlled by something other than 'subject', for example some participant in the preceding discourse. In English, however, 'object', as well as 'subject', can control the reflexive in some constructions. (9b) shows that also 'object' can antecede the reflexive. Thus, the reflexive-binding is not always an exclusive property of 'subject' in the case of English.

(9) a. James$_i$ saw himself$_{i/*j}$.

b. Sam$_i$ told Miriam$_j$ about herself$_{i/j/*k}$.

In Japanese, it has often been claimed that only 'subject' can antecede the reflexive *zibun*. This is generally true as shown in (10) (see Aikawa 1999 for the general properties and the summary of the past arguments on *zibun*). Non-'subject' NPs such as the accusative-marked NP ('object') in (10b) cannot control the reflexive. In the passive counterpart, (10c), only the nominative-marked PSA is the controller and the demoted actor cannot control the reflexive. As already touched on in the coding property section, a dative-marked PSA can control the reflexive as well. This is shown in (10d).

(10) [S]

a. Taroo$_i$-ga zibun$_{i/*j}$-no-heya-de { hashitta / nemutta }
Taroo-NOM self-GEN-room-LOC { ran / slept }
'Taroo$_i$ ran/fell down in his$_{i/*j}$ room.'

[A_T] [*U_T]

b. Taroo$_i$-ga Hanako$_j$-o zibun$_{i/*j}$-no-heya-de hometa
Taroo-NOM Hanako-ACC self-GEN-room-LOC praised
'Taroo praised Hanako in his/*her room.'

[d-S]
c. Hanako$_i$-ga Taroo$_j$-ni zibun$_{i/*j}$-no-heya-de home-rare-ta
Hanako-NOM Taroo-by self-GEN-room-LOC praise-PASS-PST
'Hanako was praised by Taroo in her/*his room.'

[DCA$_{inv}$]
d. Taroo$_i$-ni zibun$_i$-no-ronbun-ga wakaranakatta
Taroo-dat self-gen-paper-nom could.understand.neg.pst
'Taroo could not understand his (own) paper.'

The following examples in (11) indicate that the reflexive takes only a specific argument as its antecedent, which further demonstrates the subject-orientation of the reflexive. As expected from the fact that the reflexive cannot be controlled by an undergoer, it cannot be controlled by the dative-marked DCA in an ordinary (non-stative) construction, as in (11a), much less the comitative participant as in (11b). (11c) shows that the reflexive cannot be bound by an embedded element (the genitive-marked possessor here). It should be noted that these non-nominative marked arguments are totally different from the oblique-marked PSAs (locative, instrumental and ablative), which can control the reflexive as demonstrated in the previous section on the coding properties.

(11) a. [*dative]
Taroo$_i$-ga Hanako$_j$-ni zibun$_{i/*j}$-no-oya-no-koto-o hanashita
Taroo-NOM Hanako-DAT self-GEN-parents-GEN-matter-ACC talked.about
'Taroo talked to Hanako about his/*her parents.'
(lit. 'Taroo$_i$ talked to Hanako$_j$ about self's$_{i/*j}$ parents.')

b. [*comitative]
Taroo$_i$-ga Hanako$_j$-to zibun$_{i/*j}$-no-oya-no-koto-o hanashita
Taroo-NOM Hanako-with self-GEN-parents-GEN-matter-ACC talked.about
'Taroo talked with Hanako about his/*her parents.'
(lit. 'Taroo$_i$ talked to Hanako$_j$ about self's$_{i/*j}$ parents.')

c. [*genitive]
Taroo$_i$-no-ane$_j$-ga kagami-de zibun$_{*i/j}$-no-sugata-o mita
Taroo-GEN-sister-NOM mirror-by self-GEN-figure-ACC saw
'Taroo's sister saw *himself/herself in the mirror.'
(lit. Taroo's$_i$ sister$_j$ saw self's$_{*i/j}$ figure in the mirror.)

In the following question-answer pair, the answer in (12B), *Taroo*, is in focus and is controlling the reflexive. This invalidates the possibility that it must be a topical argument that exclusively antecedes the reflexive. Thus topichood is not a decisive factor and the reflexive binding is not a pragmatics-driven process.

(12) A: Dare-ga sokoni itta-no?
who-NOM there went-Q
'Who went there?'

B: Taroo$_i$-ga zibun$_{i/*j}$-no-kuruma-de itta-yo
Taroo-NOM self-GEN-car-by went-SFP
'Taroo went by his car.'

The constructions examined thus far are intransitive or transitive with two participants and the 'subject'-orientation was demonstrated. The reflexive is, however, not always bound only by a single NP. Causative constructions, including both morphologically overt and covert ones, do not show the 'subject'-orientation. The morphologically overt causatives are the ones formed by the causative morpheme *-sase-* and the covert ones intended here are three-place predicates (ditransitive verbs). Ditransitive verbs semantically contain a causative structure (in the case of 'give', for example, some actor's action causes the undergoer's having something) which is known to show ambiguity in the interpretation of the reflexive *zibun* as shown in (13).

(13) a. Taroo$_i$-ga Hanako$_j$-ni zibun$_{i/j}$-no-heya-de benkyoos-ase-ta
Taroo-NOM Hanako-DAT self-GEN-room-LOC study-CAUS-PST
'Taroo made Hanako study in his/her room.'

b. Taroo$_i$-ga Hanako$_j$-ni zibun$_{i/j}$-no-kaban-o ataeta
Taroo-NOM Hanako-DAT self-GEN-bag-ACC gave
'(lit.) Taroo$_i$ gave self's$_{i/j}$ bag to Hanako$_j$.'

In the past generative literature, in order to defend the 'subject'-orientation, a so-called 'biclausal analysis' was proposed that claims the sentences in question underlyingly have two

clauses (e.g. Kuno 1973a, Shibatani 1976). Each underlying clause has its own 'subject', namely the arguments appearing on the surface as nominative and dative in (13). The two antecedents of the reflexive were claimed to be 'subject' at some syntactic level in the derivation process and the 'subject'-orientation was thus maintained in the theory. Such an analysis is not tenable in the current framework. In this case, the antecedent is ambiguous between the two NPs and the reflexive in causative constructions simply fails to restrict the antecedents. Unless one takes the construction-specific view of grammatical relations, there is no solution for this situation without stipulating some abstract derivational relations.

Some linguists wonder whether the Japanese reflexive can be used as a diagnostic test for subjecthood. Hoji (2003) even doubts that Japanese has a reflexive construction at all. Aikawa (1999) doubts its validity since Japanese reflexive sentences show the following two peculiarities. First, some reflexive sentences whose counterpart in English is regarded as a typical reflexive are not allowed in Japanese as shown in (14a). Second, for some reflexive sentences, varied judgments have been observed among native speakers as in (14b).

(14) a. *Taroo-ga zibun-o kitta
Taroo-NOM self-ACC cut.pst
'(int.) Taroo cut himself.'

b. ??/?*Taroo-ga zibun-o tataita
Taroo-NOM self-ACC hit.pst
'(int.) Taroo hit himself.'

Indeed, this is a largely neglected area in the study of the Japanese reflexives. Kitagawa (1986, 1994) and Takezawa (1991) are some of the very few papers that point out these peculiarities though they leave the question open. As discussed in Chapter 4, these peculiarities are due to some other factors not inherent in the reflexive marker itself. Therefore, they do not invalidate the efficacy of the reflexive interpretation as a diagnostic test for

subjecthood in Japanese.

In sum, the type of the controller is a variable syntactic controller, [S,A_T,d-S,DCA_{inv}] (or [~U_T]). Pragmatics such as topicality is not a necessary requirement for the reflexive binding. The causative constructions, including both morphologically overt and lexical ones, do not show 'subject'-orientation.

3.4.3.3 Conjunction reduction constructions (CRC)

When two clauses are combined, it is usually 'subject' that is deleted in the second conjunct. This is known as a conjunction reduction construction (CRC hereafter). The followings are examples of the CRC in English. In (15a), the actor argument in the first conjunct is omitted in the second conjunct and the omitted argument (i.e. pivot) is coreferential with the actor of the first conjunct (i.e. controller). In this case, it is unknown that the pivot is being controlled by a semantic element (actor) or a syntactic element ('subject'). In (15b) and (15c), the omitted arguments have the same macrorole, undergoer, so that the difference in grammaticality cannot be attributed to the semantic (macrorole) status. In (15b), passive morphology is employed and it indicates that the missing argument has been assigned 'subject' status ([d-S]). On the other hand, in (15c), the type of the clause is active and it indicates the missing argument remains as 'object' status. We can conclude that it is an argument functioning as a 'subject' that can be omitted in the second conjunct.

(15) a. The man$_i$ went downhill and Ø$_i$ saw the dog.

b. The dog$_i$ went downhill and Ø$_i$ was seen by the man.

c. *The dog$_i$ went downhill and the man saw Ø$_i$.

The same constraint can be observed in Japanese as well (cf. Shibatani 1985a). The

following examples in (16) correspond to the ones in English above. In the square brackets, the role of the controller and that of the pivot are presented for each example. [DCA] in inversion construction is usually a candidate for neutralization in Japanese, but, as shown in (16d), there seems to be some constraint for the inversion construction to be linked via *-te*-CLM[9]. Inversion constructions can be perfectly linked via another CLM, *-to*, as shown in (16e). (16f) indicates that there is no problem with combining two inversion constructions via *-te*-CLM. [DCA_{inv}] does not exhibit exactly the same linking pattern as other role types. In sum, the **pivot** type is a variable syntactic pivot [S,A_T,d-S,(DCA_{inv})].

(16) [controller-pivot]

[S-A_T]

a. otoko$_i$-ga saka-o kudat-te Ø$_i$ inu-o mitsuke-ta
man-NOM hill-ACC go.down-Cte dog-ACC find-PST
'The man$_i$ went downhill and Ø$_i$ found the dog.'

[S-d-S]

b. inu$_i$-ga saka-o kudat-te Ø$_i$ otoko-ni mitsuke-rare-ta
dog-NOM hill-ACC go-down-Cte man-by find-PASS-PST
'The dog$_i$ went downhill and Ø$_i$ was found by the man.'

[#S-U_T]

c. #inu$_i$-ga saka-o kudat-te otoko-ga Ø$_i$ mitsuke-ta
dog-NOM hill-ACC go-down-Cte man-NOM find-PST
'*The dog$_i$ went downhill and the man found Ø$_i$.'

[#S-DCA_{inv}]

d. #otoko$_i$-ga saka-o kudat-te Ø$_i$ umi-ga mieta
man-NOM hill-ACC go.down-Cte sea-NOM saw
'The man$_i$ went downhill and Ø$_i$ saw the sea.'

e. otoko$_i$-ga saka-o kudaru-to Ø$_i$ umi-ga mieta
man-NOM hill-ACC go.down-Cto sea-NOM saw
'The man$_i$ went downhill and Ø$_i$ saw the sea.'

[9] There are many clause linkage markers in Japanese, some of which are described in Kuno (1973). The *te*-construction is used here assuming it is comparable to the English CRC. It may be a matter of debate whether this assumption is correct. Some claim (e.g. Talmy 1978) that Japanese does not have genuine coordination. It is true that there is no linguistic device that directly corresponds to the English conjunction 'and'.

[DCA_{inv}-DCA_{inv}]

f. Taroo$_i$-ni roshiago-ga hanase-te Ø$_i$ supeingo-mo wakaru
Taroo-dat Russian-nom can.speak-Cte Spanish-also can.understand
'Taroo$_i$ can speak Russian and Ø$_i$ can understand Spanish as well.'

The following data indicate that the same neutralization pattern as pivot can be found for the controller, [S,A_T,d-S, (DCA_{inv})]. Regarding [DCA_{inv}], the same argument as above applies.

(17) [controller-pivot]

[A_T-S] [*U_T-S]

a. Hanako$_i$-ga Taroo$_j$-o tatai-te Ø$_{i/*j}$ nigeta
Hanako-nom Taroo-acc hit-Cte ran.away
'Hanako hit Taroo and ran away.'

[d-S-S] [*demA-S]

b. Taroo$_i$-ga Hanako$_j$-ni tatak-are-te Ø$_{i/*j}$ nigeta
Taroo-nom Hanako-by hit-pass-Cte ran.away
'Taroo was hit by Hanako and ran way.'

In the following example from Comrie (1988), (18a), only one interpretation is available in which the entity that burst is the man, not the melon, however odd the denoted situation is. Basically the same interpretation obtains also for Japanese (i.e. the first translation), but, as the judgment marker (#) of the second translation indicates, it seems that it is not totally impossible to have the second interpretation.

(18) a. The man dropped the melon and burst.

b. Taroo-ga suika-o otoshi-te Ø haretsu-shita
Taroo-NOM water.melon-ACC drop-Cte burst-did
'Taroo dropped the water melon and burst.'
#'Taroo dropped the water melon and it burst.'

There seems to be no room for pragmatics to come in for the interpretation in (18a); however, the following data show that topichood is important and the pivot type is a pragmatic

pivot in the English CRC (Lambrecht1986, 2000; VVLP1997: 522, VV2005: 103). In (19a), *John* is a topical argument by the default focus pattern (i.e. predicate focus). However, the first conjunct in (19b) is an inversion construction whose focus pattern is sentence focus. Therefore, there is no topical argument in (19b). Thus, the contrast between (19a) and (19b) indicates that the controller must be a topical argument.

(19) a. John$_i$ walked into the room and Ø$_i$ spoke to Pat immediately.

b. *Into the room walked John$_i$ and Ø$_i$ spoke to Pat immediately.

c. Into the room walked John$_i$ and he$_i$ spoke to Pat immediately.

This influence by topichood can be observed also in Japanese. In (20a), the actor, *Taroo*, is in focus since it is now located at the preverbal focus position and the undergoer is out of the default focus position. In my judgment, both actor and undergoer have difficulty controlling the zero in the linked clause. When (20a) and (18b), repeated below as (20b), are compared, two things are made clear: (1) the nominative actor is a potential PSA but the accusative undergoer is not regardless of information structure (by word order); (2) the morphosyntactic and semantic status (i.e. being marked by nominative as well as being actor) are not enough to control the zero in the linked clause. These observations suggest that the nominative actor in (18b) above carries some topichood due to the default information structure of the clause i.e. predicate focus (see Shimojo 1995)[10]. The importance of topicality can be more vividly demonstrated by employing the *wa*-marked topic construction. In (20c), the actor is topic-marked and only one interpretation is available. It is not possible any longer to have the other interpretation.

[10] Kuno's (1973) remark that topic/old information is (always) marked by the topic-marker *wa* in Japanese could be misleading. See Shimojo (1995) for more details.

(20) a. #suika$_i$-o Taroo$_j$-ga otoshi-te Ø$_{?i/?j}$ haretsu-shita
water.melon-ACC Taroo-NOM drop-Cte burst-did
#'Taroo dropped the water melon and burst.'
#'Taroo dropped the water melon and it burst.'

(= 18b)
b. Taroo-ga suika-o otoshi-te Ø haretsu-shita
Taroo-NOM water.melon-ACC drop-Cte burst-did
'Taroo dropped the water melon and burst.'
#'Taroo dropped the water melon and it burst.'

c. Taroo$_i$-wa suika$_j$-o otoshi-te Ø$_{i/*j}$ haretsu-shita
Taroo-TOP water.melon-ACC drop-Cte burst-did
'Taroo dropped the water melon and burst.'
*'Taroo dropped the water melon and it burst.'
'(lit.) As for Taroo$_i$, (he) dropped the water melon$_j$ and Ø$_{i/*j}$ burst.'

It has been made clear that in both English and Japanese, in addition to grammatical relations, topicality is a licensing condition for CRCs. In the case of Japanese, however, it must be noted that the topichood produced by a *wa*-marked topic-construction (as in 20c) and the one carried by a case-marker (as in 20b above) should be carefully distinguished. As Tsunoda (1991: 208) points out, once the *wa*-marked topic-construction is employed, the grammatical relation seems to become irrelevant. In (20c), the actor is topic-marked. The topic-marked actor controls the pivot in the second conjunct (the burst of *Taroo*) and the other interpretive possibility is not available at all. On the other hand, in (21a), in which the undergoer is topic-marked, only the other interpretation (the burst of the 'water melon') is available. In (21b), the topic-marked undergoer, [U$_T$], is controlling the [U$_T$] pivot in the linked clause.

(21) [controller-pivot]

[U$_T$-S]
a. suika-wa$_i$ Taroo$_j$-ga otoshi-te Ø$_{i/*j}$ haretsu-shita
water.melon-TOP Taroo-NOM drop-Cte burst-did
*'Taroo dropped the water melon and burst.'
'Taroo dropped the water melon and it burst.'
'(lit.) As for the water melon$_i$, Taroo$_j$ dropped (it) and Ø$_{i/*j}$ burst.'

[U_T-U_T]

b. suika-wa$_i$ Taroo$_j$-ga otoshi-te Hanako-ga Ø$_{i/*j}$ tataita
water.melon-TOP Taroo-NOM drop-Cte Hanako-nom hit
'(lit.) As for the water melon$_i$, Taroo$_j$ dropped (it) and Hanako hit Ø$_{i/*j}$.'

Thus, the influence of the topichood produced by the topic construction is extremely pervasive in many cases, as noted by many scholars (e.g. Mikami 1963). The following contrast suggests, however, that it does not seem to be the case that the topic-construction can always ignore the implicit grammatical relation hidden under the topic marker. In (22a), it is difficult to interpret the [U_T] pivot in the linked clause as being controlled by the topic-marked actor [A_T], *Taroo* in the first conjunct, but, once a passive construction is employed as in (22b), it becomes perfect. It seems that, even under topic-construction, [A_T] has difficulty controlling a [U_T] pivot in the linked clause.

(22) [#A_T-U_T]

a. #Taroo$_i$-wa suika$_j$-o otoshi-te Hanako-ga Ø$_{?i/?j}$ tataita
Taroo-top water.melon-ACC drop-Cte Hanako-nom hit.pst
'Taroo dropped the water melon and Hanako hit Ø$_?$.'

[A_T-d-S]

b. Taroo$_i$-wa suika$_j$-o otoshi-te Ø$_{i/*j}$ Hanako-ni tatak-are-ta
Taroo-top water.melon-acc drop-Cte Hanako-by hit-pass-pst
'Taroo dropped the water melon and was hit by Hanako.'

In this section, the Japanese CRC was discussed. The controller is a variable pragmatic controller whose neutralization pattern is [S,A_T,d-S,(DCA$_{inv}$)]. The pivot is a variable syntactic (presumably pragmatic) pivot, ([S,A_T,d-S,(DCA$_{inv}$)]). This neutralization pattern does not involve the case in which the undergoer is marked by the topic-marker *wa* as in (21).

3.4.3.4 Matrix-coding ('raising') constructions

In this section, a matrix-coding construction (MCC hereafter), which is also known as a

'raising' construction, is discussed. Since Kuno (1976) it has been claimed that there is a MCC in Japanese. (23b) is deemed as an example of such a MCC. The nominative-marked argument in the linked clause in (23a) appears accusative-marked in the matrix clause in (23b). The NP is claimed to be 'raised' from the embedded clause to the matrix clause. There has been an on-going debate over the alleged 'raising' construction whether it is a MCC or not (Saito 1985, Sells 1990, Mihara 1994 among many others), but let us assume here this is a MCC simply for the convenience's sake.

(23) a. Hanako-wa [Taroo-ga baka-da-to] omotteita
Hanako-TOP Taroo-NOM fool-COP-Cto thought
'Hanako thought that Taroo was a fool.'

b. Hanako-wa Taroo-o [Ø baka-da-to] omotteita
Hanako-TOP Taroo-ACC fool-COP-Cto thought
'Hanako thought Taroo to be a fool.'

Kuno (1976) points out that this construction is limited to the linked unit whose nucleus is an adjective or an adjectival nominal. To rephrase this in terms of the current framework, the pivot of the construction is a semantic pivot, [U]. It seems that this description is generally agreed upon and rarely challenged in the literature. However, Kuno's generalization is incorrect. For example, (24b) in which [A$_T$] is 'raised' is unacceptable, but the passive counterpart, (24c), is acceptable. Obviously, the semantic type of the pivot remains the same even in (24c), [A$_T$]. That is, the pivot in the linked clause can be [A$_T$]. The constraint in (24b) comes from something else (presumably due to the so-called 'double-*o* constraint' which prohibits accusative stacking unlike Korean, cf. Harada 1973).

(24) [A$_T$]
a. Hanako-wa [Taroo-ga Ken-o shikatta-to] omotteiru
Hanako-TOP Taroo-NOM Ken-ACC scolded-Cto think
'Hanako thinks that Taroo scolded Ken.'

b. *Hanako-wa Taroo-o [Ø Ken-o shikatta-to] omotteiru
Hanako-TOP Taroo-ACC Ken-ACC scolded-Cto think
'Hanako thinks Taroo to have scolded Ken.'

c. Taroo-ga Hanako-ni [Ø Ken-o shikatta-to] omow-are-teiru
Taroo-nom Hanako-by Ken-ACC scolded-Cto think-pass-ASP
'Taroo is thought by Hanako to have scolded Ken.'

The following example has been traditionally analyzed as 'long-distance scrambling' since Saito (1985, 1992). The accusative-marked matrix element in (25b) is allegedly scrambled out of the linked clause in (25a). What happens in this construction, however, seems to be the same as above. An element in the linked clause, accusative here, appears in the matrix clause. It is possible to interpret the process as a MCC.

(25) [U_T]
a. Hanako-wa [Taroo-ga Ken-o shikatta-to] omotteiru
Hanako-top Taroo-nom Ken-acc scolded-Cto think
'Hanako thinks that Taroo scolded Ken.'

b. Ken-o Hanako-wa [Taroo-ga Ø shikatta-to] omotteiru
Ken-acc Hanako-top Taroo-nom scolded-Cto think
'Hanako thinks of Ken$_i$ that Taroo scolded Ø$_i$.'

In (26a), which is an attested example on the Internet, the pivot is [d-S] since the verb *nottoru* 'take over (lit. ride-take)' can be used in either an active or a passive construction, as shown in (26a'), which I made based on (26a). Also intransitives are well acceptable, as shown in (26b) and (26c) below.

(26) [d-S]
a. hajime-wa webu.peeji-o [Ø nottor-are-ta-to] omotta-ga, ...
first-TOP web.site-ACC take.over-PASS-Cto thought-but ...
'(I) initially thought my webpage taken over, but ....'

a'. hajime-wa [(dareka-ga) webu.peeji-o nottotta-to] omotta-ga, ...
first-TOP (someone) web.site-ACC take.over-PASS-Cto thought-but ...
'(I) initially thought (someone) took over my web page, but ....'

[U]
b. Taroo-wa **Hanako-{ ga/o }** shinda-to omotta
Taroo-TOP Hanako-{ NOM/ACC } died-Cto thought
'Taroo thought { that Hanako died/Hanako to have died }.'

[A]
c. Shinpan-ga **Taroo-{ ga/o }** hashitteiru-to handanshita
judge-nom Taroo-{ nom/acc } be.running-Cto judged
'The judge judged { that Taroo was running/Taroo to be running }.'

In addition to macrorole arguments, the following examples indicate that the pivot can be a non-macrorole direct core argument, DCA, in inversion constructions, i.e. [DCA_{inv}]. In (27b), the DCA is 'raised' to the matrix clause. In (27c), the preverbal undergoer is realized as a matrix element. (27b') and (27c') more clearly indicate the accusative argument is a matrix argument respectively.

(27) [DCA_{inv}]
a. Hanako-wa [Taroo-{ ga/ni } eego-ga hanaseru-to] shinziteita
Hanako-TOP Taroo-{ NOM/DAT } English-NOM speak.can-C*to* believed
'Hanako believed that Taroo could speak English.'

b. Hanako-wa **Taroo-o** [Ø eego-ga hanaseru-to] shinziteita
Hanako-TOP Taroo-ACC English-NOM speak.can-C*to* believed
'Hanako believed Taroo to be able to speak English.'

b'. **Taroo-o** Hanako-wa [Ø eego-ga hanaseru-to] shinziteita

c. Hanako-wa **eego-o** [Ø Taroo-{ ga/#ni }[11] hanaseru-to] shinziteita
Hanako-TOP English-ACC Taroo-{ NOM/DAT } speak.can-C*to* believed
'Hanako believed Taroo to be able to speak English.'

c'. **eego-o** Hanako-wa [Ø Taroo-ga hanaseru-to] shinziteita

In this section, the pivot type of the 'raising' construction was examined. It was argued that, in addition to the undergoer arguments ([U]), which were originally suggested by Kuno, the

[11] It should be noted, in passing, that in (27c), *Taroo* in the linked unit cannot be marked by dative as indicated in the parenthesis. In the nominative-dative alternation as in (27a), dative is used when it does not carry 'pragmatic peak' (Imai 1998), or focus. The preverbal position, in which the NP *Taroo* is located in (27c), is the default focus position of SOV languages (Kim 1988). Presumably, that is the reason the acceptability of (27c) degrades when *Taroo* is marked by dative that is incompatible with the information structure in (27c).

pivot can take other roles as well. The pivot exhibits the following neutralization: [S,A_T,U_T,d-S,DCA_{inv}]. There seems to be no restriction. Thus, this construction provides no evidence concerning grammatical relations in Japanese because it does not involve any restricted neutralization. This 'raising' construction will be termed 'pseudo-raising' and will be further detailed in Chapter 6.

3.4.3.5 Participle constructions

Participial constructions also show 'subject'-'object' asymmetries. The following array in (28) indicates the type of the construction discussed in this section (taken from VVLP97). In (28c) and (28d), the missing argument is an undergoer in both cases; however, only (28c) is acceptable. This difference must be attributed to the difference in grammatical relations. While in (28c), the passive voice indicates the missing argument is given 'subject' status, the active voice in (28d) indicates that the missing argument has 'object' (non-PSA) status.

(28) a. The student watched TV while Ø eating pizza.

b. The student watched TV while Ø lying on the bed.

c. The $suspect_i$ looked out the window while $Ø_i$ being questioned by the police.

d. *The $suspect_i$ looked out the window while the police was questioning $Ø_i$.

Two constructions, the *nagara*-construction 'while' (e.g. Perlmutter1984, Shibatani 1988, Matsumoto 1992, Ohori 1992, Dubinsky 1997) and the *sezuni*-construction 'without doing' (Matsumoto 1992, Hasegawa 1996), will be discussed in order. *Nagara*-constructions work in exactly the same way as the English examples above. In (29d) and (29e), the missing argument is an undergoer in both cases; however, only (29d) is acceptable. This difference must be attributed to the difference in grammatical relations. In (29d), the passive voice indicates that

the missing argument is given 'subject' status. The active voice in (29e) indicates that the missing argument has 'object' status.

(29) [A]

a. Taroo$_i$-ga [Ø$_i$ hashiri-nagara] hanashi-o shita
Taroo-NOM run-NAGARA talk-ACC did
'Taroo talked while running.'

[U]

b. Taroo$_i$-ga [Ø$_i$ beddo-ni nesoberi-nagara] terebi-o mita
Taroo-NOM bed-LOC lie-NAGARA TV-ACC watched
'Taroo watched TV while lying on the bed.'

[A$_T$]

c. Taroo$_i$-ga [Ø$_i$ piza-o tabe-nagara] terebi-o mita
Taroo-NOM pizza-ACC eat-NAGARA TV-ACC watched
'Taroo watched TV while eating a pizza.'

[d-S]

d. Taroo$_i$-ga [Ø$_i$ keisatsu-ni kanshi-s-are-nagara] aruita
Taroo-NOM police-by watch-do-PASS-NAGARA walked
'Taroo walked while being watched by the police.'

[*U$_T$]

e. *Taroo$_i$-ga [keisatsu-ga Ø$_i$ kanshi-shi-nagara] aruita
Taroo-NOM police-NOM watch-do-NAGARA walked
'Taroo walked while the police was watching him.'

When this *nagara*-construction is combined with a stative predicate, it only produces the other use of the two possible meanings, concessive 'though,' as shown in (29f) below. Perlmutter (1984), for example, discuss this construction without making this semantic distinction. Thus, [DCA$_{inv}$] in inversion constructions does not count as a member of the neutralization. Therefore, in this construction, the neutralization pattern for the intended meaning is [S,A$_T$,d-S] and thus the pivot type is a variable syntactic pivot.

(29) [DCA$_{inv}$]

f. Taroo-ga [Ø$_i$ roshiago-ga amari wakaranai-nagara(mo)]
Taroo-nom Russian-nom very can.understand.neg-NAGARA
hanashi-o kiiteita
talk-acc be.listening.to.pst
'Though he cannot understand Russian well, Taroo was listening to the talk.'

The next construction is the *sezuni*-construction (cf. Hasegawa 1996: 53, Matsumoto 1990: 279-280). (30) shows the structure of this construction. It is complex and *se* is an inflected form of the verb *su* 'do'. The *se* part is substituted with other verbs as seen in the examples examined below.

(30) se-zu-ni
do-NEG-DAT
'without doing'

This construction shows almost the same pattern as the *nagara*-construction. (31e) in which an undergoer argument is missing without passive morphology is only unacceptable. While the *nagara*-construction does not allow stative predicates for the intended meaning, the *sezuni*-construction can take a stative predicate as in (31f). Thus, the neutralization pattern of the pivot in this construction is [S,A_T,d-S,DCA_{inv}] (or [~U_T]).

(31) [U]
a. Taroo-ga [Ø koke-zu-ni] aruki-tsuzuketa
Taroo-NOM slip.down-NEG-DAT walk-continued
'Taroo continued to walk without slipping down.'

[A]
b. Taroo-ga [Ø hashira-zu-ni] kaetta
Taroo-NOM run-NEG-DAT left
'Taroo left without running.'

[A_T]
c. Taroo-ga [Ø ronbun-o yoma-zu-ni] kita
Taroo-NOM paper-ACC read-NEG-DAT came
'Taroo came without reading the paper.'

[d-S]
d. Taroo-ga [Ø keisatsu-ni mitsuke-rare-zu-ni] nige-kitta
Taroo-NOM police-by find-PASS-NEG-DAT escape-cut
'Taroo succeeded in escaping without being found by the police.'

[*U_T]
e. *Taroo-ga [keisatsu-ga Ø mitsuke-zu-ni] nige-kitta
Taroo-NOM police-NOM find-NEG- DAT escape-cut
'Taroo$_i$ succeeded in escaping without the police finding Ø$_i$.'

[DCA_{inv}]
f. Taroo-ga [Ø roshiago-ga zutto yome-zu-ni] ita
Taroo-nom Russian-nom long.time can.read-neg-dat be.pst/existed
'Taroo could not read Russian for a long time.'
'(lit.) Taroo was/existed for a long time without being able to read Russian.'

As the data show, the Japanese participial constructions show almost the same behavior as the English counterparts. Though the pattern seems very consistent across the two different constructions, they show some difference once we take a closer look. Unless we take the construction-specific view of grammatical relations, it is difficult to capture these subtle similarities and differences. The neutralization pattern of the pivot is [S,A_T,d-S] for the *nagara*-construction and [S,A_T,d-S,DCA_{inv}] (or [~U_T]) for the *sezuni*-construction.

3.4.3.6 Obligatory control constructions

In this section, the behavior of obligatory control (OC) constructions will be examined. Japanese has both 'subject'- and 'object'-control. As for the controller, RRG has advocated the advantages of the semantic approach since the early stage of the theory (FVV84). The following formulation in (32) is from VVLP97.

(32) Controllers of control constructions

causative and jussive verbs: undergoer control
all other (M)-transitive verbs: actor control

Controllers can be thus semantically determined. This is cross-linguistically valid and Japanese is no exception. On the other hand, the behavior of pivots varies language to language (or, construction to construction). The following array of constructions in (33), adopted from Aoshima (2001), shows major obligatory control constructions in Japanese.

(33) a. Taroo-ga sono-ronbun-o yomi-wasureta
Taroo-NOM that-paper-ACC read-forgot
'Taroo forgot to read the paper.'
(*-naosu* 'try to do again', *-sokoneru* 'fail to do', *-kaneru* 'difficult to do', *-hajimeru* 'start', *-oeru* 'finish', *-tsuzukeru* 'continue', ...)

b. Taroo-ga sono-ronbun-o yon-de-mita
Taroo-NOM that-paper-ACC read-Cte-saw
'Taroo tried reading the paper.'
(*-hoshii* 'want', *-kureru* 'give', *-morau* 'receive', *-ageru* 'give', ...)

c. Taroo-ga sono-ronbun-o yom-oo-to kokoromita
Taroo-NOM that-paper-ACC read-AUX-Cto tried
'Taroo tried to read the paper.'
(*suru* 'try/do', *tanomu* 'ask', ...)

d. Taroo-ga ronbun-o kaku-koto-o kokoromita
Taroo-NOM paper-ACC write-Ckoto-ACC tried
'Taroo tried to write a paper.'
(*tanomu* 'ask', *dekiru* 'able', *kobamu* 'refuse', *erabu* 'choose', *susumeru* 'recommend', ...)

e. Taroo-ga Hanako-ni sono-ronbun-o yomu-yoo(ni) itta
Taroo-NOM Hanako-DAT that-paper-ACC read-AUX said
'Taroo told Hanako to read the paper.'
(*tanomu* 'ask', *meijiru* 'order', *settokusuru* 'persuade', *tsugeru* 'tell', *susumeru* 'recommend', ...)

In RRG, a control construction is a core-level (or above) process so that a nuclear juncture, which functions as a single unit, is not recognized as a control construction. (33a) is a V(erb)-V(erb) compound and looks like such a nuclear juncture; however, it is not. There are two types of compounds, syntactic and lexical ones, as detailed in Toratani (2002). These can be primarily distinguished by passivization test whether the juncture level is nuclear or core. When V1 can be passivized, it means the verb constitutes its own core and therefore the juncture is a core juncture. V1 in (34a) can be passivized as in (34a') so that it is a syntactic compound that has its own core and hence the juncture level is core. *Te*-linkage can also form a nuclear juncture, as detailed in Hasegawa (1996), so also (33b) can be an instance of such a nuclear juncture. However, V1 can be passivized by itself, as in (34b'), which means it has its own core. Thus, all the constructions in (33) are core-level control constructions.

(34) a. yomi-tsuzukeru
read-continue
'continue to read'

a'. yom-**are**-tsuzukeru
read-PASS-continue
'continue to be read'

b. damashi-te-miru
deceive-Cte-see
'try deceiving'

b'. damas-**are**-te-miru
deceive-PASS-Cte-see
'try being deceived'

As shown below in (35), the linked unit cannot carry tense, as well as other clausal operators, which further indicates that the juncture is core.

(35) a. *... yon-da-wasureta
read-pst-forgot

b. *... yon-da-de-mita
read-pst-Cte-saw

c. *... yon-da-to kokoromita
read-pst-Cto tried

d. *... kai-ta-koto-o kokoromita
write-pst-Ckoto-ACC tried

e. *... yon-da-yoo(ni) itta
read-pst-Cyoo(ni) said

Another feature that must be stated is that the control constructions in (33) are all obligatory control (OC) constructions. I follow the traditional definition of OC constructions that the position of the missing argument (i.e. pivot) cannot be overtly filled and the referent of the missing argument necessarily coincides with a (direct) core argument in the matrix clause[12].

[12] Aoshima (2001) uses Hornstein's (1999) diagnostic tests for OC (such as necessity of antecedent, locality of the antecedent, c-command relation, sloppy identity under ellipsis, impossibility to have split antecedents and so forth) and concludes only three of the five constructions are OC constructions, (33a), (33b) and (33e). Aoshima excludes (33c) and (33d) as non-OC

This is shown in (36). Though only one example is presented here, all the other constructions follow the same pattern.

(36) Taroo-ga { Ø/*Hanako-ga } sono-ronbun-o **yomi-wasureta**
Taroo-NOM { Ø/Hanako-NOM } that-paper-ACC read-forgot
'Taroo forgot (*Hanako) to read the paper.'

Let us examine the VV compound-type control construction in (33a). The relevant data are shown in (37) below. Only [U_T] is excluded from the pattern. Thus, the neutralization pattern is [S,A_T,d-S,DCA_{inv}] (or ~[U_T]). The pivot is a variable syntactic pivot.

(37) [S]
a. hitobito$_i$-ga [Ø$_i$ { hashiri/ne }]-tsuzuketa
people-NOM { run/sleep }-continued
'People continued to run/sleep.'

[A_T]
b. hitobito$_i$-ga [Ø$_i$ sono-hon-o **yomi]-tsuzuketa**
people-NOM that-book-ACC read-continued
'People continued to read the book.'

[*U_T]
c. *sono-hon$_i$-ga [hitobito-ga Ø$_i$ yomi]-tsuzuketa
that-book-NOM people-NOM read-continued
'The book$_i$ continued people to read Ø$_i$.'

[d-S]
d. sono-hon$_i$-ga [Ø$_i$ hitobito-ni yom-are]-tsuzuketa
that-book-NOM people-by read-PASS-continued
'The book continued to be read by people.'

[DCA_{inv}]
e. hitobito$_i$-ni [Ø$_i$ kimyoona oto-ga kikoe]-tsuzuketa
people-dat strange sound-nom hear-continued
'The people continued to hear the strange sound.'

This neutralization pattern is highly consistent and can be seen in all of the four

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constructions. I use a more traditional definition of OC construction as stated in the text.

'subject'-control constructions from (33a) to (33d). See Appendix for the data of the other 'subject'-control constructions (33b, 33c, 33d).

The 'object'-control construction, *-yoo(ni)*, in (33e) is not different from the 'subject'-control ones except [DCA_{inv}]. The relevant data are shown in (38). Given the causative nature of the 'object' control construction, [DCA_{inv}] in an inversion construction whose predicate is [+stative] is not compatible with this nature of the OC constructions as in (38e). However, once a [-stative] predicate that denotes a change of state is added, the sentence becomes acceptable as in (38e').

(38) [*-yoo(ni)*] 'object' control (= 33e)

[S]

a. Taroo$_i$-ga Hanako$_j$-ni [Ø$_{*i/j}$ { hashiru/neru }-yoo(ni)] itta
Taroo-NOM Hanako-DAT { run/sleep }-Cyoo(ni) said
'Taroo told Hanako to run/sleep.'

[A_T]

b. Taroo$_i$-ga Hanako$_j$-ni [Ø$_{*i/j}$ Ken-o tataku-yoo(ni)] itta
Taroo-NOM Hanako-DAT Ken-ACC hit-Cyoo(ni) said
'Taroo told Hanako to hit Ken.'

[*U_T]

c. *Taroo-ga Hanako-ni [Ken-ga Ø$_{*i/j}$ tataku-yoo(ni)] itta
Taroo-NOM Hanako-DAT Ken-NOM hit-Cyoo(ni) said
'Taroo told Hanako (for) Ken to hit Ø.'

[d-S]

d. Taroo-ga Hanako-ni [Ø$_{*i/j}$ Ken-ni tatak-are-ru-yoo(ni)] itta
Taroo-NOM Hanako-DAT Ken-BY hit-PASS-NPST-Cyoo(ni) said
'Taroo told Hanako to be hit by Ken.'

[*DCA_{inv}]

e. *Taroo$_i$-ga Hanako-ni [Ø$_i$ hon-ga yomeru-yoo(ni)] itta
Taroo-NOM Hanako-DAT book-nom can.read-Cyoo(ni) said
'Taroo told Hanako to be able to read a book.'

e'. Taroo$_i$-ga Hanako-ni [Ø$_i$ hon-ga yomeru-yoo(ni)
Taroo-NOM Hanako-DAT book-nom can.read-Cyoo(ni)
naru-yoo(ni)] itta
become-Cyoo(ni) said
'Taroo told Hanako to become able to read a book.'

Next let us examine two *want*-constructions in Japanese. Cross-linguistically, the controller of *want*-constructions is always a semantic controller (VVLP1997: 305). English does not distinguish who carries out the action denoted in the linked unit (i.e. one verb, 'want', for

both 'subject'-control and 'object'-control), but there are two different constructions in Japanese depending on who carries out the action: *-tai* ('-want$_{bound}$') construction for 'subject'-control and *-te-hoshii* ('-Cte-want$_{free}$') construction for 'object'-control. As indicated in the parentheses, *-tai* is a bound form whereas *hoshii* is a free form that corresponds to *want* in English. The relevant data are shown in (39). Though there are two different constructions, the behavior is very consistent. As shown below, only [U$_T$] is excluded from the neutralization and the pivot is a variable syntactic pivot [S,A$_T$,d-S,DCA$_{INV}$] (or [~U$_T$]).

(39) [S]

a. Taroo-ga [Ø { odori/ne }]-tai
Taroo-NOM { dance/sleep } -DES
'Taroo wants to dance/sleep.'

[A$_T$]

b. Taroo-ga [Ø Hanako-ni kisushi]-tai
Taroo-NOM Hanako-DAT kiss -DES
'Taroo wants to kiss Hanako.'

[*U$_T$]

c. *Taroo-ga [Hanako-ga Ø kisushi]-tai
Taroo-NOM Hanako-NOM kiss -DES
'*Taroo$_i$ wants Hanako to kiss Ø$_i$.'

[d-S]

d. Taroo-ga [Ø Hanako-ni kisus-are]-tai
Taroo-NOM Hanako-by kiss-PASS -DES
'Taroo wants to be kissed by Hanako.'

[DCA$_{inv}$]

e. Taroo-ga [Ø roshiago-ga wakari]-tai
Taroo-NOM Russian-nom can.understand-DES
'Taroo wants to be able to understand Russian.'

(40)

[S]

a. Taroo-ga Hanako-ni [Ø { odot/ne }-te] hoshii
Taroo-NOM Hanako-dat { dance/sleep }-Cte want
'Taroo wants Hanako to dance/sleep.'

[A$_T$]

b. Taroo-ga Hanako-ni [Ø Ken-ni kisushi-te] hoshii
Taroo-NOM Hanako-dat Ken-DAT kiss-Cte want
'Taroo wants Hanako to kiss Ken.'

[*U$_T$]

c. *Taroo-ga Hanako-ni [Ken-ga Ø kisushi-te] hoshii
Taroo-NOM Hanako-dat Ken-NOM kiss-Cte want
'*Taroo$_i$ wants Hanako Ken to kiss Ø$_i$.'

[d-S]
d. Taroo-ga Hanako-ni [Ø Ken-ni kisus-are-te] hoshii
Taroo-NOM Hanako-dat Ken-by kiss-PASS-Cte want
'Taroo wants Hanako to be kissed by Ken.'
[DCA_{inv}]
e. Taroo-ga Hanako-ni [Ø Fujisan-ga mie-te] hoshii
Taroo-NOM Hanako-dat Mt.Fuji-nom can.see-Cte want
'Taroo wants Hanako to be able to see Mt. Fuji.'

In this subsection, four control constructions were examined (eight in total including the data in Appendix). It was shown that the neutralization pattern is highly consistent, [S,A_T,d-S,DCA_{inv}] (or [~U_T]) except one 'object'-control construction (*-yoo(ni)*-construction) which does not allow [DCA_{inv}], hence [S,A_T,d-S]. The type of pivot is a variable syntactic pivot.

3.4.3.7 Purposive constructions

Japanese has the following four purposive constructions (Kitagawa 1973, Nakayama and Tajima 1993): *tame(ni), yoo(ni), noni* and *ni*. The example of each construction is shown in (41). A purposive clause is an optional element and therefore, the sentences in (41) are all self-contained without the purposive clause. In this section, the fist two constructions, *-tame(ni)* and *-yoo(ni)*, will be discussed in order below.

(41) a. $Taroo_i$-ga [$Ø_i$ { hashiru/neru }]-**tame(ni)** soko-e itta
Taroo-NOM { run/sleep }-Ctame(ni) there-LOC went
'Taroo went there to run/sleep.'

b. $Taroo_i$-ga [Hanako-{ ga/ni } $Ø_i$ mieru]-**yoo(ni)** tachiagatta
Taroo -NOM Hanako-{ NOM/DAT } see-Cyoo(ni) stood.up
'Taroo stood up to be seen by Hanako.'
'(lit.) $Taroo_i$ stood up for Hanako to see (him_i).'

c. kono-basho-ga { hashiru/neru }-**noni** ii
this-place-NOM { run/sleep }-Cnoni good
'This place is good to run/sleep.'

d. Taroo-ga { hashiri/ne }-**ni** kita
Taroo-NOM { run/sleep }-Cni came
'Taroo came to run/sleep.'

In the *tame(ni)*-construction, *tame* corresponds to 'sake' in English and the dative-marker, *ni*, can be optionally attached. When the linked unit is marked by past tense, the *tame(ni)*-clause indicates 'reason' (rationale) for the event denoted in the matrix clause. When it is marked by a non-past infinitival form, the linked unit serves as a purposive clause (core juncture). The examples of these two uses, purpose and reason, are shown below in (42a) and (42b). Tense is a defining feature of this construction, so once tense is changed, as in (42a') and (42b'), only the other reading is available. Given the obligatory presence and absence of tense, it seems reasonable to say that the 'reason' unit is clausal whereas the 'purpose' unit is core.

(42) a. [reason (rationale)]
Taroo-ga [Ø benkyoo-shinakatta-tame(ni)] shiken-ni ochita
Taroo-nom study-**do.neg.pst**-Ctame(ni) exam-dat failed
'Since he didn't study, Taroo failed the exam.'

a'. Taroo-ga [Ø benkyoo-shinai-tame(ni)] shiken-ni ochita
Taroo-nom study-**do.neg**-Ctame(ni) exam-dat failed
*'Since he didn't study, Taroo failed the exam.'
'In order not to study, Taroo failed the exam.'

b. [purposive]
Taroo-ga [Ø benkyoo-suru-tame(ni)] toshokan-e itta
Taroo-nom study-**do**-Ctame(ni) library-loc went
'Taroo went to the library to study.'

b'. Taroo-ga [Ø benkyoo-shita-tame(ni)] toshokan-e itta
Taroo-nom study-**do.pst**-Ctame(ni) library-loc went
'Since he studied, Taroo went to the library.'
*'In order to study, Taroo went to the library.'

The following array of data in (43) shows the neutralization pattern of the pivot in the *-tame(ni)*-construction. [U_T] is excluded like the English counterpart (see the translation). The controller does not have to be topical and each controller in the sentences below, *Taroo*, can be an answer to the corresponding wh-question (i.e. 'who did for what?'). The Japanese passive sometimes produces adversative implicature (cf. Shibatani 2000, Oshima 2006), so (43d'), in

which a benefactive construction is employed, is probably more natural for the intended meaning.

(43) [S]

a. Taroo$_i$-ga [Ø$_i$ { hashiru/neru }-tame(ni)] soko-e itta
Taroo-NOM { run-sleep }-Ctame(ni) there-LOC went
'Taroo went there to run/sleep.'

[A$_T$]

b. Taroo$_i$-ga [Ø$_i$ saihu-o sagasu-tame(ni)] soko-e itta
Taroo-NOM wallet-ACC look.for-Ctame(ni) there-LOC went
'Taroo went there to look for the wallet.'

[*U$_T$]

c. *Taroo$_i$-ga [Hanako-ga Ø$_i$ homeru-tame(ni)] benkyooshita
Taroo-NOM Hanako-NOM praise-Ctame(ni) studied
'*Taroo$_i$ studied (for) Hanako to praise Ø$_i$.'

[d-S]

d. Taroo$_i$-ga [Ø$_i$ Hanako-ni home-rare-ru-tame(ni)] benkyooshita
Taroo-NOM Hanako-by praise-PASS-npst-Ctame(ni) studied
'Taroo studied to be praised by Hanako.'

d'. Taroo$_i$-ga [Ø$_i$ Hanako-ni home-temora-u-tame(ni)] benkyooshita
Taroo-NOM Hanako-by praise-BEN-npst-Ctame(ni) studied
'(lit.) Taroo studied to have Hanako praise (him).'

When a [+stative] predicate, which triggers a dative-nominative inversion construction, is combined with *tame(ni)*, it necessarily results in a 'reason' clause as shown below in (44) and (45) even though the tense of the linked core is present (Nakayama and Tajima 1993). Therefore, [DCA$_{inv}$] cannot count as a possible member of the neutralization pattern for the intended meaning (purposive). Thus, the type of the pivot is a variable syntactic pivot, [S,A$_T$,d-S].

(44) [DCA$_{inv}$]
Taroo-ga [Ø roshiago-ga wakaru-tame(ni)] atsumari-ni
Taroo-nom Russian-nom can.understand-Ctame(ni) meeting-loc
yobareta
be.called.in
'Since he can understand Russian, Taroo was called in to the meeting.'
*'Taroo was called in to the meeting to be/become able to understand Russian.'

(45) [DCA_{inv}]
Taroo-ga [Ø eigo-ga hanaseru-tame(ni)] amerika-ni
Taroo-nom English-nom can.speak-Ctame(ni) America-loc
ika-s-are-ta
go-caus-pass-pst
'Since he could speak English, Taroo was forced to go to America.'
*'Taroo went to America to be/become able to speak English.'

The following data in (46) show the pattern of the controller. All the linked cores are [S] type in the examples. In the square brackets, the role of the controller and that of the pivot are represented in order.

(46) [controller-pivot]

[S-S]
a. $Taroo_i$-ga [$Ø_i$ neru-tame(ni)] soko-e itta
Taroo-nom sleep-Ctame(ni) there-loc went
'Taroo went there to sleep.'

b. $Taroo_i$-ga [$Ø_i$ soochoo hashiru-tame(ni)] hayaku neta
Taroo-nom early.morning run-Ctame(ni) early slept
'Taroo went to bed early to run early in the morning.'

[A_T-S]
c. $Taroo_i$-ga [$Ø_i$ { hashiru/neru }-tame(ni)] sono-basho-o totonoeta
Taroo-nom { run/sleep }-Ctame(ni) that-place-acc arranged
'Taroo prepared the place to run/sleep.'

[#U_T-S]
d. #Taroo-ga $Hanako_i$-o [$Ø_i$ { hashiru/neru }-tame(ni)] yonda
Taroo-nom Hanako-acc { run/sleep }-Ctame(ni) called
'Taroo called Hanako to run/sleep.'

d'. Taroo-ga $Hanako_i$-o [$Ø_i$ { hashir/nes }-aseru-tame(ni)] yonda
Taroo-nom Hanako-acc { run/sleep }-CAUS-Ctame(ni) called
'Taroo called Hanako to make her run/sleep.'

[d-S-S]
e. $Hanako_i$-ga [$Ø_i$ hashiru-tame(ni)] yobareta
Hanako-nom run-Ctame(ni) be.called.pst
'Hanako was called to run.'

f. kono-$kuruma_i$-ga [$Ø_i$ hayaku hashiru-tame(ni)] kaihatsusareta
this-car-nom fast run-Ctame(ni) be.developed.pst
'This car was developed to run fast.'

In the case of the controller, in addition to the neutralization pattern for the pivot ([S,A_T,d-S]), [DCA_{inv}] seems possible as shown in (47).

(47) [DCA_{inv}-S]

Taroo$_i$-ni	tokubetsuna	heya-ga	[Ø$_i$	neru-tame(ni)]	aru
Taroo-dat	special	room-nom		sleep-Ctame(ni)	be/exist

'Taroo has a special room to sleep in.'

Also [U_T] seems to be able to very marginally control the zero in the linked core as in (46d). However, in order for the [U_T] controller to uniquely carry out the event denoted in the linked core (i.e. uniquely control the zero in the embedded clause), a causative construction must be employed in the embedded clause as in (46d'); otherwise, the nominative-marked PSA argument is the primary participant of the event (i.e. 'subject'-control) and the undergoer argument, *Hanako*, was called in to prepare for the event denoted in the linked unit (such as bed-making in the case of 'sleeping'). It is difficult to imagine a linked purposive clause in which the pivot is uniquely controlled by a matrix [U_T] controller. The neutralization pattern of the controller is thus [S,A_T,d-S,DCA_{inv}] (or ~[U_T]).

The next purposive construction is the *yoo(ni)*-construction. This is morphologically the same construction as the one discussed in section 3.4.3.6 (obligatory control constructions). A purposive construction is an optionally linked construction without which the matrix sentence can stand by itself, unlike obligatory control constructions in which the linked unit cannot be omitted. The sentences with *yoo(ni)* in (48) are all self-contained without *yoo(ni)*-construction; therefore, the *yoo(ni)*-construction in the examples in (48) is a purposive construction, not an obligatory control construction. In addition to the optionality of the clause, there is one more difference from the obligatory control constructions. While the linked purposive clause only takes stative predicates, the matrix predicate needs to be a non-stative predicate (Nakayama

and Tajima 1993). When two roles are represented in the square brackets in (48), they represent the role of the controller and that of the pivot respectively.

(48) [*S]

a. *Taroo-ga [Øi { hashiru/neru }-yoo(ni)] soko-e itta
Taroo-NOM { run/sleep }-Cyoo(ni) there-LOC went
'(int.) Taroo went there to run/sleep.'

[*A_T]

b. *Taroo-ga [Øi saihu-o sagasu-yoo(ni)] soko-e itta
Taroo-NOM wallet-ACC look.for -Cyoo(ni) there-LOC went
'(int.) Taroo went there to look for the wallet.'

[A-U_{inv}]

c. $Taroo_i$-ga [Hanako-{ ga/ni } Øi mie-ru-yoo(ni)] tachiagatta
Taroo-NOM Hanako-{ NOM/DAT } can.see-npst-Cyoo(ni) stood.up
'(lit.) $Taroo_i$ stood up for Hanako to see $Ø_i$.'

[U_T-U_{inv}]

d. Taroo-ga [Hanako-{ ga/ni } Øi wakaru-yoo(ni)]
Taroo-NOM Hanako-{ NOM/DAT } can.understand-Cyoo(ni)
$mondai_i$-o setsumei-shita
problem-ACC explanation-did
'(lit.) Taroo explained the $problem_i$ for Hanako to be able to understand $Ø_i$.'

[*U_T]

e. *$Taroo_i$-ga [Hanako-ga Øi homeru-yoo(ni)] benkyooshita
Taroo-NOM Hanako-NOM praise-Cyoo(ni) studied
'(lit.) $Taroo_i$ studied (for) Hanako to praise $Ø_i$.'

[A_T-d-S]

f. $Taroo_i$-ga [Øi Hanako-ni home-rare-ru-yoo(ni)] benkyooshita
Taroo-NOM Hanako-by praise-PASS-npst-Cyoo(ni) studied
'Taroo studied to be praised by Hanako.'

[A-DCA_{inv}]

g. $Taroo_i$-ga [Øi butai-ga yoku mi-e-ru-yoo(ni)] tachiagatta
Taroo -NOM stage-nom well see-pot-npst-Cyoo(ni) stood.up
'Taroo stood up to see the stage well.'

The ban on the roles in (48a), (48b) and (48e) (i.e. [*S,*A_T,*U_T]) is a natural result expected from the semantic constraint on the predicate of the linked unit, i.e. [+stative] predicate. The pivot is limited to the lower end of the (macrorole) hierarchy and the neutralization pattern is [U_{inv},d-S,DCA_{inv}]. As for the controller, I cannot come up with the sentences with the controller

whose role is [U], [d-S] or [DCA_{inv}]. Thus, my tentative conclusion is that the neutralization type of the controller is [$A_{(T)}$,U_T] as shown in (48). The controller does not seem to show the [A_T]-[U_T] opposition in this construction, though more scrutiny is clearly needed in the future study.

3.4.3.8 Relative clause constructions

Since Keenan and Comrie's (1977, 1979) studies, the relative clause is probably one of the best-known cases which shows that grammatical relations are hierarchical and relativization possibilities are language-dependent. While there are languages like Malagasy that can relativize only 'subject', there are also languages like English which has no restriction on relativization and virtually any NPs can be relativized (i.e. a pivotless construction). There are other in-between languages such as Persian or Tamil. The English examples are shown in (49). The role of the zero in the linked clause is not restricted at all.

(49)
a. I talked to the person$_i$ [who Ø$_i$ bought the house on the corner]. 'subject'
b. I talked to the person$_i$ [who the police interviewed Ø$_i$]. 'object'
c. I talked to the person$_i$ [to whom the police sent a summons Ø$_i$]. recipient
d. I talked to the person$_i$ [whose Ø$_i$ house burned down]. genitive
e. I talked to the person$_i$ [who Chris is taller than Ø$_i$]. comparative

Japanese has several subvarieties of relative clauses (e.g. Matsumoto 1997), but perhaps the most significant division is between externally-headed and internally-headed relative clauses. In the case of the former, the situation is almost the same as the English relative clauses in (49). The Japanese externally-headed relative clauses that correspond to the English ones are shown in (50). They are highly similar to the relative clauses in English and show only neutralization without any restriction (i.e. a pivotless construction).

(50) a. Taroo-ga [Øi kado-ni ie-o katta] hitoi-to shabetta
Taroo-NOM corner-LOC house-ACC bought person-with talked
'Taroo talked to the person who bought the house on the corner.'

b. Taroo-ga [keisatu-ga Øi mensetsushita] hitoi-to shabetta
Taroo-NOM police -NOM interviewed person-with talked
'Taroo talked to the person who the police interviewed.'

c. Taroo-ga [Hanako-ga Øi tegami-o okutta] hitoi-to shabetta
Taroo-NOM Hanako-NOM letter-ACC sent person-with talked
'Taroo talked to the person to whom Hanako sent a letter.'

d. Taroo-ga [Øi ie-ga moeta] hitoi-to shabetta
Taroo-NOM house-NOM burned.down person-with talked
'Taroo talked to the person whose house burned down.'

e. Taroo-ga [Øi Hanako-yori (se-ga) takai] hitoi-to shabetta
Taroo-NOM Hanako-than (height-NOM) tall person-with talked
'Taroo talked to the person who is taller than Hanako.'

Japanese has an internally-headed relative clause construction (IHRC) and it has received continued attention (e.g. Kuroda 1974, 1975, 1976, 1999, Mihara 1994, Ohara 1996, Shimojo 2002). The observations in terms of grammatical relations are, however, not so often made in the literature. There are two aspects that need to be examined: the role of the IHRC as a whole and the role of the head inside an IHRC, i.e. pivot[13]. Regarding the former, some observations have been made and it has been generally agreed upon that there are almost no constraints. An IHRC as a whole can serve as an oblique argument such as allative, comitative, ablative and instrumental in addition to a direct argument such as nominative or accusative. Two examples with an oblique case are shown in (51) to illustrate the unrestrictiveness of the IHRC. (51a) and (51b) are adopted from Mihara (1994: 243) and Ohara (1996: 8) respectively with some modifications[14]. Other more canonically case-marked IHRCs such as nominative or accusative can be observed below in the examples used for the discussion of the internal head (pivot).

[13] Blake (1994) calls these two 'external relations' and 'internal relations.'
[14] Judgement varies among Japnanese linguists. For example, Hoshi (1995: 79: [91f,g]) claims that instrumental (*-de*) and source (*-kara*; [ablative] in our term) cannot mark IHRC as a whole.

(51) [ablative] (Mihara 1994: 243)

a. zimukan-wa [shorui-ga mada dekiteinai]-no-**kara** torikakatta
officer-top document-nom yet not.be.complete-Cno-from began
'The officer began with the documents that were not finished yet.'

[comitative] (Ohara 1996: 8)

b. [tomodachi-ga amerika-kara kikokushiteita]-no-**to** saikaishita
friend-nom America-from had.returned-Cno-with again.met
'(I) met a friend of mine who had returned from America.'

As for the role of the internal head, it is limited to arguments and oblique cases cannot be the head. The roles allowed are shown from (52a) to (52f). Though there is almost no constraint (restriction) among these roles, in the case of [U_T], when two potential candidates have semantically equal status, such as both being human NPs, an [A_T] argument seems more likely to win the competition also in my judgment ("??" in 52d is Ishii's original judgment and I agree). But this preference is not strong and can be easily overridden, as in (52d'), once semantically unequal entities and context are given. Besides, as Kuroda (1992, 1999) points out, it seems possible for an IHRC to target two arguments within a clause (typically, actor and undergoer), which is unique to the Japanese IHRC according to Ohara (1996). That is, for example, in (52c), those who were caught can be both the gangster and the thief.

(52) [internal role-external role]

[A-A]

a. [kodomo-ga hashit-te-kita]-no-ga totsuzen tachidomatta
child-NOM run-Cte-came -Cno-NOM suddenly stopped
'A child who came running suddenly stopped.'

[U-U_T]

b. [kodomo-ga ana-ni ochita]-no-o otoko-ga tasukedashita
child-nom hole-loc fell -Cno-acc man-nom rescued
'A man rescued a child who fell in a hole.'

[A_T-U_T] (Kuroda 1999: 51; actually [{A_T/U_T}-U_T] according to Kuroda 1999)

c. keikan-ga [yakuza-ga kosodoro-o oikaketeiru]-no-o tsukamaeta
policeman-nom gangster-nom thief-acc be.chasing -Cno-acc caught
'A policeman caught a gangster who was chasing a thief.'

[(#)U_T-U_T] (Ishii 1989: [25] via Kuroda 1999: 78)

d. ??keikan-ga [otoko-ga kodomo-o ijimeteiru]-no-o hogoshita
policeman-nom man-nom child-acc be.bullying -Cno-acc protected
'A policeman protected a child whom a man was bullying.'

d'. [Taroo-ga sakana-o tsukamaeta]-no-o Hanako-ga ryoorishita
Taroo-nom fish-acc caught-Cno-acc Hanako-nom cooked
'Hanako cooked the fish which Taroo caught.'

[d-S-Ut]

e. keikan-ga [kodomo-ga otoko-ni ijimerareteiru]-no-o hogoshita
policeman-nom child-nom man-by be.being.bullied -Cno-acc protected
'A policeman protected a boy who was being bullied by a man.'

[DCA_{inv}-Ut]

f. [otoko-ni okane-ga nakatta]-no-o onna-ga sukutta
man-dat money-nom lacked-Cno-acc woman-nom helped
'The woman helped the man who lacked money.'

Unlike EHRC above, an IHRC cannot generally target a non-argument as its clause-internal head (i.e. pivot). In each example below, the underlined argument is the intended pivot in the embedded clause. As in (52g), in addition to non-arguments, a direct core argument of three-place predicates (i.e. 'indirect object' in the traditional terminology) cannot be construed as the head of the embedded clause. The intended meaning in each example can be all expressed via EHRC.

[*DCA] (Ishii 1989: [27] via Kuroda 1999: 78; slightly modified)

g. *keikan-ga [hushin'na otoko-ga kodomo-ni omocha-o
policeman-nom strange man-nom child-dat toy-acc
ataeteiru]-no-o hogoshita
be.giving -Cno-acc protected
'(int.) A policeman protected a child to whom a strange man was giving toys.'

[*demA] (Shimojo 2002: 100[21b]; slightly modified)

h. *[kodomo-ga norainu-ni kamitsukareta]-no-ga niwatori-mo osotta
child-nom stray.dog-by was.bit -Cno-nom hen-also attacked
'(int.) The stray dog by which the child was bit attacked the hen too.'

[*allative]

i. *[Taroo-ga sono machi-e itta]-no-ga hito-ga ooi
Taroo-nom the town-to went -Cno-nom people-nom many
'(int.) The town where Taroo went has a large population.'

[*comitative]
j. *keikan-ga [kodomo-ga otoko-to asondeiru]-no-o taihoshita
policeman-nom child-nom man-with be.playing -Cno-acc arrested
'(int.) A policeman arrested a man with who a child was playing.'

[*ablative]
k. *[Taroo-ga mura-kara detekita]-no-ga hito-ga sukunai
Taroo-nom village-from came -Cno-nom people-nom few
'(int.) The village Taroo came from has a small population.'

[*instrumental]
l. *[Taroo-ga kuruma-de kita]-no-ga amari urenai
Taroo-nom car-by came-Cno-nom well sell.neg
'(int.) The car by which Taroo came does not sell well.'

[*genitive] (cf. Hoshi 1995: 98 [114])
m. *[otoko-no-emono-ga nige-soodatta]-no-o onna-ga tasuketa
man-gen-game-nom escape-seemed -Cno-acc woman-nom helped
'(int.) A woman helped a man whose game was about to get away.'

[*locative]
n. *[kookoo-de rekishi-ga oshierareteiru]-no-ga sankoo aru
high.school-loc history-nom be.taught -Cno-nom three.CL be/exist
'(int.) There are three high schools where history is being taught.'

Given the above data, the neutralization pattern is something like [S,A_T,(U_T),d-S,DCA_{INV}] (or [MR,DCA_{INV}]). This might be somewhat surprising given the cross-linguistic data. Cross-linguistically, [S,U_T] seems to be a preferred neutralization pattern for IHRC in many languages (data from Belhare, Tibetan and Korean are cited in VVLP97: 308). Though obviously more detailed data collection from natural corpuses is necessary, the neutralization pattern for the Japanese IHRC, [S,A_T,(U_T),d-S,DCA_{inv}] does not seem to follow the cross-linguistic preference.

Two comments are in order here. One is that preference is an empirical problem and different from the structural possibilities a certain construction allows. Therefore, there is a possibility that the cross-linguistically preferred pattern emerges in more natural data from corpuses. The other is a possibility that the Japanese IHRC is somewhat different from that in other languages (cf. Ohara 1996). The possible difference could be related to information

structure. Shimojo (2002) collected 46 tokens from various texts and observes that the internal pivot is often topical and therefore omitted in the IHRC tokens (Shimojo 2002: 101[22]). This is confirmed by his focus structure analysis of the data. He observes that, among the tokens, 59% of the IHRC is sentence focus, 41% predicate focus and 0% argument focus. His observation suggests that the Japanese IHRC does not generally function to introduce a new referent (NP) in a discourse, though the event or proposition denoted by the entire IHRC can be new and focal (i.e. sentence focus). Shimojo's observation on the zero occurrence of argument focus can be further confirmed in the following data, (53), from Ohara (1996) as well. She claims that IHRC cannot serve as a focal answer to a wh-question.

(53) Ohara (1996: 11)

Q: dare-ga kawa-ni ochita-no
who-nom river-loc fell-sfp
'Who fell into the river?'

A: a. keekan
policeman
'A policeman.'

b. [doroboo-o oikaketeita] keekan
thief-acc was.chasing policeman
'A policeman who was chasing a thief.'

c. *[keekan-ga doroboo-o oikaketeita]-no
policeman-nom thief-acc was.chasing -Cno
'(int.) A policeman who was chasing a thief.'

It seems the Japanese IHRC could be somewhat different from that in other languages (for example, Korean; Yang 1993,1994), though more scrutiny is needed. If the characteristic features of the Japanese IHRC are true, the neutralization pattern observed above, (i.e. [S,A_T,(U_T),d-S,DCA_{inv}]), which does not follow the cross-linguistic pattern, may not be so mysterious.

Let us summarize the observations in this section. Externally-headed relative clauses do not show any restriction but only neutralization. Therefore, they are a pivotless construction. On the other hand, in the case of internally-headed relative clauses, there are two aspects to look at, the role of the embedded clause as a whole and that of the internal head of the clause (pivot). The former does not show any restriction and only neutralization (like the externally headed relatives). The latter, however, exhibits certain restriction, [S,A_T,(U_T),d-S,DCA_{inv}] (or [MR,DCA_{inv}]), though the restriction seems to be very weak. The neutralization pattern of the internal pivot of IHRC is a variable syntactic (possibly pragmatic) pivot.

3.4.3.9 Floating quantifier constructions

Floating quantifier (FQ) phenomena have been known to be sensitive to grammatical relations and cross-linguistically limited to 'terms' (e.g. Chung 1976 for Bahasa Indonesian, Bell 1983 for Cebuano, Seiter 1983 for Niuean). Shibatani (1977) is one of the earliest studies that applied this criterion to argue for the grammatical relations in Japanese. As cross-linguistically attested, the NPs marked by the following asterisk-marked cases ('non-terms') cannot launch an FQ (see Amazaki 2006: 53 for the actual data for each): ^{ok}nominative, ^{ok}accusative, (?)dative, *allative, *comitative, *ablative, *instrumental, *genitive, *locative.

In an intransitive construction, an FQ is generally insensitive to the actor-undergoer distinction as shown in (54a) and (54b). In the case of [A], however, there is some interaction with aspect. Amazaki (2006: 75: fn92) claims that (54c) is acceptable (contra Miyagawa1989b), but there is some difference between (54c) and (54d) as noted by some linguists (e.g. Katagiri 1992), though Miyagawa's judgment as ungrammatical might be too strong as Amazaki suggests. The minute behaviors of the FQ are thus different between [A] and [U], but overall it is

reasonable to conclude that [S] can launch an FQ.

(54) [A]

a. gakusee-ga kawazoi-o **san.nin** hashitteiru
student-NOM river.side-ACC three.CL be.running.npst
'Three students are running along the river.'

[U]

b. doa-ga kono-kagi-de **hutatsu** aita (Miyagawa 1989a: 662)
door-NOM this-key-by two.CL opened
'Two doors opened with this key.'

[A]

c. (*)kodomo-ga geragera-to hutari warat-ta (Miyagawa 1989b: 44)
child- NOM great.guffaws-with two.CL laugh-pst
'Two children laughed with great guffaws.'

d. kodomo-ga geragera-to hutari warattei-ta (Katagiri 1992)
child- NOM great.guffaws-with two.CL be.laughing-pst
'Two children were laughing with great guffaws.'

There is some interaction with an aspect-related factor also in the case of transitive constructions. One of the very important distinctions among transitive verbs is whether they denote a change of state or not (i.e. affectedness; cf. Miyagawa 1988, Mihara 1998a, b, c). [A_T] produces an ill-formed FQ sentence, especially in the case of the verbs that denote a change of state as in (55a) adopted from Miyagawa (1989a: 662). It is possible, however, that [A_T] can launch an FQ in the case of the verb that does not entail a change of state on the undergoer, as in (55b) adopted from Tsunoda (1991: 205).

(55) [(#)A_T]

a. #kodomo-ga kono-kagi-de **hutari** doa-o aketa
kids-NOM this-key-by two.CL door-ACC opened
'Two kids opened a door with this key.'

b. gakusee-ga kinoo **gonin** toshokan-de hon-o yonda
student-nom yesterday five.CL library-loc book-acc read.pst
'Five students read books at the library yesterday.'

Thus there is a constraint on the floating quantifier from [A$_T$]. Furthermore, when an undergoer argument intervenes between an FQ and the host NP, the sentence degrades, though, again, it may be arguable whether (56b) is totally unacceptable as shown (judgment original). There is no such constraint on the FQ launched from [U$_T$] as shown in (56c).

(56) Saito (1985)

[(#)A$_T$]

a. gakusee-ga **sannin** hon-o katta
student-nom three.CL book-acc bought
'Three students bought a book.'

b. *gakusee-ga hon-o **sannin** katta
student-nom book-acc three.CL bought
'(int.) Three students bought a book.'

[U$_T$]

c. (**sansatsu**) gakusee-ga (**sansatsu**) hon-o (**sansatsu**) katta
three.CL student-nom three.CL book-acc three.CL bought
'A student bought three books.'

In (57), *naguru* 'hit' is a verb that does not entail a change of state (only denotes contact) and therefore, an FQ from [A$_T$] is generally acceptable. The possible hosts are equally likely to be the host of the FQ as shown in the two corresponding translations. There is, however, a clear tendency that [U$_T$] is predominant once some operation such as scrambling takes place as in (57b). It has been pointed out that FQ constructions cross-linguistically exhibit an 'ergative' pattern which excludes [A$_T$]. Amazaki reconfirms this claim, through his own text count, that the 'ergative' pattern is the norm also in Japanese. In his count, 44% was [S]-based FQ and 30% [U$_T$]-based whereas only 2% was [A$_T$]-based FQ (Amazaki 2006: 55). This phenomenon can be called "Avoid [A$_T$]" for convenience's sake. Based on the hitherto discussed nature of the FQ (i.e. it is more likely to target an [U$_{(T)}$] argument), it is easily predicted that [d-S] is another perfectly acceptable host. This expectation is born out as in (57c). The position of the FQ has no bearing on the interpretive possibilities as shown in the same example, (57c).

(57) ["Avoid [A_T]" (or preference to [U_T])]

a. gakusee-ga **sannin** kodomo-o nagutta (Amazaki 2006: 73)
student-NOM three.CL child-ACC punched
Likely: 'A student punched three children.'
Likely: 'Three students punched children.'

b. kodomo-o **sannin** gakusee-ga nagutta
child-ACC three.CL student-NOM punched
Likely: 'A student punched three children.'
Unlikely: 'Three students punched children.'

[d-S]

c. **(sannin)** kodomo-ga **(sannin)** sensee-ni **(sannin)** shikar-are-ta
(three.CL) children-NOM (three.CL) teacher-by (three.CL) scold-PASS-PST
'Three children were scolded by the teacher.'
*'The children were scolded by three teachers.'

As for inversion constructions, relevant data are shown in (58). Again, the undergoer-orientation of the FQ can be clearly observed in the preference to the first interpretation in the two potential ones in (58a) and (58b).

(58) [DCA_{inv}]

a. gakusee-ni **sannin** kodomo-ga iru
student-dat three.CL child-nom be/exist
likely: 'A/The student has three children.'
likely: 'Three students have a child/children.'

b. gakusee-ni kodomo-ga **sannin** iru
student-dat children-nom three.CL be/exist
likely: 'A/The student has three children.'
unlikely: 'Three students have a child/children.'

In this section, the behavior of the floating quantifier was discussed in terms of grammatical relations. The FQ construction shows restricted neutralization and the controller type is a variable syntactic controller, [S,(A_T),U_T,d-S,(DCA_{inv})].

3.4.3.10 Secondary-predicate constructions

Secondary predicates (SP, hereafter) generally modify a direct core argument as shown in

(59a) and (59b). (59c) indicates that, in some cases, it exhibits some 'subject'-orientation. The contrast between (59d) and (59d') further suggests that this process pertains to grammatical relations.

(59) a. Tom ate the meat **raw**. (Williams 1980)
b. Tom ate the meat **hungry**. (Williams 1980)
c. I_i gave $Mary_j$ the meat **hungry**$_{i/*j}$. (Baker 1997)
d. *He told me the news **drunk**. (Koizumi 1994)
d'. I was told the news **drunk**. (Koizumi 1994)

Japanese also has both 'subject'-oriented and 'object'-oriented SPs, as shown below in (60), that are comparable to the first two English examples in (59) (Koizumi 1994).

(60) a. Taroo-ga niku-o **nama-de** tabeta
Taroo-nom meat-acc raw ate
'Taroo ate the meat raw.'

b. Taroo-ga booru-o **hadashi-de** ketta
Taroo-nom ball-acc bare.foot kicked
'Taroo kicked the ball bare foot.'

While in English, the adjectives used as an SP do not have any morphological marker, in Japanese, postposition(*de*)-marked nouns are used. The postposition *de* is polysemous and denotes 'means' as in *kuruma-de* ('by car'), 'location' as in *baffaroo-de* ('at Buffalo'), or instrumental as in *naifu-de* ('with a knife'). This construction is semi-productive and some relevant examples are listed in (61).

(61) hadaka-de 'naked'
kimono.sugata-de 'kimono-dressed'
katame-de 'one-eyed'
hudangi-de 'in casual wear'
hadashi-de '(with) bare foot'
...
...

The following data in (62) show the neutralization pattern of a Japanese SP. The underlined arguments are the intended controller of the SP in boldface. Word order variants are given for each example to show that the word order variations, which tend to induce some difference in information structure (topicality), do not affect the judgment. In the passive construction, the SP cannot single out only one argument as in (62c). The demoted actor ([demA]) as well as [d-S] can be the controller of the SP (cf. Farrell 2005: 97; 'quasi-subject' for demoted actor). When the demoted actor is implicit, obviously it behaves like [S]. In inversion constructions, there is no ambiguity and the dative-marked DCA is the only possible controller. This is shown in (62d).

(62) [S]

a. Taroo-ga **hadaka-de** { hashitta/neta }
Taroo-NOM naked { ran/slept }
'Taroo ran/slept naked.'

[A] [*U_T]

b. Taroo$_i$-ga Ken$_j$-o **hadaka$_{i/*j}$-de** shikatta
Taroo-NOM Ken-ACC naked scolded
'Taroo scolded Ken naked.'

b'. Taroo$_i$-ga **hadaka$_{i/*j}$-de** Ken$_j$-o shikatta

b''. **hadaka$_{i/*j}$-de** Taroo$_i$-ga Ken$_i$-o shikatta

[d-S], [demA]

c. Ken$_i$-ga Taroo$_j$-ni **hadaka$_{i/j}$-de** shikar-are-ta
Ken-NOM Taroo-by naked scold-PASS-PST
'Ken was scolded by Taroo naked.'

c'. Taroo$_i$-ga **hadaka$_{i/j}$-de** Taroo$_j$-ni shikar-are-ta

c''. **hadaka$_{i/j}$-de** Taroo$_i$-ga Taroo$_j$-ni shikar-are-ta

[DCA_{inv}] [*U_{inv}]

d. Taroo$_i$-{ ni/ga } Hanako$_j$-ga **katame$_{i/*j}$-de** sagaseru
Taroo-{ dat/nom } Hanako-nom one-eyed can.seek
'Taroo$_i$ can seek Hanako one-eyed$_i$.'

d'. Taroo$_i$-{ ni/ga } **katame$_{i/*j}$-de** Hanako$_j$-ga sagaseru

d''. **katame$_{i/*j}$-de** Taroo$_i$-{ ni/ga } Hanako$_j$-ga sagaseru

Thus, the neutralization is restricted and the neutralization pattern is [S,A_T,(d-S),DCA_{inv}]. The controller type is a variable syntactic controller.

There are construction-specific properties. When a causative construction is employed, whether morphological or lexical, the 'subject'-orientation disappears and also 'object' can control the SP as in the reflexive binding. In (63a), adopted from Koizumi (1994: 51), the SP, *hadaka-de*, can modify both the 'subject', *keekan* 'police', and the 'object', *yopparai* 'drunken man'. In (63b), it is difficult to interpret the SP as modifying the 'subject,' but this is probably due to pragmatics rather than syntax. If *Hanako* gives some sign to *Taroo* by being one-eyed, the situation seems to be described by (63b), though *Taroo*'s being one-eyed is still a predominant reading.

(63) a. Keekan$_i$-ga yopparai$_j$-o **hadaka$_{i/j}$-de** ryuuchijo-ni ireta
policeman-NOM drunken.man-ACC naked custody-LOC put
'The policeman took the drunken man into custody naked.'

b. Hanako$_i$-ga Taroo$_j$-ni e-o **katame$_{(?)i/j}$-de** kak-ase-ta
Hanako-nom Taroo-dat picture-acc one-eyed draw-caus-pst
'Hanako made Taroo draw a picture one-eyed.'

The same claim made for the reflexive construction can be made here again. Unless one takes the construction-specific view of grammatical relations, some abstract derivations or the like need to be stipulated to capture the cross-constructional global 'subject.'

3.4.3.11 *Tough*-constructions

In English, a *tough*-construction targets an undergoer or a non-macrorole argument in the linked core and it appears as the PSA of the matrix clause (Lasnik and Fiengo 1974). Naturally, the predicate in the linked core is a transitive or some comparable predicate as in (64a) and (64b). In (64c), the 'subject' of the derived intransitive (i.e. [d-S]) generally cannot function as a pivot of a linked core. As shown in (64d) and (64e), [A_T] and [S] cannot serve as the PSA of the matrix

clause (Lasnik and Fiengo 1974). It seems that the construction targets the semantic roles on the lower end of the hierarchy and the neutralization seen in (64) is something like [*S,*A$_T$,*d-S,U$_T$,DCA...].

(64) a. This part is easy [to play Ø].
b. The chair is comfortable [to sit on Ø].
c. *Aluminum is easy [Ø to be shaped by machining].
d. *Tom is easy [Ø to forget appointments].
e. *Ken is easy [Ø to walk/slip down in the water].

In Japanese, a *tough*-construction is formed by a compound predicate in which the second predicative element is the *tough* predicate. The *tough* predicates are very limited in Japanese and they are bound morphemes (e.g. *-yasui* 'easy/likely', *-nikui* 'hard/unlikely', *-gatai* 'hard'). The sentences in (65), adopted from Inoue (1978) with some modification, are examples of the Japanese *tough*-construction.

(65) a. gakusee-{ ni/ga } kono jisho-ga tsukai-**yasui**
student-{ dat/nom } this dictionary-nom use-easy
'This dictionary is easy for students to use.'

b. toshiyori-{ ni/ga } kono toori-ga kaimono-o shi-**nikui**
aged.people-{ dat/nom } this street-nom shopping-acc do-hard
'This street is hard for the aged people to shop around on.'

The second adjectival (bound) nucleus is the primary predicate and, as expected from the case configuration possibilities of Japanese, dative(nominative)-nominative, which is for the stative predicates, is employed. However, there is one more case configuration possibility with the same complex *tough* predicate: nominative-accusative. The two case patterns exhibit different meanings respectively, 'easiness' (or 'toughness') and 'likelihood' ('tendency)'. While the former is an attribute (of some sort) to the PSA (typically a human NP), the latter is the

likelihood of the event denoted by the linked core.

Given this semantic difference, it seems reasonable to assume, following Miki (2001), that the dative(nominative)-nominative pattern corresponds to the English *tough*-construction (e.g. 'John is tough to please') whereas the nominative-accusative pattern is comparable to the extraposition construction (e.g. 'It is tough to please John'). This contrast is shown between (66a) and (66b). The adjectival *tough* nucleus (e.g. *-yasui* 'easy/likely') is, as mentioned above, potentially ambiguous so that sometimes it is difficult to pin down which meaning is intended. There is a suffix that only means 'likelihood (tendency)', *-gachi*. Therefore, this morpheme can be used as a diagnostic test to disambiguate the two meanings. As expected, while (66a) cannot be substituted with *-gachi*, (66b) can.

(66) [A_T]

a. Hanako-ni kono ryoori-ga tsukuri-**yasui** (*tsukuri-**gachi-da**)
Hanako-dat this cuisine-nom make-*yasui* (make-likely-cop)
'This cuisine is easy/*likely for Hanako to make.'

b. Hanako-ga kono ryoori-o tsukuri-**yasui** (ok ... tsukuri-**gachida**)
Hanako-nom this cuisine-acc make-*yasui* (make-be.likely)
'Hanako is *easy/likely to make this cuisine.'

The different case patterns come from which nucleus heads the clause. When the clause is headed by the transitive nucleus, the nominative-accusative pattern is triggered. When it is headed by the adjectival *tough* nucleus, the inversion (dative/nominative-nominative) pattern is triggered. Our concern in this section is the construction type headed by the *tough* nucleus as in (66a).

It has been made clear thus far that in an inversion construction, the dative-marked DCA is a PSA under normal circumstances. What about the PSA in this complex *tough* predicate? Miki (2001: 235), for example, claims that the preverbal nominative argument, 'cuisine' in (66a),

is the 'subject,' which is comparable to the 'subject' in the English counterpart (see the corresponding translation). The subjecthood tests, however, reject his view. All the three 'subject' tests, the PSA-agreement (honorifics), the reflexive-binding and the behavior of the FQ, point to the dative-marked DCA as the PSA of the whole construction, as shown in (67). In other words, in the case of English, an undergoer or non-macrorole argument is realized as the matrix PSA, but in Japanese, it is not selected as a PSA but remains as a non-PSA argument, though it is a macrorole argument (undergoer).

(67) [PSA-agreement]

a. Tanaka-sensee-ni(-wa) okayu-ga meshiagari-yasui
Tanaka-teacher-dat(-top) rice.gruel-nom eat(hon)-*yasui*
'It is easy for Prof. Tanaka to eat rice gruel.'
'(lit.) Prof. Tanaka is easy to eat rice gruel.'

[reflexive]

b. Hanako$_i$-ni(-wa) Taroo$_j$-ga zibun$_{i/*j}$-no-ane-yori settokushi-yasui
Hanako-dat(-top) Taroo-nom self-gen-sister-than persuade-*yasui*
'It is easier for Hanako to persuade Taroo than her/*his sister.'
'(lit.) Hanako is easier to persuade Taroo than her/*his sister.'

[FQ]

c. sensee-ni sannin gakusee-ga atsukai-yasui
teacher-dat three.CL student-nom deal.with-*yasui*
likely: 'Three students are easy for the teacher to deal with.'
unlikely: 'A student is easy for three teachers to deal with.'

There is one more difference from the English *tough*-construction. As very briefly reviewed at the beginning, the English *tough*-construction does not allow [A] as a matrix PSA, but the Japanese counterpart does. Since intransitive constructions have only one argument by definition and there is only one case possibility, nominative, to mark the single PSA in Japanese, it is predicted that if [A] argument occurs with a *tough*-predicate, it should produce ambiguity between 'easiness' and 'likelihood' readings. In other words, the nominative [A] should serve for both *tough*- and extraposition-type. This expectation is born out and the two readings are

available in (68a).

(68) [A]

a. Taroo-ga keisoo-de aruki-**yasui** (ok ...aruki-**gachida**)
Taroo-nom light.wear-de walk-*yasui* (walk-be.likely)
'It is easy for Taroo to walk because of the light clothing.'
'It is likely for Taroo to walk wearing light clothing.'
'(lit.) Taroo is easy/likely to walk ...'

It is known that the predicate in the linked clause needs to be agentive or controllable in English (Lasnik and Fiengo 1974). This generally holds true of Japanese as well. [U] and [d-S] produces the likelihood reading only as shown in (68b,c) and (68d). It should be noted that what is intended by the roles such as [A] or [A_T] here are the ones the arguments have for the first nucleus (i.e. non-*tough*) of the complex predicate which corresponds to the predicates in the linked core in the English *tough*-construction. What might be of some surprise is that [DCA_{inv}] is also allowed. [A_T] and [DCA_{inv}] behave in a similar way in this construction. For example, floating quantifiers tend to avoid these two roles, [A_T] in an canonical transitive construction and [DCA_{inv}] in an inversion construction. These two roles, [$A_{(T)}$] and [DCA_{inv}], constitute a natural class and can be lumped as 'highest ranking argument' in terms of logical structure.

(68) [*U]

b. Taroo-ga koko-de korobi-**yasui** (ok ...korobi-**gachida**)
Taroo-nom here-loc slip.down-*yasui* (slip.down-be.likely)
'It is *easy/likely for Taroo to slip down here.'
(lit. 'Taroo is *easy/likely ...')

c. juutai-ga koko-de okori-**yasui** (ok ...okori-**gachida**)
traffic.jam-nom here-loc happen-*yasui* (happen-be.likely)
'It is *easy/likely for traffic jams to happen here.'
(lit. 'Traffic jams are *easy/likely ...')

[*d-S]

d. Taroo-ga hito-ni settokus-are-**yasui** (ok .... settokusare-**gachida**)
Taroo-nom person-by persuade-pass-*yasui* (be.persuaded-be.likely)
'It is *easy/likely for Taroo to be persuaded by others.'
(lit. 'Taroo is *easy/likely ...')

[DCA_{inv}]
e. Taroo-ni Tanaka-sensee-no-hanashi-ga wakari-**yasui**
Taroo-dat Tanaka-teacher-gen-talk-nom can.understand-*yasui*
(*wakari-**gachida**)
(can.understand-be.likely)
'It is easy/*likely for Taroo to understand Prof. Tanaka's talk.'
(lit. 'Taroo is easy/*likely...')

There are some examples, as in (69), which look like a *tough*-construction. In these examples, the nominative argument seems to be functioning as a PSA. (69a,b,c) might suggest that the construction has no restriction on the roles and therefore, the Japanese *tough*-construction is a pivotless construction. This is not true, however. The examples in (69) are *tough*-sentences in which a dative-marked PSA is omitted because the first person (speaker) is the experiencer. Therefore, in (69a), (69b) and (69c), the first person, *watashi-ni* (1st-dat 'to/for me') can be overtly attached. On the other hand, once the second *tough* nucleus is removed from (69a), (69b) and (69c), they do not constitute meaningful full-fledged sentences as shown in (69a',b',c'). Thus, the nominative arguments in (69a), (69b) and (69c) are not a PSA but a preverbal undergoer argument (in inversion constructions).

(69) [instrumental]
a. kono naihu-ga tsukai-yasui
this knife-nom use-*yasui*
'This knife is easy to use.'
a'. *kono naihu-ga tsukau
this knife-nom use
'*This knife uses Ø.'

[comitative]
b. Taroo-ga hanashi-yasui
Taroo-nom talk-*yasui*
'Taroo is easy to talk with.'

b'. *Taroo-to hanasu
Taroo-com talk
'*Ø talks with Taroo.'

[goal]
c. Tokyo-ga iki-yasui
Tokyo-nom go-*yasui*
'Tokyo is easy to go to.'

c'. *Tokyo-e iku
Tokyo-to go
'*Ø goes to Tokyo.'

In sum, the neutralization is highly restricted and the neutralization pattern of the PSA is [$A_{(T)}$,DCA_{inv}].

3.4.3.12 Switch-reference constructions

There are various clause linkage markers (CLMs) in Japanese. Some of them are examined in Kuno (1973a), but this has been a largely neglected area in the Japanese linguistics with notable exceptions of, for example, Ohori (1992) and Hasegawa (1996). Some of the CLMs exhibit a constraint on grammatical relations but others do not. There are three patterns, those which have a constraint on grammatical relations without pragmatic influence, those which have a constraint but can be influenced by pragmatics and those that do not exhibit any constraint on grammatical relations. Among the three types of CLMs, the two poles, the CLMs with and without a constraint on grammatical relations, *-kuseni* 'though' and *-to* 'when(ever)', are examined as an exemplar of each pattern.

The first CLM is *-kuseni* (cf. Ohori 1992). This is a concessive marker and roughly corresponds to 'though' in English. However, not only does the CLM simply combine two adversative conjuncts, but some modality is encoded. The referent of the PSA is the target of some criticism (or possibly amazement) by the speaker. Relevant data are shown in (70). In the square brackets, the role of controller and that of pivot are represented in order.

(70) [controller - pivot]

[DCA_{inv}-A]
a. Taroo$_i$-ga [Ø$_i$ annani hashitta-kuseni] mada hashireru
Taroo-nom that.much ran-Ckuseni still can.run
'Though (he) ran that much, Taroo is still able to run.'

[d-S-U]
b. Taroo$_i$-ga [Ø$_i$ shippaishita-kuseni] sensee-ni homerareta
Taroo-nom failed-Ckuseni teacher-by be.praised.pst
'Though (he) failed, Taroo was praised by the teacher.'

[A-A_T]
c. Taroo$_i$-ga [Ø$_i$ Hanako-o zibun-de yonda-kuseni] heya-kara detekonai
Taroo-nom Hanako-acc self-by called-Ckuseni room-from get.out.neg
'Though (he) himself called Hanako, Taroo won't come out of his room.'

[*U_T]
d. *Taroo$_i$-ga [sensee-ga Ø$_i$ shikatta-kuseni] mada Hanako-o ijimeru
Taroo-nom teacher-nom scolded-Ckuseni still Hanako-acc bully
'Though the teacher scolded (him), Taroo still bullies Hanako.'

e. *[sensee-ga Ø$_i$ shikatta-kuseni] Taroo$_i$-ga mada Hanako-o ijimeru

f. *Taroo$_i$-wa [sensee-ga Ø$_i$ shikatta-kuseni] mada Hanako-o ijimeru

g. *[sensee-ga Ø$_i$ shikatta-kuseni] Taroo$_i$-wa mada Hanako-o ijimeru

h. *Taroo$_i$-wa Hanako-o [sensee-ga Ø$_i$ shikatta-kuseni] mada ijimeru

[A_T-d-S]
i. Taroo$_i$-ga [Ø$_i$ sensee-ni shikarareta-kuseni] mada Hanako-o ijimeru
Taroo-nom teacher-by be.scolded-Ckuseni still Hanako-acc bully
'Though (he) was scolded by the teacher, Taroo still bullies Hanako.'

[A- DCA_{inv}]
j. Taroo$_i$-ga [Ø$_i$ roshiago-ga shabereru-kuseni] shaber-oo-to-shinai
Taroo-nom Russian-nom can.speak-Ckuseni speak-AUX-Cto-do.neg
'Though (he) can speak Russian, Taroo won't speak.'

The array of data in (70) indicates that only [U_T] is excluded from the neutralization. As shown in the examples with various word order possibilities from (70e) to (70h), they barely contribute to the interpretation of the whole construction. It should be noted that a *wa*-marked topic construction has no bearing either (the robustness of the constraint on the [A_T] controller with [U_T] pivot, which was observed also in conjunction reduction constructions, is confirmed

here again). Thus, pragmatic influence is not seen in this *kusenri*-construction. The controller and pivot are both variable syntactic ones, [S,A_T,d-S,DCA_{inv}] (or ~[U_T]).

An example of the CLMs which do not impose on a constraint on grammatical relations is *-to* (cf. Kuno 1973a, Ohori 1992). This CLM roughly corresponds to 'when' or 'whenever' in English. As shown in (71), any combinations of the roles seem possible for both pivot and controller. Thus, there is neutralization only and no restriction. This construction provides no evidence concerning grammatical relations in Japanese because it does not involve any restricted neutralization.

(71) [controller - pivot]

[DCA_{inv}-A]
a. Taroo$_i$-ga [Ø$_i$ hashitteiru-to] ki-ga magireta
Taroo-nom be.running-Cto feeling-nom be.lost.pst/mixed
'Taroo could find relief when (he) is running.'

[A-U]
b. Taroo$_i$-ga [Ø$_i$ kokeru-to] suguni nakidashita
Taroo-nom slip.down-Cto soon cry.started
'Taroo started crying the moment he slipped down.'

[d-S-A_T]
c. Taroo$_i$-ga [Ø$_i$ ronbun-o kaku-to] minna-ni chuumoku-sareta
Taroo-nom paper-acc write-Cto everyone-by attention-do.pass.pst
'Taroo received much attention when (he) wrote a paper.'

[A-U_T]
d. Taroo$_i$-ga [oya-ga Ø$_i$ shikaru-to] suguni hanpatsushita
Taroo-nom parents-nom scold-Cto soon repulsed
'Taroo repulsed his parents at once when they scolded (him).'

[A_T-d-S]
e. Taroo$_i$-ga [Ø$_i$ oya-ni shikarareru-to] itsumo nanika-o
Taroo-nom parents-by be.scolded-Cto always something-acc
kowashita
broke
'Taroo always broke something when (he) was scolded by his parents.'

[U-DCA_{inv}]
f. Taroo$_i$-ga [Ø$_i$ sono-oto-ga kikoeru-to] sugu egao-ni natta
Taroo-nom that-sound-nom hear-Cto soon smile-dat became
'Taroo smiled when (he) heard the sound.'

3.4.3.13 Some constructions without any restrictions

In some languages (e.g. Malagasy), cleft constructions and wh-question formation hinge on grammatical relations (cf. Van Valin 2001). Japanese does not have any restriction on grammatical relations to form these two constructions. The unrestrictiveness (i.e. neutralization only) of these two constructions is shown in (72) and (73).

(72) [demoted actor]
a. Taroo-ga **dare-ni** shikar-are-ta-no
Taroo-NOM who-by scold-PASS-PST-SFP
'Who was Taroo scolded by?'

[allative]
b. Taroo-wa **doko-ni** itta-no?
Taroo-TOP where-LOC went-SFP
'Where did Taroo go?'

[comitative]
c. Taroo-ga **dare-to** paatii-ni itta-no?
Taroo-NOM who-with party-LOC went-SFP
'With whom did Taroo go to the party?'

[instrumental]
d. Taroo-wa **nani-de** ano-isu-o tsukutta-no?
Taroo-TOP what-with that-chair-ACC made-SFP
'By what did Taroo make that chair?'

[comparative]
e. Taroo-ga **dare-yori** se-ga takai-no?
Taroo-NOM who-than height-NOM tall-SFP
'Who is Taroo taller than?'

(73) [allative]
a. [Taroo-ga itta-no]-wa kooen-(ni)-da
Taroo-NOM went-Cno-TOP park-loc-COP
'It is to a park that Taroo went.'

[comitative]
b. [Taroo-ga (isshoni) paatii-ni itta-no]-wa Hanako-(to)-da
Taroo-NOM (together) party-LOC went-Cno-TOP Hanako-COM-COP
'It is with Hanako who Taroo went to the party.'

[instrumental (means)]
c. [Taroo-ga isu-o tsukutta-no]-wa ki-(de)-da
Taroo-NOM chair-ACC made-Cno-TOP wood-(by)-COP
'(lit.) It was by wood that Taroo made the chair.'

[genitive]
d. [Hanako-ga kuruma-o untenshita-no]-wa Taroo-no-da
Hanako-NOM car-ACC drove-Cno-TOP Taroo-GEN-COP
'It is Taroo whose car Hanako drove.'

Thus, these constructions provide no evidence concerning grammatical relations in Japanese because they do not involve any restricted neutralization.

3.4.4 Summary of the chapter

In this chapter, grammatical relations of the Japanese language were examined. Japanese is one of the best documented languages in the world; however, grammatical relations of the language have not necessarily been detailed in the literature. Though there are several studies which examined them in Japanese in the past, all of them are neither comprehensive nor conclusive. It was pointed out that there are two reasons for this. First, the coverage of the constructions examined in the past studies is rather limited. Second, the frameworks assumed are too coarse and obsolete to pin down the exact nature of the 'subject' properties in terms of the current standpoint. Thus, they are insufficient in both quantitative and qualitative aspects.

Therefore, it is attempted in this chapter to give a more comprehensive and new look at the grammatical relations of Japanese. More than twenty constructions in total, including less discussed oblique 'subject' constructions, were examined in terms of Role and Reference Grammar which has developed a fine-grained system to analyze grammatical relations. As a result of the examination, three conclusions can be drawn.

The first conclusion is that it is necessary to have the notion of 'subject' to describe the language, which supports the position by Kuno, Shibatani and Tsunoda, because it turned out that a sizable number of constructions involve restricted neutralization in Japanese. The second conclusion is that, among the constructions examined, some constructions can be claimed

to have 'subject' whereas others can't, which supports the construction-specific view of grammatical relations RRG advocates. The third conclusion is that, even among the constructions that exhibit 'subject' properties, the type of 'subject' is not necessarily uniform across the constructions (contra the hidden assumption by Kuno, Shibatani and Tsunoda). The last conclusion can be reached by employing the fine-grained system of RRG. It should be obvious by now that the notion of 'subject in Japanese' is not a useful concept. The table on the next page is the summary of the examination in this chapter.

In the following three chapters, more detailed analyses of the two constructions discussed in this chapter will be presented, a reflexive construction and a 'pseudo-raising' construction. As for the reflexive construction, two issues will be addressed in two different chapters (Chapter 4 and 5). The 'pseudo-raising' construction is the construction which was examined as a 'raising' construction or matrix-coding construction (MCC) in this chapter. A detailed analysis of this construction will be given in Chapter 6.

Grammatical Phenomenon	Controller or pivot	Syntactic or semantic	Roles
Imperative	controller	sem	[S,A_T,(d-S)]
Reflexive	control	syn	[S,A_T,d-S,DCA_{inv}] (or [~U_T])
Conjunction Reduction	both	both syn	both [S,A_T,d-S, (DCA_{inv})]
Matrix-coding ('raising')	pivot	d.n.a	pivotless
Participial (*-nagara*)	pivot	syn	[S,A_T,d-S]
Participial (*-sezuni*)	pivot	syn	[S,A_T,d-S,DCA_{inv}] (or [~U_T])
Control ('sub')	both	controller = sem pivot = syn	[A_T] [S,A_T,d-S,DCA_{inv}] (or [~U_T])
Control ('obj')	both	controller = sem pivot = syn	[U_T] [S,A_T,d-S]
Purposive	both	controller = syn? pivot = syn	[$A_{(T)}$,U_T] [U_{inv},d-S,DCA_{inv}]
Relative clause (externally-headed)	pivot	d.n.a	pivotless
Relative clause (internally-headed)	pivot	(syn)	[S,A_T,(U_T),d-S,DCA_{inv}]
Floating quantifier	controller	(syn)	[S,(A_T),U_T,d-S,(DCA_{inv})]
Secondary predicate	controller	syn	[S,A_T,(d-S),DCA_{inv}] (or [~U_T])
Tough-construction	pivot	syn	[$A_{(T)}$,DCA_{inv}]
Switch-reference (*-kuseni*)	both	both syn	[S,A_T,d-S,DCA_{inv}] (or [~U_T])
Switch-reference (*-to*)	both	d.n.a	pivotless
wh-question	pivot	d.n.a	pivotless
cleft construction	pivot	d.n.a	pivotless

Chapter 4 Reflexives I

4.1 Introduction

4.1.1 The aim of the current chapter

In section 3.3.3.2 (Chapter 3), it was pointed out that there are some unresolved issues regarding the Japanese reflexive construction. In this chapter and the next chapter, two related issued are addressed: the antilocality and interpretive issue of the Japanese reflexive construction. The former is an issue between semantics and syntax, and the latter is that between semantics and pragmatics (information structure). In this chapter, the former issue is addressed.

Some linguists wonder whether the Japanese reflexive can be used as a diagnostic test for subjecthood[1]. For example, Aikawa (1999) doubts the validity since Japanese reflexive sentences show the following two peculiarities. First, some reflexive sentences are not allowed in Japanese though their English counterparts are regarded as typical. Second, for some reflexive sentences, varied judgments have been observed among native speakers. The two relevant examples are repeated below in (1).

(1) a. *Taroo-ga zibun-o kitta
Taroo-NOM self-ACC cut.pst
'(int.) Taroo cut himself.'

b. ??/?*Taroo-ga zibun-o tataita
Taroo-NOM self-ACC hit.pst
'(int.) Taroo hit himself.'

Exploring the binding conditions of the so-called long-distance reflexivization has been

[1] Hoji (2003) even asks whether Japanese has a reflexive construction at all.

examined extensively in the literature [2] and, presumably as a consequence, the above peculiarities of the Japanese reflexive have not been examined in detail. That is, there is a severe constraint on the Japanese reflexive *zibun* as 'object' in many simple reflexive sentences as shown in (1)[3]. This phenomenon in which the reflexive cannot occur at the canonical 'object' position can be called 'antilocality.'

The antilocality of the reflexive like (1) above has been cross-linguistically reported, as we will see in section 4.2. Such antilocality has been accounted for primarily in terms of the notion of 'lexical reflexivity'. In this chapter, it is demonstrated that the notion of 'lexical reflexivity' is irrelevant to the antilocality seen in the behavior of the Japanese reflexive. It is demonstrated that Japanese verbs require an NP of a certain semantic type as their 'object' and that the antilocality effect in Japanese is a consequence of this peculiar verbal subcategorization.

4.1.2 The target construction

In the literature, the term reflexive has the following (at least) two meanings. One meaning refers to sentences that contain a reflexive pronoun of some sort, regardless of where it occurs in the sentence. The other meaning refers to sentences that denote reflexive events (i.e. semantically reflexive) in which someone acts upon him/herself rather than upon others. The construction examined in this chapter involves the latter type. The event scheme of such semantic reflexives can be formulated as in (2).

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[2] Unlike English reflexive forms, the so-called long distance reflexive is allowed in Japanese. Compare (i) and (ii). For further details on this issue, see Aikawa (1993) for a syntactic approach and Iida (1996) for a pragmatic approach.

(i) Taroo said that Hanako criticized *himself/herself

(ii) Taroo$_i$-ga [Hanako$_j$-ga zibun$_{i/j}$-o hihansita]-to itta
Taroo-nom Hanako-NOM self-ACC criticized -Cto said
'(lit.) Taroo said that Hanako criticized self$_{i/j}$'

[3] Some of the recent major studies on Japanese reflexives (e.g. Aikawa 1993, Iida 1996) do not even argue about the problem examined in what follows. In addition, the major grammar books on Japanese (e.g. Kuno 1973a, Shibatani 1990) do not touch upon this issue, either.

(2) Semantic reflexivity (Wierzbicka 1996):

at some time, someone did something
because of this,
something happened to the same person at the same time.

Such reflexive events are expressed by a sentence in which an antecedent and a reflexive are co-arguments of the same sentence[4]. The surface syntactic structures that are primarily examined are the most basic, simple sentences, i.e. sentences with two arguments and a verb, as schematically shown in (3). The first NP and the second NP are coindexed and the second argument is a certain function of the first NP. The second NP could be exactly the same as the first NP or it could be some NP related to the first NP such as a body-part of the first NP[5].

(3) $_{\text{clause}}[\ \text{NP}^1_i\ \text{NP}^2_{f(i)}\ \text{V}\ ]$

The following is a roadmap of this chapter. In section 4.2, the previous, primarily syntactic, approach to the antilocality issue will be examined and it will be shown that this account is irrelevant to the antilocality seen in Japanese. In section 4.3, as a result of the examination of several examples, it is first proposed that there is a language-specific 'affectedness constraint' on the use of the reflexive as 'object'. It is pointed out, however, that there is a class of verbs (perception verbs) that cannot be ruled out by the (affectedness) constraint on the reflexive. To solve this, it will be argued that a subset of Japanese verbs has a peculiar selectional restriction on the 'object' and that the antilocality is a consequence of this. In section 4.4, a formal treatment of the grammatical behavior is given in terms of Role and Reference Grammar. A brief conclusion follows in section 4.5.

[4] An interesting observation made by Jackendoff (1992) is that in English co-argument reflexives can express semantically non-reflexive events between a real person and a statue of the person. Lidz (1997, 2001) calls this *near-reflexive* and distinguishes it from *pure-reflexive* which does not allow a non-reflexive event reading. This is the topic of the next chapter.

[5] It should be noted that the interpretation of the sentences assumed in what follows is a default non-contrastive one. A contrastive reading obtained by putting stress on a certain NP, for example, is known to loosen certain constraints (cf. Postal 1970, Kuno 1972) and such a reading is not considered in this paper.

4.2 Antilocality: cross-linguistic data

4.2.1 Lexical reflexivity

The antilocality effect of reflexive pronouns has been cross-linguistically reported in many languages such as Norwegian, Dutch and Kannada. It is a problem for Condition A in traditional binding theory (Chomsky 1981) which says an anaphor (i.e. reflexive) is bound in its governing category. Several proposals have appeared to resolve this difficulty. Among them are those proposed by Reinhart and Reuland (1993; R&R hereafter) and Lidz (1997, 2000, 2001). Both studies rely on the notion of 'lexical reflexivity'. That is, they claim that the antilocality effect depends on whether the verb is lexically reflexive-marked in the lexicon.

Some languages overtly mark lexical reflexivity by morphology. In Kannada, for example, lexical reflexivity is morphologically marked on the predicate as in (4a). When a predicate is morphologically marked for reflexivity, the predicate is lexically reflexive. Other languages, on the other hand, do not have any overt morphological marking. As in (5a), the Dutch verb *wast* 'wash' is assumed to be lexically reflexive-marked in the lexicon based on some diagnostic tests[6]. Thus, (4a) and (5a) show roughly the same phenomenon except for the morphological marking.

(4) a. Hari tann-annu ho<u>d</u>e-du-ko<u>nd</u>-a[7]
Hari self-ACC hit-PP-REFL.PST-3sm
'Hari hit himself.'

b. *Hari tann-annu ho<u>d</u>e-d-a
Hari self-ACC hit-PST-3sm
'Hari hit himself.'

c. Hari tann-annu-taane ho<u>d</u>e-d-a
Hari self-ACC-self hit-PST-3sm
'Hari hit himself.'

[6] R&R propose a diagnostic test for the lexical reflexivity marked only in the lexicon: whether nominalized predicates allow reflexive interpretation.

(i) *wassen is gezond* ('Washing (oneself) is healthy')

(ii) *haten is niet gezond* ('Hating (only someone else) is unhealthy')

[7] In the original Kannada examples (Lidz 2001: 127), a dot is used instead for each of the underlined characters.

(5) a. Max wast zich
Max washes himself
'Max washes himself.'

b. *Max haat zich
Max hates himself
'Max hates himself.'

c. Max haat zichzelf
Max hates himself'
'Max hates himself.'

It is well-known that many languages have two reflexive forms, a morphologically simple reflexive and a complex one. As in (4a) or (5a), the lexically reflexive predicates can take the simple reflexive form (i.e. *tann-* in Kannada and *zich* in Dutch). This is explained as follows. Since the predicates are already reflexive-marked in the lexicon, the simple reflexive form suffices to achieve the reflexivity as a whole. However, if the predicate is not lexically reflexive-marked, the complex reflexive marker has to be employed as in (4c) and (5c). No reflexive morphology on the Kannada predicate in (4c) means the predicate is not lexically reflexive. In Dutch, *haat* 'hate' is assumed not to be lexically reflexive in the lexicon (see footnote 5). The examples, (4b) and (5b), are claimed to be unacceptable since they use the simple reflexive form despite the fact that the predicate is not lexically reflexive.

4.2.2 Cross-linguistic variation in lexical reflexivity

It has been observed that there is variation in lexical reflexivity. The data (6) are from Malayalam (Lidz 2000: 17). For example, in Dutch, the verb that corresponds to *shave* in English is lexically reflexive and, as expected, allows the simple reflexive *zich* as in (7). On the other hand, it is claimed that the Malayalam 'shave' verb is not lexically reflexive so that (6a), in

which the simple form is employed, is unacceptable[8].

(6) a. *Raaman tan-ne kshauram ceytu
Raaman self-ACC shaving did
'Raaman shaved.'

b. Raaman tan-ne-tanne kshauram ceytu
Raaman self-ACC-self shaving did
'Raaman shaved himself.'

(7) Ringo scheert zich/zich-zelf
Ringo shave self/self-self
'Ringo shaves himself.'

Let us summarize the observations so far. The advocates of lexical reflexivity claim that the lexical reflexivity of the predicates is a primary factor in the antilocality effect and that there is cross-linguistic variation regarding the lexical reflexivity even among the verbs that denote (presumably) the same event such as 'shaving'. Let us call their approach 'lexical-reflexivity theory'. In the next section, it is pointed out that the antilocality of the Japanese reflexives cannot be accounted for in terms of the lexical reflexivity theory. It will be further demonstrated that the Japanese case has nothing to do with lexical reflexivity at all.

4.2.3 A few examples from Japanese

(8a) is a typical reflexive sentence in Japanese. It has been long noted, however, that some Japanese reflexives exhibit, as in (8b), an antilocality effect which is similar to the ones introduced in the previous section (e.g. N.A.McCawley 1973, Oshima 1979, Takezawa 1991, Kitagawa 1986, 1994). Despite the fact that this has been noted for a long time, as far as I am aware, there have been no comprehensive studies on this issue and this has been largely neglected in Japanese linguistics.

[8] Lidz does not give any diagnostic tests on the lexical reflexivity of the Malayalam *shave* verb, unlike R&R, so that his claim of variation in lexical reflexivity seems circular. See Van Valin's (1990) criticism on similar circularity in Kuno's (1987) treatment of some English reflexives.

(8) a. Hanako-wa zibun-o hazita/semeta
Hanako-TOP self-ACC ashamed/blamed
'Hanako is ashamed of/blamed herself.'

b. *Taroo ga senmensho-de zibun-o sotta
Taroo-NOM lavatory-LOC self-ACC shaved
'Taroo shaved himself in the lavatory.'

The lexical-reflexivity theory would predict that the Japanese 'shave' verb, *soru*, is not lexically reflexive so that the reflexive sentence (8b) that employs the simple reflexive is unacceptable. If this claim were true, it is expected that the sentence would be acceptable with the complex form. This expectation is, however, not born out. As (8c) shows, the use of the complex form, *zibun-zisin* 'self-self,' does not change the acceptability at all unlike Malayalam. This suggests that the unacceptability of (8b) cannot be accounted for in terms of the lexical reflexivity of the predicate.

c. *Taroo ga semmensho-de zibun.zisin-o sotta
Taroo-NOM lavatory-LOC self.self-ACC shaved
'Taroo shaved himself in the lavatory.'

To indicate the same reflexive event, an NP that specifically denotes a body-part has to be employed, as in (9a) below. It must be noted that the Japanese 'shave' verb is a transitive verb, as shown in (9b) and therefore the antilocality of the reflexive cannot be attributed to the (in)transitivity of the verb, either. Where does this constraint on the reflexive come from?

(9) a. Taroo-wa semmensho-de { hige/atama }-o sotta
Taroo-TOP lavatory-LOC { beard/head }-ACC shaved
'Taroo shaved { beard/head }.'

b. *Taroo-wa semmensho-de sotta
Taroo-TOP lavatory-LOC shaved
'(int.) Taroo shaved (himself).'

4.3 Antimetonymy

4.3.1 Affectedness

4.3.1.1 Verbs that denote change of physical state

In the previous section, it was demonstrated that the antilocality in Japanese cannot be accounted for in terms of the notion of lexical reflexivity. In this section, the type of semantic property at work is examined.

Given the contrast between (8a) and (8b), the part-whole relation seems to be a possible factor for the constraint. That is, when one blames someone, as in (8a), the whole person is blamed. It is nonsensical to blame a certain part of a person. Thus, the whole person is necessarily involved in the blaming event. On the other hand, in (8b), only a body-part (face or beard) is involved in the event[9]. Observe (10a). We cannot throw only a part of our body so that the whole body is necessarily involved in the event (10a) describes. In spite of the fact that the whole body is involved, the sentence is far less acceptable than (8a). There is a rather clear preference for a body-part NP as the object. It should be noted that the verb in (10) is not a verb that exclusively takes a body-part NP as its object and it is a canonical transitive verb. Thus the relevance of the part-whole relation is questionable.

(10) a. Taroo-wa beddo-ni {*?zibun/*?zibun.zisin/karada/hon }-o nagedashita
Taroo-TOP bed-LOC { self/self.self/body/book }-ACC threw.out.PST
'Taroo throw out { *self/*self.self/body/book } to the bed.'

Another plausible factor we can detect from the difference between (8a) and (8b) is whether or not a certain dynamic physical action is involved in the event. The event of being ashamed or blaming someone, (8a), does not entail any physical action, but the event of shaving, (8b), does.

[9] A similar antilocality phenomenon has been reported in Samoan (Cook 1991 cited in Mosel 1991, Mosel 1991). Cook suggests that, for Samoan antilocality, part-whole relation may be a semantic parameter for the behavior.

This semantic factor, however, has nothing to do with the unacceptability as shown in (10b). The event described by (10b) is that a person lies on the beach to tan himself or herself. Tanning does not seem to be a dynamic action and this can be demonstrated by the fact that we cannot modify the event, for example, by dynamicity-denoting adverbs such as *vigorously* or *powerfully*. It should be noted in passing that if the whole body is necessarily involved in the event described by (10b), the sentence is unacceptable. This is another piece of evidence in support of the claim that the part-whole relation is a secondary factor at best.

b. Taroo-wa hamabe-de { *zibun/*zibun.zisin/karada/senaka }-o yaita
Taroo-TOP beach-LOC { self/self.self/ body/back }-ACC burned/tanned
'Taroo tanned { *self/*self.self /body/back } on the beach.'

A possible conclusion we can draw from the observations above is that the reflexive *zibun* cannot be used as the object of verbs that denote an event in which a body-part is affected in one way or another, whether the event is dynamic or not. Thus, it seems that the following 'affectedness constraint' can be formulated on the behavior of the reflexives, as in (11). As a matter of fact, a similar proposal can be found in the past literature (e.g. Takezawa 1991, Aikawa 1999).

(11) Affectedness constraint on the Japanese reflexive *zibun* (*zibun-zisin*):

The reflexive *zibun* (*zibun.zisin*) cannot be used for the object of the verbs that denote the event in which a human body-part is affected.

As noted at the beginning of this chapter, it has been pointed out that while some verbs simply do not take the reflexive as its 'object' (i.e. antilocal verbs) as in (1a), others can marginally take the reflexive but produce varied judgments among native speakers as in (1b). In the next section, it is observed that the affectedness shows gradience.

4.3.1.2 Gradience in affectedness

In sentence (1b), repeated below as (12a), the reflexive *zibun* metonymically refers to a certain body-part under a typical interpretation of each event (in the case of *sawaru* 'touch,' the preverbal 'object' is marked by dative). The sentence does not sound as odd as expected from the affectedness constraint formulated in (11) above. The judgment of the sentence, however, varies among native speakers as already noted.

(12) a. ??/?*Taroo-wa zibun-o { tataita/ketta/(ni)sawatta/sashita }
Taroo-TOP self-ACC { hit/kicked/(DAT)touched/stabbed }
'(lit.) Taroo hit/kicked/touched/stabbed self.'

Furthermore, the slight awkwardness, which some native speakers find in (12a), almost disappears when the complex form, *zibun.zisin*, is employed as in (12b). It seems that we can assume that the complex reflexives function here in the same way as the English reflexive[10].

b. Taroo-wa zibun.zisin-o { tataita/ketta/(ni) sawatta/sashita }
Taroo-TOP self.self-ACC { hit/kicked/(DAT) touched/stabbed }
'(lit.) Taroo hit/kicked/touched/stabbed self.self.'

The difference between the antilocal verbs in the previous section and the class of the verbs at hand is that the former entail a change of state whereas the latter do not. In terms of Levin's (1993) classification, for example, the verbs in (12) belong to 'contact verbs' or 'contact by impact verbs'. These verbs describe an event in which someone moves one entity and brings it into contact with another entity. In addition, these verbs are regarded as not necessarily entailing that the contact has any effect on the second entity. On the other hand, almost all of the antilocal verbs are change of state verbs that entail the contact's effect on the second entity.

[10] Note that even the acceptability of (12b) in which the complex form is employed also can vary among speakers. For example, Kitagawa (1986, 1994) judges the reflexive sentence with *tataku/naguru* 'hit' and *keru* 'kick' in (12b) as unacceptable as (12a). On the other hand, Kitagawa judges as acceptable the reflexive *zibun* with verbs such as *sasu* 'stab', *utsu* 'shoot' or *tsuneru* 'pinch'.

Thus, affectedness is a significant semantic parameter. It must be noted that, as formulated in (11), the affectedness is limited to something physical. Accordingly, the following sentence, (12c), in which the 'subject', *Hanako*, is psychologically affected, does not posit any problem. This also suggests that causality is a secondary factor.

c. Hanako-wa (zibun-de) zibun-o kowagaraseta
Hanako-TOP (self-by) self-ACC scared
'Hanako scared herself.'

There is another set of verbs illustrated in (13a). The verbs correspond to contact verbs in Levin's classification; however, it seems that the verbs show gradience in acceptability. Like the verb class in (12), the morphologically complex form increases acceptability in some cases as shown in (13b), but there is a clear threshold. As expected, body-part nominals sound perfect with such verbs as in (13c).

(13) a. Taroo-wa zibun-o { ?tsunetta/??sasutta/*?kaita/*?aratta }
Taroo-TOP self-ACC { pinched/rubbed/scratched/washed }
'Taroo { pinched/rubbed/scratched/washed } himself.'

b. Taroo-wa zibun.zisin-o { (?)tsunetta/?sasutta/*?kaita/*?aratta }
Taroo-TOP self.self-ACC { pinched/rubbed/scratched/washed }
'Taroo { pinched/rubbed/scratched/washed } himself.'

c. Taroo-wa (zibun-no-) { hoho/ude/momo }-o { tsunetta/sasutta/kaita }
Taroo-TOP (self-GEN-) { cheek/arm/thigh }-ACC { pinched/rubbed/scratched }
'Taroo pinched/rubbed/scratched (self's) cheek/arm/thigh.'

The difference between the two classes of verbs in (12) and (13) seems to be whether the verb denotes pure contact or contact with some additional motion. The English verbs such as *hit*, *kick*, *touch* and *stab* in (12) typically denote an event in which some entity's motion finally leads to a contact with another entity and the event is a single instantaneous action. The corresponding Japanese verbs do not seem to differ with respect to these semantic aspects. On

the other hand, the verbs in (13) such as *kak-u* 'scratch' and *sasur-u* 'rub' strongly imply (almost entail) repeated actions. *Kak-u* 'scratch' typically denotes an event in which the 'subject' person repeatedly (at least more than once) moves his/her hand with its nails in contact with the surface of some body-part. *Sasu-ru* 'rub' typically denotes a similar repeated action, but it is his/her palm that is in contact with the surface of the body-part when the person denoted by 'subject' moves his/her hand. Furthermore, if one scratches hard, a scar may be left on the surface (change of state), but this is not true of rubbing. Thus, it seems that the verbs in (13) encode different degrees of affectedness in their event descriptions.

In sum, there are two issues that must be taken into consideration to describe the behavior of the reflexive: verb class and affectedness. The antilocal verbs discussed in the previous section are the ones which entail (physical) change of state and therefore, the reflexive cannot be used as the 'object' of such verbs, as formulated in (11). On the other hand, the contact (with impact) verbs discussed in this section do not necessarily entail change of state and allow the entity denoted by the 'object' to be left unspecified. Therefore, the reflexive can be used with the latter class of verbs. However, the more affected the entity denoted by the 'object' becomes, the more difficult it is for the entity to be unspecified. Accordingly, a body-part NP sounds more natural than the reflexive. The variation depends on the degree of affectedness encoded in each (contact) verb. The revised formulation based on the findings in this section is given in (14).

(14) Affectedness constraint on the reflexive *zibun* (*zibun.zishin*) (revised):

> The reflexive *zibun* (*zibun.zisin*) cannot be used for the 'object' of the verbs that denote the event in which the human body-part is affected. The reflexive is licensed according to a function of affectedness entailed in the verb.

In this section, a semantic constraint on the reflexive was proposed to account for the antilocality of the reflexive and its variation. At glance, this affectedness constraint is plausible

and, as mentioned above, a similar affectedness constraint has been proposed in previous literature. There are a small class of verbs, however, that cannot take the reflexive as the 'object' irrespective of the morphological complexity of the reflexive. More importantly, these cases cannot be ruled out by the affectedness constraint formulated in (14). The problematic verb class is perception verbs. They will be examined in the next section.

4.3.2 Antimetonymy hypothesis

4.3.2.1 Active zone (Langacker 1984)

In the previous section, we examined the behavior of the antilocal verbs and analogues in terms of semantics and proposed a semantic constraint (affectedness constraint) on the behavior of the reflexives. There are, however, a handful of verbs that cannot be ruled out by the constraint: perception verbs. In this section, such Japanese (auditory) perception verbs are examined. To clarify their behavior, the English counterpart will be cited for reference.

(15a) is a reflexive sentence in English that contains a perception verb. It is extremely difficult to construct the Japanese counterpart of this sentence. (15b) and (15c) are hypothetical Japanese counterparts. Contrary to the acceptability of the English example, the Japanese sentences are unacceptable. Obviously, these sentences, (15b) and (15c), cannot be ruled out by the current affectedness constraint since the perception verbs do not entail any (physical) affectedness relation between the participants in the event. Why is this? I would like to argue that this is a consequence of anti-metonymic selectional restriction of the Japanese verbs.

(15) a. Kate heard/listened to herself.

b. *Hanako-wa zibun(.zisin)-o kiita
Hanako-TOP self(.self)-ACC listened.to
'(int.) Hanako listened to herself.'

c. *Hanako-ni zibun(.zisin)-ga kikoeta
Hanako-dat self(.self)-nom heard
'(int.) Hanako heard herself.'

Langacker (1984) claims, in terms of his own notion of 'active zone' (i.e. metonymy)[11], that *Tom heard the trumpet* can be metonymically used to mean that Tom heard the sound of the trumpet as in (16a). Interestingly, the Japanese counterpart does not easily allow this metonymic contraction as in (16b). It is less acceptable to use the contracted form in Japanese to describe a situation in which Hanako is walking down a street and happens to hear (the sound of) the trumpet. Let us term this phenomenon 'antimetonymy'.

(16) a. Tom heard the trumpet. (= Tom heard the sound of the trumpet.)

b. Hanako-ni { torampetto-no-oto/*?torampetto }-ga kikoeta
Hanako-dat { trumpet-GEN-sound/trumpet }-NOM heard
'Hanako heard { the sound of the trumpet/the trumpet }.'

A trumpet is known, from our encyclopedic knowledge of the world, to exist to emit sounds so that it may be not too difficult to use the contracted form, even in Japanese, in a certain music-related context, for example, when someone is conducting a brass band. There is, however, more striking evidence for the antimetonymy. The Japanese auditory perception verbs can not take a human NP as the object as in (17b). An object NP to be heard must be headed by the voice or an equivalent such as the sound of footsteps; otherwise, the sentence is just bizarre. The other auditory perception verb *kiku* 'listen to' behaves similarly regarding the same point as in (17c).

[11] Langacker's (1984) notion of 'active zone' is a special case of metonymy (Langacker 1995).

(17) a. I was listening to you/Ken.

b. Hanako-wa { *Taroo/Taroo-no-koe/Taroo-no-ensoo }-ga kikoeta
Hanako-TOP { Taroo/Taroo-GEN-voice/Taroo-GEN-performance }-NOM heard
'Hanako heard { Taroo/the voice of Taroo/the performance by Taroo }.'

c. Hanako-wa { *Taroo/Taroo-no-koe/Taroo-no-ensoo }-o
Hanako-TOP { Taroo/Taroo-GEN-voice/Taroo-GEN-performance }-ACC
kiita
listened.to
'Hanako listened to { Taroo/Taroo's voice/Taroo's performance }.'

It must be noted that the data examined above, (16) and (17), have nothing to do with a reflexive construction. The above observations on the Japanese perception verbs suggest that they have a peculiar selectional restriction on their 'object' and require a certain semantically qualified NP to be the 'object' (i.e. antimetonymy)[12].

This finding gives us an alternative hypothesis that can cover all the antilocal data presented so far. That is, all the antilocal verbs, whether they are perception verbs or not, require an NP of certain semantic type according to the semantics of the verb. This is a conception completely different from or opposite to the affectedness constraint in (14). Under this hypothesis of antimetonymy, the seeming antilocality effect of the Japanese reflexives is actually a mere consequence of the antimetonymic selectional restriction which the Japanese verbs have as their lexical property. In other words, the reflexives are just ruled out as a result of the nature of the verbs and, accordingly, there is no necessity to posit a constraint on the behavior of the reflexive itself. In the next section, this hypothesis is shown to be true of other non-perception verbs presented in the preceding sections.

[12] This process seems to be more pervasive than observed here. For example, other perceptual domains such as the sense of smell show a similar requirement. I owe this observation to Jennifer Cornish. More details will have to wait for future study.

4.3.2.2 Antimetonymic selectional restriction

If the above hypothesis that the antilocal verbs have an anti-metonymic selectional restriction on their 'object' is true, the series of the 'antilocal' verbs in question should require a certain qualified NP *irrespective of the type of the construction*, as the perception verbs do (see16b and 17b). In other words, the verbs termed 'antilocal verbs' should require an NP of certain meaning also in canonical (non-reflexive) transitive constructions. This expectation is born out as in (18b).

(18) a. Taroo-wa { *zibun(.zisin)/hige/*∅ }-o sotta
Taroo-TOP { self(.self)/ beard/∅ }-ACC shaved
'Taroo shaved { himself/ beard/∅ }.'

b. Taroo-wa { *Ken/Ken-no-atama/*∅ }-o sotta
Taroo-TOP { Ken/Ken-GEN-head/∅ }-ACC shaved
'Taroo shaved { Ken/Ken's head/∅ }.'

The above examples (18a) and (18b) are a reflexive and a non-reflexive transitive construction, respectively. The anti-metonymic requirement seen in (18b) indicates that, as expected, the grammatical behavior in question is not specific to the reflexive construction but to the nature of the subcategorization of the antilocal verbs.

When we 'shave,' what is shaved is more or less limited to a body-part. It must be noted, however, that the antilocal verbs are not exclusively specified for such body-part NPs in the lexicon, as evidenced in the example below, (19a), which shows that verbs such as *someru* 'dye' can take any NPs insofar as the NP satisfies the semantic requirement of the predicate (note: *kami* 'paper' and *kami* 'hair' are homophonous). Nonetheless, when a human participant is involved in the event, the verbs require a body-part NP regardless of the type of the construction.

(19) a. Hanako-wa { nuno/kami }-o akaku someta
Hanako-TOP { cloth/paper }-ACC red dyed
'Hanako dyed { cloth/paper } red.'

b. Hanako-wa { *zibun(.zisin)/kami/karada }-o akaku someta
Hanako-TOP { self(.self)/hair/body }-ACC red dyed
'Hanako dyed { herself/hair/body } red.'

c. Hanako-wa { *Taroo/Taroo-no-kami }-o akaku someta
Hanako-TOP { Taroo/Taroo-GEN-hair }-ACC red dyed
'Hanako dyed { Taroo/Taroo's hair } red.'

Antilocal verbs largely overlap with lexical causative verbs (apart from the contact verbs and the auditory perception verb). The same observation on the selectional restriction is true of the morphological causatives as in (20a) and (20b) below.

(20) a. Hanako-wa Taroo-ni { *zibun(.zisin)/kami }-o some-sase-ta
Hanako-TOP Taroo-DAT { self(.self)/hair }-ACC dye-CAUS-PST
'(lit.) Hanako made Taroo dye self(.self)/ hair.'

b. Ken-wa Taroo-ni hamabe-de { *zibun(.zisin)/karada }-o yak-ase-ta
Ken-TOP Taroo-DAT beach-LOC { self(.self)/body }-ACC tan-CAUSE-PST
'(lit.) Ken made Taroo tan self(.self)/body.'

Thus, it seems reasonable to conclude that the Japanese antilocal verbs have a peculiar selectional restriction on the 'object' and the antilocality of the reflexives is a natural consequence of the restriction. What follows from this conclusion is that it is not necessary to posit any constraints on the behavior of the reflexive itself. Rather, it would be even misguided to posit such a constraint on the reflexive.

Given the conclusion above, the next concern is the appropriate description of the grammatical behavior of the antilocal verbs. It seems obvious that, roughly speaking, the traditional conception of body/mind dualism has to be referred to in the description. In the next section, I would like to introduce the linguistically grounded semantic dichotomy, Self and Subject, proposed in Lakoff (1996).

4.3.2.3 Self and Subject (Lakoff 1996)

The data presented so far suggest that the Japanese 'antilocal' verbs are sensitive to a body/mind distinction. Therefore, we need to refer to this distinction in the grammar somehow. The necessity of introducing the distinction in the description of grammar has been argued by Lakoff (1996) independently of our purpose. Lakoff argues that we need the distinction to explain several phenomena of anaphora. For example, he points out that (21a) and (21b) have different meanings and that traditional logic or formal linguistics, which is based on the classic assumption that reflexive anaphors indicate identity of reference (i.e. x in 'x acts on x'), cannot handle the differences. Lakoff claims that it is necessary to introduce a semantic distinction in interpreting such anaphora (see below).

(21) a. If I were you, I would hate me.

b. If I were you, I would hate myself.

Generally speaking, a human can be viewed as consisting of a container-like body and mind that can control the body at will. Take a look at the example (22), which is originally due to James McCawley. The meaning of the sentence is roughly as follows. The speaker dreamed that he could control the will or consciousness of Bardot and took over her body at the same time. Then Bardot, whose will is under the control of the speaker, kissed the body of the speaker. That is, we need to refer to the two separate components of a person to interpret the sentence. Lakoff calls them Self and Subject, respectively. While Self refers to a body-part, physical or social part, Subject is the locus of subjectivity, will or consciousness.

(22) I dreamt that I was Brigitte Bardot and that I kissed me.

Given the semantic elaboration of person, the examples in (21) can be analyzed as follows. The *if*-clause creates a hypothetical domain as shown on the right of Figure 1 in (23). *Subject-of-I* in the real world (R) is projected to *Subject-of-you* in the hypothetical world (H) as indicated by the arrow in Figure 1. This is a common scheme that underlies the *If I were you …* sentences. For the *hate-me* sentence in (21a), suppose a following scenario: *I did something nasty to you; you are very forgiving, but I am not forgiving at all.* In this hypothetical situation, I would hate *Self-of-I* in H in terms of the viewpoint of *Subject-of-you* in H, upon which my real Subject is projected; therefore, the object of the verb *hate* is realized as "me". The projected relation in H is indicated by the arrows in Figure 2 in (23). For the *hate-myself* sentence in (21b), suppose a following context: *you did something nasty; you have no moral sensibility at all, but I have a high moral sensibility.* In this situation, I would hate *Self-of-you* in H in terms of *Subject-of-you* in H, upon which my real Subject is projected; therefore, the object is realized as a reflexive, "myself". The projected relation is indicated by the arrows in Figure 3 in (23).

(23) Figure 1.

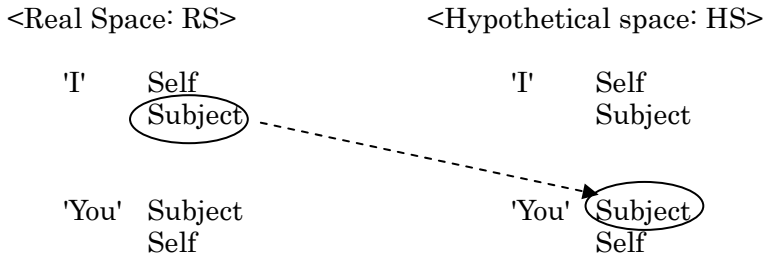


Figure 2.

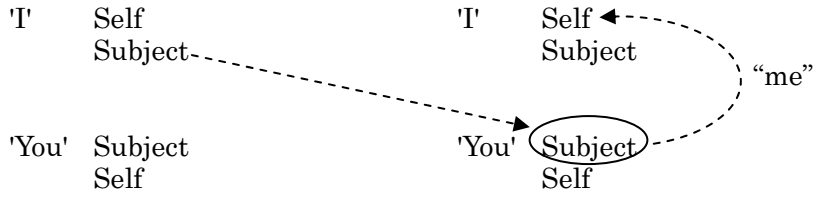
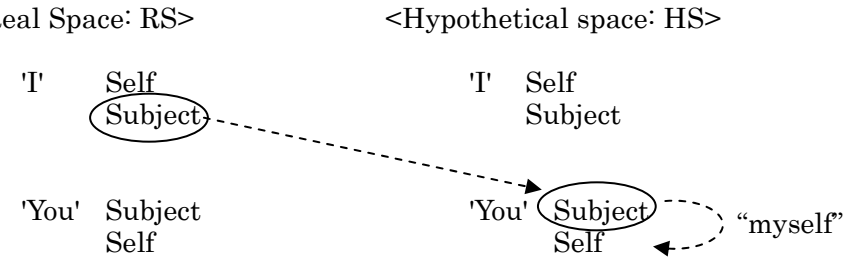


Figure 3.



If NP1 were NP2, NP3 would VP (NP3 is an anaphor and NP1 is its antecedent) is the construction in question and the semantic features involved are summarized as in (24) (Lakoff 1996: 95).

(24) (i) There are two mental spaces, the Reality Space, R, and a Hypothetical Space, H, dependent on R;
(ii) The referents of NP1 and NP2 are in R, and the referent of NP3 is in H;
(iii) Each referent of an NP is conceptualized as having a Subject and a Self
(iv) NP3's Subject is the counterpart of NP1's Subject. NP3's Self is the counterpart of NP2's Self;
(v) VP predicates the Subject properties of NP3 that result from NP2's Self being paired with NP1's Subject;
(vi) NP2 VP is false in R; NP3 VP is true in H; and
(vii) The antecedent-anaphor relationship indicates not full person identity, but rather Subject identity between NP3 and NP1

One of the most important features in (24) is (v) which states that the VP in the apodosis

clause must predicate the Subject component. This semantic division between Subject and Self is justified by the following examples in (25), adopted from Lakoff (1996: 96). The VP in the second clause must predicate the Subject component by (v) in (24), but the VPs of the two sentences in (25) predicate the Self component; therefore, the two sentences in (25) sound odd.

(25) a. *If I were you, I would be short and named George.
b. *If I were Ross Perot, I would be Jewish.

The contrast seen in (26) further illustrates the same point. According to Lakoff, 'getting glasses' is an act based on judgment (i.e. one of the Subject properties). On the other hand, 'needing glasses' is due to a physical property (i.e. one of the Self properties), not an act resulting from a judgment. As a physical property, it is not a property of Subject and this violates the semantics of the constructions in (24) and therefore (26b) results in an unacceptable sentence (Lakoff 1996: 97).

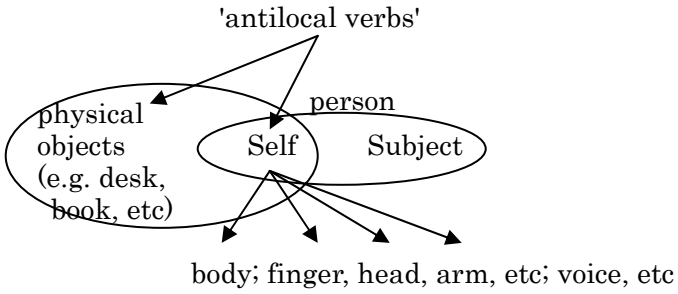
(26) a. If I were you, I'd get glasses.
b. *If I were you, I'd need glasses.

In this section, we saw a piece of evidence that there is a necessity to introduce a body/mind split system in the linguistic theory, which is totally independent of our observations on the antilocality in Japanese. I would like to claim that the Japanese antilocality effect (as a result of antimetonymy) is another manifestation of the hidden body-mind split system Lakoff observes in English (anaphoras). As we have seen, the 'antilocal' verbs can take any NP as the undergoer of the verb insofar as it satisfies the semantics of the verb. As far as our data are concerned, however, the 'antilocal' verbs generally require as an undergoer the type of noun that is

subsumed in the Self component rather than the Subject component. Given the characteristic property of Self, i.e. something externally and physically perceivable, it seems natural that the Self component can be categorized in the same way as the other physical objects such as desk, car, or stone[13].

Now we have a rather straightforward picture of the phenomenon. The scheme represented in Diagram 1 below incorporates Lakoff's dichotomous model and shows the relation between the antilocal verbs and their subcategorization. The 'antilocal' verbs require NPs of the Self properties, but there is no human noun (such as *Taroo, him, himself* or *zibun*) that uniquely refers to a body-part of the person. Therefore, as a consequence, one of the body-part nouns, which are subsumed under the Self component, has to be employed as the head of the undergoer NP of the verb. Furthermore, there is a correlation between affectedness encoded in the verb and the preference to the Self component of a person. The more affectedness is encoded in the event description of the 'antilocal' verb, the more likely it prefers to (or requires) the Self component. The gradience discussed in 4.3.1.2 can be thus accounted for.

Diagram 1.



It has been demonstrated so far that the 'antilocal' verbs require the undergoer to be a

[13] Inoue (1976c) suggests a semantic case feature *Object* as well as ordinary *Experiencer* and it seems that Inoue had an intuition similar to that of Lakoff (1996).

body-part noun which is subsumed under the Self component and the reflexives are ruled out as a consequence of this particular subcategorization. Therefore, it can be concluded that the antilocality effect has nothing to do with the property of the Japanese reflexive itself. However, there is one more question left. We need to account for the varied judgment which native speakers tend to produce for the sentences with a contact verb such as 'hit' or 'kick.' A relevant example, (1b), is repeated below as (27).

(27) ??/?*Taroo-ga zibun-o tataita (= 1b)
Taroo-NOM self-ACC hit.pst
'(int.) Taroo hit himself.'

I would like to claim that the reflexive *zibun* is semantically non-vacuous and biased toward the Subject component. That is, the reflexive *zibun* is a 'Subject-primary' reflexive which primarily denotes the Subject properties and refers to the Self component only as a secondary property. If this characterization is correct, the varied judgment of the sentence in (27) can be accounted for as a consequence of the semantic incompatibility between the verb that prefers to have a noun of the Self property and the reflexive that primarily denotes the Subject property.

My claim of the Subject-primacy is based on the following four reasons. First, the reflexive *zibun* can be used as the undergoer of the verbs that denote a non-physical event, such as *semeru* 'blame' or *kurushimeru* 'distress'. The target of the event denoted by these verbs is the Subject property rather than the Self property. It is nonsensical to blame or distress some insentient physical entity (including body-parts). The target of the event must be some sentient being. Thus, the Subject-primacy analysis fits the empirical data already presented, for example, in (12c).

Second, there are many (idiomatic) expressions in which the reflexive *zibun* refers to the Subject rather than the Self properties. Observe (28).

(28) Hanako-wa zibun-o mot-teiru
Hanako-TOP self-ACC have-ASP
'Hanako has an established personality.'
'(lit.) Hanako has self.'

This is a fairly common idiomatic expression that suggests the semantic nature of the reflexive. It would be odd to interpret the sentence as a so-called reflexive construction in which the reflexive is coreferential with the 'subject'. The literal translation of the sentence is 'Hanako has self'. Roughly speaking, the sentence means something like 'Hanako has established self or ego'. To use our current terminology, it amounts to saying 'Hanako has her own Subject'. It seems reasonable to assume that the coreferential reflexive *zibun* inherits this semantic nature of *zibun* that primarily refers to one's Subject[14].

Third, the antecedent of the reflexive *zibun* is limited to a sentient being or something that has willpower (Kuno 1973a). This is illustrated in (29b). (29c) is acceptable and corresponds to the English counterpart in (29a). It is well-known that the semantic (or pragmatic) condition such as awareness or consciousness, sometimes referred to as 'empathy,' is responsible for the behavior of the reflexive *zibun* (see Kuno 1972, 1973a, Kuroda 1973 among many others). Obviously, awareness or consciousness is a property that belongs to Subject, not Self. This must be also a piece of evidence that supports the current claim (i.e. Subject-primacy).

[14]Kitagawa (1986, 1994) alludes to the same point I claim. Safir (1996) argues, citing many examples primarily from Indo-European languages, that the original meanings of the reflexives do have certain influence on their syntactic distribution.

(29) a. History repeats itself.

b. *Rekishi-wa zibun(.zisin)-o kurikaesu
history-TOP self(.self)-ACC repeat
'(int.) History repeats itself.'

c. Rekishi-wa kurikaesu
history-TOP repeat
'History repeats itself.'

Fourth, visual perception verbs show another piece of supporting evidence for the reflexive *zibun* as being Subject-primary. In English, *Bill saw himself in the mirror* denotes the event where Bill turns his eyes to the mirror and sees his reflection there. The Japanese equivalent, (30a), does not seem to be as semantically neutral as the English counterpart. The default Japanese expression that denotes the same state of affair is "look at the mirror" as in (30b). The sentence is obviously ambiguous in that it can mean either "look at the mirror" (e.g. inspection) or "look at his or her own reflection". The default interpretation of (30b) is "look at one's self-image" rather than the other (i.e. inspection). Example (30a) is syntactically well-formed, but has a connotation like "staring at one's reflection in the mirror" and he or she is highly conscious of him/herself[15]. In other words, the Japanese literal equivalent of 'looking at oneself' denotes a highly volitional or intentional event. The sentence that takes a body-part as an undergoer, (30c), does not have the connotation (30a) has.

(30) a. Hanako-wa kagami-de { zibun/zibun.zisin }-o mita
Hanako-TOP mirror-with { self/self.self }-ACC looked.at
'Hanako looked at herself in the mirror.'

b. Hanako-wa kagami-o mita
Hanako-TOP mirror-ACC looked.at
'Hanako looked in the mirror.'
'(lit.) Hanako look at the mirror.'

[15] It might be worth citing Inoue's (1976c) following remark: '… Japanese reflexives are not mere reflexes of their antecedents but carry their own semantic values. … First, some speakers, including myself, try to avoid as much as possible the use of *zibun* in certain contexts, because we feel that its use has a rather direct effect of pointing to the expected self-consciousness of the event on the part of the referent of the coreferential noun, i.e. the antecedent, …'

c. Hanako-wa kagami-de { kao/senaka/kubi }-o mita
Hanako-TOP mirror-by { face/back/neck }-ACC looked.at
'(lit.) Hanako looked at face/back/neck in the mirror.'

Furthermore, in the corpus I referred to[16], the verb phrase *zibun-o mi-ru* 'look at self', (31), is often found, but the expression almost always means "to think about one's characteristics, nature or behavior", which is an abstract property subsumed under the Subject component. In other words, the phrases found in the corpus do not mean to physically see (look at) his or her reflection, for example, in the mirror. In many cases, there is no antecedent in the sentence (i.e. no subject). Thus, *zibun-o mi-ru* 'looking at self' is not a neutral, but rather a disfavored description for the event of one's physically looking at himself or herself.

(31) zibun-o miru
self-ACC look.at
'(lit.) look at self'

Thus, given the characterization of the reflexive *zibun* as Subject-primary, it becomes possible to give a straightforward account for the varied judgment observed in the contact verbs in (27). The contact verbs prefer to have an undergoer NP that belongs to the Self component according to the affectedness entailed in the verb, whereas the reflexive primarily refers to the Subject component. Thus, the use of the reflexive *zibun* as the undergoer of a contact verb results in a semantically odd combination.

On the other hand, what we are "ashamed of" or "blame" are typically Subject-ful entities. For example, (32b) is bizarre due to its semantic incompatibility. We cannot "blame" or "criticize" insentient entities which do not have any Subject properties. That is, the Subject component is an essential semantic requirement for the undergoer of these non-physical (speech

[16] I used the *Saga* newspaper database that is open to the public on the internet. In the database, all the articles that have appeared since 1994 are digitally stored and available for search.

act) verbs. If the reflexive is, as claimed here, semantically biased toward the Subject component, the reason why these psychological verbs take the reflexive *zibun* without any problem as in (32a) should be obvious.

(32) a. Taroo-wa zibun-o { semeta/hihan-shita }
Taroo-TOP self-ACC { blamed/criticism-did }
'Taroo { blamed/criticized } himself.'

b. #Taroo-wa kuruma-o { semeta/hihan-shita }
Taroo-TOP car-ACC { blamed/criticism-did }
'Taroo { blamed/criticized } the car.'

It was shown that it is necessary to have the semantic dichotomy proposed by Lakoff, Self and Subject, to account for some linguistic phenomena which are independent of our observations. Based on this observation, it was claimed that Japanese grammar involve an interesting sensitivity to the semantic distinction and the antilocality effect seems to hinge on it.

4.3.2.4 Section summary

In this section, two things were shown. First, it was demonstrated that the 'antilocal' verbs exhibit a semantic requirement on the undergoer and that the antilocality effect is not due to a constraint on the reflexive itself but due to the selectional restriction of the 'antilocal' verbs. Accordingly, it is a misguided approach to posit a certain constraint on the behavior of the reflexive itself to rule out illegitimate sentences. Second, it was claimed, citing several pieces of evidence, that the Japanese reflexive *zibun* is semantically biased and should be characterized as Subject-primary. It was further claimed that the semantic nature of the reflexive *zibun* (i.e. Subject-primacy) can account for the other long-standing puzzle that varied judgments can be observed among native speakers regarding contact verbs.

4.4 An RRG account of Japanese semantic reflexive constructions

In this section, I will give a possible formal treatment of the Japanese semantic reflexive constructions and, more generally, the antilocality effect, in terms of Role and Reference Grammar.

4.4.1 Reflexive constructions in RRG

The type of the reflexive construction discussed in this chapter is all 'coreference reflexive' in which there are two distinct direct core arguments and they refer to the same entity. Reflexive binding in RRG is primarily accounted for at the semantic level (LS), in accordance with the proposal by Jackendoff (1990, 1992). (33a) and (33b) are an example of a reflexive sentence and its corresponding LS.

(33) a. Hanako-wa zibun-o semeta
Hanako-TOP self-ACC blamed
'Hanako blamed herself.'

b. **blamed'** (Hanako$_i$, zibun$_i$)
Actor Undergoer

The primary concern in this chapter is how to rule out the 'antilocal' cases like (33c) below. It is not necessary to modify or add some new mechanism to the current treatment of the reflexive constructions in RRG since the illegitimate cases (i.e. antilocality effect) have nothing to do with the reflexivization process itself. We need to use some semantic information to rule out the 'antilocal' cases at hand.

c. *Taroo-ga senmensho-de zibun-o sotta
Taroo-NOM lavatory-LOC self-ACC shaved
'Taroo shaved himself in the lavatory.'

RRG has various semantic parameters and one of the most important parameters is the verbal aspect, or *Aktionsart*, as introduced in Chapter 2. Can we have any coherent *Aktionsart* type that is common to all the 'antilocal' or semi-'antilocal' verbs? With the data observed in the preceding sections, the answer is no. The following verbs in (34) are some of the (semi-)'antilocal' verbs used as data so far. As shown in the list, they belong to different *Aktionsart* types and therefore it is clear that there is no single *Aktionsart* type that is responsible to the 'antilocality' effect.

(34) a. semelfactive: *tataku* 'hit', *keru* 'kick'
b. activity: *sasuru* 'rub', *kaku* 'scratch'
c. (causative) achievement: *nage.dasu* 'throw (out)', *kiru* 'cut'
d. (causative) accomplishment: *yaku* 'tan'
e. state: *kikoeru* 'hear'

Given the fact that we cannot rule out illegitimate cases by resorting to an *Aktionsart* type, it is necessary to use more fine-grained semantics to rule out the unacceptable cases. As we have seen, the 'antilocal' verbs in question refer to the meaning of the undergoer noun; therefore, we need to represent the semantics of nominals. In RRG, Pustejovsky's qualia structure theory has been adopted as the theory of the semantics of nominals. In the next section, the notion of qualia structure is introduced.

4.4.2 Qualia structure (Pustejovsky 1995)

The most important issue in describing the 'antilocal' phenomenon is how to deal with the peculiar selectional restriction of the 'antilocal' verbs. Selectional restriction has been regarded as an important aspect in theoretical linguistic description; however, it does not seem that its true nature has been agreed upon among linguists. As Jackendoff (2002) points out, in particular, the semantics of nominals has been largely neglected in the field, though the

semantic analysis of verbs has flourished in the literature.

Pustejovsky (1995) has put forth a theory called 'qualia structure', which is the theory of the semantics of nominals, and his theory has been adopted in RRG. Qualia Structure (QS) consists of four essential specifications (i.e. qualia): constitutive, formal, telic and agentive. The constitutive role (abbreviated here as 'Qc') specifies the relation between an object and its constituent parts. For example, *cookie* and *beer* differ in their constitutive roles such that neither "drink cookie" nor "eat beer" are acceptable outputs under normal circumstances. This means that the verbs (*drink* and *eat*) refer to the constitutive roles of their undergoer nouns. The formal role (Qf) is defined as the criteria which distinguish the objects within a larger domain such as shape, orientation, and magnitude. The telic role (Qt) is concerned with the purpose and function of the object. A functional aspect encoded in food is eating, for example. In other words, the Telic role is related to how we interact with the object. The agentive role (Qa) deals with factors that bring the object into being. For example, novels are 'written' whereas dictionaries are 'compiled'.

Thus each nominal has specifications for the four roles in its lexical entry. As briefly mentioned above, more important is that each verb has specification of the same kind in its entry. The undergoer NP that does not satisfy the QS required by a given verb (let us represent this as 'QSv') is a violation of the selectional restriction and ruled out as unacceptable. The sentence in (35a) is anomalous, though it is syntactically well-formed, since the QS of the undergoer noun violates (or does not correspond to) the QSv of the verb *eat*.

(35) a. ?Hanako ate (a) beer.

b. **eat'** (Hanako, beer)

The lexical entry of the verb *eat* is something like (36). In the entry, the maximally potential LS is given and an actual LS is specified according to the properties of the actual sentence. For example, the *Aktionsart* type of (37a) is an activity whose LS is **do'**(Carl, [**eat'**(Carl, pizza)]) whereas that of (37b) is an active accomplishment whose LS is **do'**(Carl, [**eat'**(Carl, pizza)])& BECOME**consumed'**(pizza).

(36) *eat*: [**do'**(x, [**eat'**(x, y)])]CAUSE[BECOME**consumed'**(y)]

(37) a. Carl ate pizza.

b. Carl ate a pizza.

In Pustejovsky's system, the lexical entries of the verbs have the qualia information on the arguments they take. Therefore, the more elaborated lexical entry of the verb, *eat*, which contains the qualia structure of the semantic arguments is something like (38), though this is still grossly simplified.

(38) *eat*

LS: [**do'**(x, [**eat'**(x, y)])]CAUSE[BECOME**consumed'**(y)]

QSv: { Qc: **mouth'**(x)[17]/**non-liquid'**(y), Qf: **animate'**(x)/**food'**(y), Qt: **exist.as.food'**(y), … }

Though the syntactically-relevant semantic factors may vary (e.g. actual *Aktionsart* type of the sentence; cf. 37a and 37b), the qualia structure of the arguments is presumably invariant under all circumstances. That is, whether the verb *eat* is used as transitive or intransitive, actors without substance (i.e. body-parts) cannot perform the activity of eating and the undergoer must not be liquid[18].

[17] This characterization is problematic since, strictly speaking, a person and his or her body-part have a different referent (Koenig 1999). I do not, however, argue this issue any further here.

[18] The boundary between liquid and non-liquid can be fuzzy and we can say either 'drink liquid food' or 'eat liquid food'. In

The representation in (39) is the lexical entry for *beer*. The constitutive property (Qc) of the entity denoted by *beer* is liquid. It is not just liquid but some sort of food as specified in the formal role (Qf). As we saw above, the singular form *a beer* contributes to make the sentence telic whereas the bare noun *beer* makes the sentence atelic. The telic role (Qt) says that the entity is consumed in a specific manner (i.e. drinking). *Beer* is 'brewed' as specified in Qa. Obviously, not all the qualia are always relevant in a specific sense enumeration so that not all the qualia specifications are always given in the representations.

(39) **beer** (x)

Qc: **liquid'** (x)
Qf: **food'** (x)
Qt: **do'**(y, [**drink'** (y, x)])CAUSE [BECOME**consumed'**(x)]
Qa: **do'**(y, [**brew'** (y, x)])CAUSE[BECOME**exist'**(x)]

We have seen some examples of qualia structure. What we need to describe the phenomenon of the antilocality in Japanese is the qualia structure of a person. What is the qualia structure of a person? I will propose the following entry for person, (40), in which the notions of Self and Subject, adopted from Lakoff (1996), are employed (see also Jackendoff 2002 on this issue). This is also a grossly simplified qualia structure.

(40) **person** (x)

Qc: **Self'**(x) ∧ **Subject'**(x)[19]
Qf: …
Qt: **do'**(x, […])[20]
Qa: …

---

this case, the choice is solely based on the speaker's construal of the object, which is a cognitive rather than linguistic issue.

[19] The symbol ("∧") indicates a simulatanesous change in RRG (VVLP1997: 109) when it is employed between different predicates. Here this indicates conjunction or unification. Namely, person consists of the two conjoined components, Subject and Self. Other empty qualia are left open for future study.

20 The telic quale is adopted from Van Valin (2004: 31). He explsins the effect of the representation as follows: "This means simply that humans act, do things, are potential actors. Given the presence of a humanreferent in the sentence in the position where actors occur, this means that there must be an activity predicate in the LS, and consequently the causative alternant must be selected."

Given the lexical entries of all the elements in the sentence, the unacceptability of *?Hanako ate beer*, repeated below as (41), follows from the mismatch of the qualia structures. The verbal qualia structure, QSv, requires the undergoer (y) to be an object that has the following quale: {Qc: ... **non-liquid'**(y), ...}. On the other hand, *beer* in (39) has the following quale: {Qc: **liquid'**(y), ...}. Obviously, the constitutive roles in the two lexical entries do not correspond to each other and result in an unintelligible sentence. In order to salvage this kind of conflict, some strategy such as so-called 'coercion' or 'accommodation' may be needed, if possible.

(41) ?Hanako ate a beer.

LS: [**do'**(Hanako {Qc: **Self'**(x) ∧ **Subject'**(x), …}, [**eat'**(Hanako {…}, beer{Qc: **liquid'** (y), Qf: **food'** (y), …})])] CAUSE [BECOME**consumed'**(beer{…})]

QSv: {Qc: **mouth'**(x)/**non-liquid'**(y), Qf: **animate'**(x)/**food'**(y), Qt: **exist.as.food'**(y), …}

In this section, an overview was given as to how semantically anomalous sentences can be explicitly ruled out based on the theory of qualia structure. In the next section, it will be shown that the antilocality effect can be accounted for in terms of the same mismatch of the qualia structures between the verbal requirement (i.e. selectional restriction) and the semantics of nouns.

4.4.3 Transitive semantic reflexive constructions in Japanese

One of the conclusions we drew in this chapter was that the 'antilocal' verbs require a noun that satisfies the selectional restriction of the verb irrespective of the construction type. Let me conclude this chapter by illustrating possible formal treatments for a transitive construction and a reflexive construction using the qualia structure introduced above.

The following in (42) are the qualia structures of the lexical entries used for the illustration

below: the verb *kiru* 'cut', a person noun, the reflexive *zibun* and a body-part noun (*yubi* 'finger' here).

(42) a. *kiru* 'cut'

LS: INGR[**do'**(x,[**cut'**(x, y)])]CAUSE[BECOME**be.cut'**(y)]
QSv: { Qc: **physical'**(y); … }

b. person: { Qc: **Subject'**(y) ∧ **Self'**(y); … }

c. *zibun* 'self': { Qc: **Subject > Self'**(y); … }

d. *yubi* 'finger':{ Qc: **physical'**(y); Qf: **body-part'**(y),… }

Regarding the entry of the verb, (42a), the most crucial semantic specification is the Qc of the undergoer argument (y): **physical'**. This means that the verb requires an NP whose Qc is specified for '**physical'**'. (42b) shows that human nouns have, as a part of Qc, the Self component in which physical body-parts are subsumed, but they are not exclusively specified for **physical'** in Qc. In (42c), the Subject-primacy of the reflexive *zibun* is represented by an inequality sign ("A > B" means that A is a more primary aspect than B). The primary Qc specification for *yubi* 'finger' is **physical'** as in (42d). Body-parts do not have any consciousness or a social role to play by themselves. They are primarily a thing. Therefore, the Qc specification in (42d), **physical'**, seems reasonable.

(43a) is an example of a transitive construction. The verb *kiru* 'cut' has a semantic requirement for Qc of the undergoer to be **physical'**; however, the undergoer in (43a) is a human noun, *Taroo*, whose Qc is not **physical'** as shown in (42b) or in the LS of (43a). The Japanese verb *kiru* 'cut' specifically requires its undergoer noun to be **physical'**. The unacceptability of the sentence is a natural result of this semantic mismatch in the qualia structures of LS and QSv.

(43) a. *Hanako-ga (naihu-de) Taroo-o kitta
Hanako-NOM (knife-INST) Taroo-ACC cut
'Hanako cut Taroo (with a knife).'

LS: INGR[**do'**(Hanako(x){Qc: **Subject'**(x) ∧ **Self'**(x);…},[**cut'**(Hanako{...}, Taroo(y) {Qc: **Subject'**(y) ∧ **Self'**(y),…})])]CAUSE[BECOME**be.cut'**(Taroo{...})]

QSv: {Qc: **physical'**(y), …}

(43b) is another example of a transitive construction, which is an acceptable counterpart of (43a). In this example, the head of the undergoer NP, *yubi* 'finger,' has a semantic specification required by the verb ({Qc: **physical'**}), by which a perfect sentence results.

b. Hanako-ga Taroo-no-yubi-o kitta
Hanako-NOM Taroo-GEN-finger-ACC cut
'Hanako cut Taroo's finger.'

LS: INGR[**do'**(Hanako(x){ Qc: **Subject'**(x) ∧ **Self'**(x), … }, [**cut'**(Hanako{ ... }, **have.as.part'** (Taroo { ... }, 'finger'(y){Qc: **physical'**(y), ... }))]) CAUSE [BECOME **be.cut'** (**have.as.part'** (Taroo{ ... }, 'finger'(y){Qc: **physical'**(y), ... }))]

QSv: {Qc: **physical'**(y), …}

The sentences in (44a) and (44b) are two syntactically possible sentences to depict a reflexive event. By the requirement of the verb, however, (44b) is the only acceptable form. The point is that exactly the same account for the above transitive construction applies to the difference in acceptability between the two reflexive sentences in (44). The reflexive *zibun* is assumed to be biased toward Subject so that it has no chance of being selected as an object noun of the verb *kiru* 'cut' except in a certain extremely coerced or a contrastive reading (neither of which are intended here).

(44) a. *Hanako-ga naihu-de { zibun/zibun.zisin }-o kitta
Hanako-NOM knife-INST { self/self.self }-ACC cut
'Hanako cut herself with a knife.'

LS: INGR[**do'**(Hanako(x){ Qc: **Subject'**(x)∧**Self'**(x),… },[**cut'**(Hanako{ ... },
'self'(y){Qc: **Subject>Self'**(y), …})])]CAUSE[BECOME**be.cut'** (self{ ... })]

QSv: { Qc: **physical'**(y), … }

b. Hanako-ga zibun-no-yubi-o kitta
Hanako-NOM self-GEN-finger-ACC cut
'Hanako cut her finger' (lit. 'Hanako cut self's finger')

LS: INGR[**do'**(Hanako(x){ Qc: **Subject'**(x)∧**Self'**(x),… },[**cut'**(Hanako{ ... },
have.as.part' ('self' { ... }, 'finger'(y){ Qc: **physical'**(y), …})])] CAUSE
[BECOME **be.cut'** (**have.as.part'**('self'{ ... }, 'finger'(y){Qc: **physical'**(y), ... }))]

QSv: { Qc: **physical'**(y), … }

The sentence in (45) is an example with a (non-perceptual) state predicate which freely allows the reflexive *zibun* to be its undergoer. As shown in QSv, the verb *semeru* 'blame' requires its undergoer to be a noun whose specification for Qc is Subject (cf. 32). The primary component of the reflexive *zibun* is Subject as demonstrated in the preceding section and represented as such in the LS; therefore, a perfect sentence results, as in (45).

(45) Hanako-ga zibun-o semeta
Hanako-NOM self-ACC blamed
'Hanako blamed herself.'

LS: **do'**(Hanako(x){ Qc: **Subject'**(x)∧**Self'**(x),… },[**blame'**(Hanako{ … },('self'(y){Qc:
Subject>Self'(y), …}))])

QSv: { Qc: **Subject'**(y), … }

In this section, a possible formal treatment of the 'antilocality' discussed in this chapter was proposed in terms of the qualia structure theory adopted in Role and Reference Grammar.

4.5 Concluding remarks

In this chapter, it was first shown that the antilocality effect of the Japanese reflexives has nothing to do with the lexical reflexivity. It was demonstrated that the antilocality of the Japanese reflexive is due to a peculiar subcategorization nature of the 'antilocal verbs'. That is, what we called 'antilocal verbs' do not allow metonymy and require NPs of certain meaning (quale). The behavior is not specific to reflexive constructions and, accordingly, there is no need to posit a constraint on the behavior of the reflexive itself.

Before closing the current chapter, two things must be noted. First, the current conclusion does not argue against the notion of lexical reflexivity the lexical reflexivity theorists have employed to account for the cross-linguistic data such as Dutch or Kannada. What has been demonstrated is that there is another source for the antilocality of the reflexive in human language that has not been examined in detail before. Second, an antilocal phenomenon highly similar to the one in Japanese has been found also in Samoan (Mosel 1991, Cook 1994). This fact suggests that the phenomenon is not language-specific but cross-linguistic. We need to investigate, however, whether the Samoan antilocality has exactly the same motivation as detected in Japanese in the current chapter.

Chapter 5 Reflexives II

5.1 Introduction

Reflexive constructions (RCs) have received much attention since the beginning of modern theoretical linguistics. However, as partly revealed in the discussion in the preceding chapter, the semantic aspects of RCs have been less discussed in the literature since it has been a central concern to look for universal syntactic conditions for reflexive binding (e.g. Chomsky 1981). RCs typically denote events in which only one entity is involved. It has been pointed out, however, that RCs do not always denote such a reflexive event where only one entity is involved. The following example (1), taken from Jackendoff (1992), cannot make any sense at first glance, but indeed (1) can be uttered to denote a non-reflexive event in which Ringo falls on the 'statue' of himself in a wax museum, for example.

(1) Ringo fell on himself.

On the other hand, there are RCs that do not allow such non-reflexive interpretation. Suppose there is a statue of Reagan in a wax museum. Then compare (2a) and (2b). (2a) never allows such a statue reading whereas (2b) allows the statue reading as well as the normal reflexive event reading (Lidz 2000).

(2) a. Reagan dressed in the museum.

b. Reagan dressed himself in the museum.

Lidz (2000, 2001) claims that there are two types of reflexives: pure-reflexives and near-reflexives. The former requires the reflexive to be referentially identical to the antecedent

whereas the latter does not. He claims that the difference comes from the lexical reflexivity of the verbs. That is, the verb of (2a) is lexically reflexive while that of (2b) is not. He concludes that there is a bidirectional relation between lexical reflexivity and pure-reflexive interpretation. He calls this principle "Condition R". To my knowledge, Lidz' theory has not been applied to Japanese. The relevant Japanese data were examined, but it turned out that some of the Japanese data do not follow Condition R.

The purpose of this chapter is two-fold. First, it will be demonstrated that Japanese lexical RCs show the behaviors expected from Condition R. This serves as further confirmation of the universality of the principle. Second, it will be shown, however, that the behaviors of syntactic RCs do not follow from it. It will be argued, following Liu (2003), that focus structure, as well as lexical reflexivity, can also yield the (unambiguous) pure-reflexive interpretation. It will be claimed that, accordingly, the current bidirectional relation of the lexicon-semantic correlation in Condition R should be weakened to a unidirectional one.

In section 5.2, the two types of reflexives and the principle, Condition R, will be further detailed. In section 5.3, the Japanese reflexives will be examined in terms of the principle and it will be shown that there are unexpected behaviors that do not follow from the principle. In section 5.4, a focus structure based account will be given. In section 5.4, concluding remarks will be made.

5.2 Two types of reflexives and lexical reflexivity

5.2.1 Pure-reflexives, near-reflexives and Condition R (Lidz 2000, 2001)

As briefly mentioned above, it has been observed that reflexives do not always refer to a reflexive event. This was extensively discussed in Jackendoff (1992). (1), repeated here as (3),

denotes a situation in which Ringo Starr is wandering in a wax museum and accidentally falls on his own statue. The event denoted is not reflexive in the canonical sense of the word since there are two distinct entities involved, i.e. a real person and his statue.

(3) Ringo fell on himself.

Lidz (2000, 2001) took Jackendoff's insight seriously and claims that there are referentially different two types of reflexives: those that require a complete identity with the antecedent and those that do not. He terms the former "pure-reflexive" and the latter "near-reflexive"[1]. Even when the referent of the reflexive is different from that of the antecedent, the entity that the near-reflexive refers to must have some identifiable association with the antecedent (e.g. statue or portrait). The difference between pure- and near-reflexives can be represented as follows:

(4) a. λ.x [P(x, x)] (Pure-reflexive)
b. λ.x [P(x, f(x))] (Near-reflexive)

Lidz further points out that the pure-reflexive reading is correlated with lexical reflexivity of predicates. As mentioned in the preceding chapter, the notion of lexical reflexivity was introduced in Reinhart and Reuland (1993; R&R hereafter) to account for the antilocality phenomena observed in some languages in which reflexives cannot be locally bound. It is argued that, in Dutch, the verb in (5a), *haat* 'hate', is not lexically reflexive so that the simple reflexive does not suffice and the complex form must be employed as in (5b). On the other hand, the verb in (6) is inherently lexically reflexive so that the simple reflexive is enough.

[1] Safir (2004) calls this type of meaning "proxy reading".

(5) a. *Max haat zich
Max hates self
'Max hates himself.'

b. Max haat zichzelf
Max hates selfself
'Max hates himself.'

(6) Max wast zich
Max washes self
'Max washes himself.'

Thus, incorporating both Jackendoff's and R&R's insights, Lidz proposes his own theory of reflexivity in which semantic reflexivity and lexical reflexivity have a bidirectional relation to each other. The following is the principle he calls Condition R:

(7) Condition R: $\lambda x[P(x, x)] \leftrightarrow (\theta 1=\theta 2)$
semantics theta-grid

The condition on the left is the semantic representation and the condition on the right is the lexical specification. This states that if a predicate is semantically reflexive (i.e. pure-reflexive), it is lexically reflexive and vice versa. In other words, what Condition R states is that true (pure) reflexivity is guaranteed through lexical reflexivity. As a consequence, when this condition is not met, near-reflexive readings such as the statue reading are expected to be available.

Condition R is a semantic condition which does not refer to any morphosyntactic realization of the lexical reflexivity. There are two realization patterns attested: a morphologically covert type and an overt type. The Dutch example (6) is an example in which lexical reflexivity is sublexically expressed (i.e. morphologically covert). There are languages that have morphologically-overt marking on the predicate. See the Kannada examples in (10) below for this morphologically overt type.

There are two predictions Condition R can make. First, if the predicate is lexically reflexive, whether it is realized sublexically or morphologically, only the pure-reflexive interpretation should be available. This expectation is born out as in (2), repeated below as (8).

(8) a. Reagan dressed in the museum. (Reagan / *statue)

b. Reagan dressed himself in the museum. (Reagan / statue)

The assumption here is that the lexical entries of the verbs used in (8a) and (8b) are lexically reflexive and non-reflexive respectively (the same logic for the Dutch examples 5 and 6 above). As expected, the sentence with a lexically reflexive predicate, (8a), does not allow any near-reflexive (i.e. statue) reading while the one with a lexically non-reflexive predicate, (8b), allows such a reading.

Second, if the predicate is lexically reflexive, only the sloppy reading should be available in the comparative ellipsis construction[2] since the second argument in the semantic representation of Condition R is a bound variable. Otherwise, both sloppy and strict readings should be available. This expectation is also born out as illustrated in (9a) and (9b).

(9) a. Reagan dresses faster than his nurse does.
'Reagan dresses himself faster than his nurse dresses herself.' (sloppy)
'*Reagan dresses himself faster than his nurse dresses him.' (*strict)

b. Reagan dresses himself faster than his nurse does.
'Reagan dresses himself faster than his nurse dresses herself.' (sloppy)
'Reagan dresses himself faster than his nurse dresses him.' (strict)

In the case of the languages that do not have overt morphological marking, it is difficult to see if the predicate is lexically reflexive or not, but it is possible to use (at least) these two as

2 Lidz (2000, 2001) calls the construction comparative 'deletion', but I will call it a comparative 'ellipsis' construction following the distinction made in Hoji (1998). Both 'deletion' and 'ellipsis' will be used as diagnostic tests below. The distinction will be made clear below.

diagnostic tests for the lexical reflexivity to some extent[3].

5.2.2 Three patterns in lexical reflexivity

Cross-linguistically, three patterns are expected to exist for lexical reflexivity: (1) all the verbs are (potentially) lexically reflexive (2) only a subset of the verbs is lexically reflexive (3) there is no lexical reflexivity. According to Lidz (2000, 2001), Kannada, Dutch and Malayalam represent each of these. After looking at the three languages, the lexical reflexivity of Japanese will be introduced as a mix of 2 and 3.

Kannada is a language that has a morphologically overt reflexive-marking on the predicates (Lidz 2000, 2001). When the predicate is morphologically reflexive-marked, it is lexically reflexive and therefore only the pure-reflexive interpretation is expected. This expectation is born out as shown in (10a).

(10) a. Hari tann-annu nooDi-du-koND-a
Hari self-ACC see-PP-REFL.PST-3SM
'Hari saw himself.' (= reflection, *statue)

(10b) and (10c) show that, without this reflexive affix, the predicate is non-reflexive and the simple reflexive pronoun does not suffice to form an acceptable sentence. The predicate in (10c), which is the same as (10b), is not lexically reflexive so that the near-reflexive interpretation is available.

[3] Readers should be aware of the circularity in the arguments. Although I do not pursue this problem any further here, a comment is in order. In order for the Condition R to work, we need to know somehow if a predicate is lexically reflexive or not independently of the two phenomena (the availability of the statue reading and the sloppy reading). When a language has a reflexive morpheme attached on a predicate stem (e.g. Kannada; see below), it is obvious that the predicate is (lexically) reflexive. But in the case of languages without such a morpheme (e.g. Dutch), it is hard to see. R&R (1993) suggests a 'nominalization test' for the lexical reflexivity of the Dutch predicates, but the efficacy of the test is far from convincing. If we use the availability of the statue reading and the sloppiness as the diagnostic tests for lexical reflexivity, we are led to wrong conclusions since, as will be discussed later, Chinese and Japanese produce the unambiguous pure-reflexive interpretation without a lexically reflexive predicate.

b. *Hari tann-annu nooD-id-a
Hari self-ACC see-PST-3SM
'Hari saw himself.'

c. Hari tann-annu-taane nooD-id-a
Hari self-ACC-self see-PST-3SM
'Hari saw himself.' (= reflection or statue)

According to Lidz, Kannada can lexically reflexivize any predicates by attaching the reflexive morpheme. Thus Kannada represents the type of language in which the predicates are (potentially) all lexically reflexive.

As we already saw, the lexical reflexivity is morphologically covert in Dutch and it can be inferred only through the possible semantic interpretation and the syntactic behaviors. It has been assumed in the literature (e.g. R&R 1993, Lidz 2000, 2001) that some verbs, especially introverted ones such as 'shave' or 'wash', have two lexical entries, one of which is lexically reflexive[4]. The acceptability of (11a) in which the simplex reflexive is used suggests that the predicate be lexically reflexive. As expected, the statue reading is not available. On the other hand, the complex reflexive form employed in (11b) indicates that the underlying lexical entry of the predicate is lexically non-reflexive. The near-reflexive interpretation (i.e. statue reading) is possible.

(11) a. Ringo scheert zich
Ringo shaves self
'Ringo shaves.' (*Near-reflexive)

b. Ringo scheert zich-zelf
Ringo shaves self-self
'Ringo shaves himself.' (ok Near-reflexive)

[4] Haiman (1983) defines the actions which one generally performs upon one's self as 'introverted' and the actions which the subject usually performs toward others as 'extroverted.' The following pair represents each type respectively. Although both of the verbs are transitive, the possibility of the omission of the reflexive pronoun is an indicator of the distinction.
i. Max washed (himself).
ii. Max kicked himself.

In the comparative ellipsis construction, the same expectation is born out. When the simple reflexive is employed in the construction, only the sloppy reading is available. If the complex form is used, both sloppy and strict readings are possible since the lexical entry of the verb is not lexically reflexive. Compare (12a) and (12b).

(12) a. Zij verdedigde zich beter dan Peter
She defended self better than Peter
'She defended herself better than Peter defended himself.' (sloppy)
'*She defended herself better than Peter defended her.' (*strict)

b. Zij verdedigde zichzelf beter dan Peter
She defended self-self better than Peter
'She defended herself better than Peter defended himself.' (sloppy)
‘She defended herself better than Peter defended her.' (strict)

In Dutch, only a subset of all the verbs, especially introverted verbs such as ‘shave’, has two lexical entries, one of which is lexical reflexives. Thus, Dutch represents the type of language in which only a subset of predicates are lexically reflexive.

Malayalam is claimed to have no lexical reflexivity. In Malayalam, the predicates which are lexically reflexive in other languages are not lexically reflexive as in (13). For example, introverted verbs such as ‘shave’ are lexically reflexive in many languages and it is expected that the simple reflexive suffices for such a lexically reflexive verb. This expectation is not born out in Malayalam as in (13a) and the complex form needs to be employed as in (13b). Furthermore, if the verb is not lexically reflexive, the near-reflexive interpretation should be available. This expectation is born out for (13b).

(13) a. *Raaman tan-ne kshauram ceytu
Raaman self-ACC shaving did
‘Raaman shaved.’

b. Raaman tan-ne-tanne kshauram ceytu
Raaman self-ACC-self shaving did
‘Raaman shaved himself.’

Although the data are somewhat limited, Lidz (2000) has concluded that Malayalam is the language that does not have any lexical reflexivity.

The following basic assumptions of this chapter were laid out in this section: the distinction between pure- and near-reflexives, Condition R, the notion of lexical reflexivity and the cross-linguistic variation of lexical reflexivity.

5.3 Reflexives in Japanese

Let us turn to our primary concern, the RCs in Japanese. Both lexical and syntactic reflexives in Japanese are discussed in order. In 5.3.1, it will be shown that the Japanese lexical RCs follow the principle of Condition R. This will serve as further confirmation of the universality of the principle. In 5.3.2, before examining the syntactic reflexives, it will be argued that the Japanese verbs used in the syntactic RCs are not lexically reflexive. In 5.3.3, it will be demonstrated that the Japanese syntactic RCs produce unambiguous pure-reflexive interpretations despite the non-reflexive nature of the predicate.

5.3.1 Reflexivity of lexical reflexives

There are lexically reflexive predicates in Japanese; however, they have been less discussed than the syntactic RCs. Tsujimura and Aikawa (1999) is one of the few previous studies. The lexically reflexive predicates are morphologically reflexive-marked like Kannada. (14) is an example.

(14) Hanako-wa tachiba-no-juuyoosee-o **zi**-kaku-siteiru
Hanako-TOP position-GEN-importance-ACC self-conscious-be.doing
'Hanako is aware of the importance of her position.'

The process is not productive at all unlike Kannada (somewhat idiosyncratic) and they are a small subset of the entire class of predicates like Dutch. Thus Japanese lexical reflexives are a mixed category (category 2 and 3) in terms of the classifications give in the previous section.

Although the morphological marking of reflexivity is not productive, there are a sizable number of such predicates[5]. In my corpus, there are two major groups: *zi*-verbs and *ziko*-verbs. The initial morphemes, *zi*- and *ziko*-, both mean 'self'. (15a) and (15b) are examples of each form.

(15) a. Taroo-ga **zi**-shuu-shita
Taroo-NOM self-learning-did
'Taroo studied by himself.'

b. Taroo-ga **ziko**-hasan-shita
Taroo-NOM self-bankruptcy-did
'Taroo became bankrupt.'

Zi-verbs are formed by attaching the bound morpheme *zi*- 'self' to another bound morpheme stem (compare 16a and 16b). As noted in Tsujimura and Aikawa (1999), *zi*-verbs can be further grouped into two types: an unaccusative type and an inalienable type[6]. There is a clear syntactic difference between them. The unaccusative type does not have any linguistic element other than 'subject' and verb. They are clearly intransitive. This is shown in (16c).

(16) a. Taroo-ga zi-ritsu-shita
Taroo-Nom self-stand-did
'Taroo became independent.'

b. *Taroo-ga ritsu-shita
Taroo-Nom stand-did
'???'

[5] In my last count, there are 29 *zi*-verbs and 64 *ziko*-verbs in my corpus. In addition to these two major groups, there are idiosyncratic, in terms of the number of tokens, self-forms such as *doku*- (*doku-gaku* 'self-study'), but these mean 'alone' or 'by oneself'.

[6] The distinction is not relevant to the current discussion, so it will not be detailed here. See Tsujimura and Aikawa (1999) for their observations for the distinction.

c. *Taroo-ga shigoto/kazoku-o zi-ritsu-shita
Taroo-Nom career/family-Acc self-stand-did
'(lit.) Taroo self-established his career/family.'

On the other hand, the inalienable type does take an object-like element as in (17a). The element is semantically bound by the reflexive morpheme whose original antecedent is the 'subject'. An entity that has no semantic/associative relation to the binder ('subject') cannot appear. As in (17b), for example, the crime must be the one committed by the subject, *Taroo*, or the one *Taroo* is somehow involved in.

(17) a. Taroo-ga hankoo-o zi-kyoo-shita
Taroo-NOM crime-ACC self-offer-did
'Taroo confessed his crime.'

b. *Taroo-ga Ken-no-hankoo-o zi-kyoo-shita
Taroo-NOM Ken-GEN-crime-ACC self-offer-did
'Taroo confessed Ken's crime.'

The inalienable type seems to have transitive structure, but it is not correct. The unacceptability of (17c) shows that the accusative-marked element is not a canonical 'object' (i.e. undergoer).

c. *Hankoo-ga Taroo-{ ni/niyotte } zi-kyoo-s-are-ta
crime-NOM Taroo-{ by/by } self-offer-do-pass-PST
'The crime was confessed by Taroo.'

The intransitive (or reflexive) nature of the inalienable type can be further diagnosed as follows. An adversative passive in Japanese which is formed from an intransitive predicate such as 'dance' produces ambiguity in reflexive binding as shown in (17d) (cf. Kuno 1973a). It should be noted, however, that this expectation is not born out for an adversative passive derived from an inalienable type verb. As indicated in the translation in (17e), the crime cannot be

Hanako's own crime in which Taroo is not involved. The crime must be the one which Taroo committed by himself or Taroo is somehow involved in. This seems to be another piece of evidence for the intransitive (or reflexive) nature of the predicate type in question.

d. Hanako-ga Taroo-ni zibun-no-ie-de odorareta
Hanako-nom Taroo-dat self-gen-house-loc be.danced.pst
'Hanako$_i$ was affected by Taroo's$_j$ dancing at self's$_{i/j}$ house.'

e. Hanako-ga Taroo-ni hankoo-o zi-kyoo-s-are-ta
Hanako$_i$-NOM Taroo$_j$-dat crime-ACC self$^{*i/ij/j}$-offer-do-pass-pst
'Hanako was affected by Taroo's confessing his/their/*her crime.'

There is another set of lexically reflexive predicates in which another 'self' form, *ziko-* is attached to form a complex nominal. The difference from the previous group, *zi*-verbs, is that, in order to form the complex reflexive nominal, the morpheme *ziko-* is attached to a free stem. Compare (18a) and (18b). The construction can take an object-like NP in some cases, but it has to have a semantic (associative) relation with the original binder ('subject') like the inalienable *zi*-verbs above. Compare (18c) and (18d).

(18) a. Taroo-ga ziko-bengo-shita
Taroo-NOM self-defense-did
'Taroo self-defended himself.'

b. Taroo-ga zibun(-zisin)-o bengo-shita
Taroo-NOM self(-self)-ACC defense-did
'Taroo defended himself.'

c. Taroo-ga sooryoo-o ziko-hutan-shita
Taroo-NOM shipping-ACC self-charge-did
'Taroo paid the shipping on his own.'

d. *Taroo-ga Hanako-o ziko-bengo-shita
Taroo-NOM Hanako-ACC self-defense-did
'Taroo self-defended Hanako.'

There are many properties common among the different *zi(ko)*-verbs. Lexical reflexives

are always locally bound and long-distance binding is not possible as in (19a) and (20a). The examples in (19b) and (20b) further demonstrate that this locality is seen irrespective of the juncture type. (19a) and (20a) are clausal juncture while (19b) and (20b) are core juncture. A primary operator for the distinction between clause and core is whether the juncture is tensed or not (See Chapter 2). In (19a) and (20a), past tense is used so that the juncture is clearly clausal whereas in (19b) and (20b) past tense cannot be used indicating the juncture is not clausal (i.e. core).

(19) a. Hanako$_i$-wa [Taroo$_j$-ga zi-ritsu$^{*i/j}$-shita]-to omotteita
Hanako-TOP Taroo-Nom self-stand-did -Cto thought
'Hanako thought that Taroo established himself/*her.'

b. Hanako$_i$-wa Taroo$_j$-ni zi-ritsu$^{*i/j}$-suru-yoo(ni) susumeta
Hanako-TOP Taroo-DAT self-stand-do-Cyoo(ni) recommended
'Hanako recommended Taroo to establish himself/*her.'

(20) a. Hanako$_i$-wa [Taroo$_j$-ga ziko-bengo$^{*i/j}$-shita]-to omotteita
Hanako-TOP Taroo-NOM self-defense-did -Cto thought
'Hanako thought that Taroo self-defended himself/*her.'

b. Hanako$_i$-wa Taroo$_j$-ni ziko-bengo$^{*i/j}$-suru-yoo(ni) susumeta
Hanako-TOP Taroo-DAT self-defense-do-Cyoo(ni) recommended
'Hanako recommended Taroo to self-defend himself/*her.'

Another characteristic is that they do not take another additional reflexive element as in (21a) and (21b) although *ziko*-verbs seem to marginally allow a reflexive as in (21c). This is a notable difference from the lexical reflexives in Kannada or Dutch[7].

(21) a. *Taroo-ga zibun(-zisin)-o zi-ritsu-shita
Taroo-NOM self(-self)-ACC self-establishment-did
'(lit.) Taroo self-established himself.'

b. *Taroo-ga zibun(-zisin) o zi-kyoo-shita
Taroo-NOM self(-self)-ACC self-offer-did
'(lit.) Taroo self-confessed himself.'

[7] I do not pursue this issue here, but this difference may be indicating a fundamental difference in self-forms between the two languages (Dutch and Kannada) and Japanese.

c. ?Taroo-ga zibun(-zisin)-o ziko-bengo-shita
Taroo-NOM self(-self)-ACC self-defense-did
'(lit.) Taroo self-defended himself.'

Now let us examine the behaviors of the Japanese lexical reflexives in terms of Condition R. A predicate that denotes physical activity is generally used to test whether a near-reflexive reading such as the statue reading is available or not, but unfortunately it seems there are no such predicates in *zi(ko)*-verbs. All the *zi(ko)*-verbs denote more or less abstract events. We will examine the availability of the sloppy and strict readings in elliptical constructions. In addition to the comparative ellipsis construction used in the previous literature, the comparative deletion construction and the null object construction (NOC) will be employed as additional diagnostic tests.

There are two types of comparative constructions in Japanese (Hoji 1998): comparative 'ellipsis' and comparative 'deletion'. In the former there appears only one argument ('subject') in the elided subordinate juncture while the latter has the same verb as well as the 'subject' also in the elided juncture. (22) and (23) are examples of comparative ellipsis and comparative deletion respectively. The square brackets in the examples are intended to show the difference.

(22) Comparative ellipsis

Taroo-ga	[Hanako-yori]	hayaku	zibun-no-tomodachi-o	suisenshita
Taroo-NOM	Hanako-than	soon	self-GEN-friend-ACC	recommended

a. (sloppy)
'Taroo recommended his friend sooner than Hanako recommended her friend.'
b. (*?strict)
'*?Taroo recommended his friend sooner than Hanako recommended his friend.'

(23) Comparative deletion

Taroo-ga	[Hanako-ga	suisensuru-yori]	hayaku	zibun-no-tomodachi-o	
Taroo-NOM	Hanako-NOM	recommend-than	soon	self-GEN-friend-ACC	
suisenshita					
recommended					

a. (*?sloppy)
'*?Taroo recommended his friend sooner than Hanako recommended her friend.'
b. (strict)
'Taroo recommended his friend sooner than Hanako recommended his friend.'

It is observed in Hoji (1998) that the sloppy reading is more readily available in the comparative ellipsis construction while the strict reading is preferred over the sloppy reading in the comparative deletion construction. In the examples above, (22a) and (23a) are sloppy readings while (22b) and (23b) are strict readings.

First, comparative ellipsis will be examined. As observed in section 2, it has been cross-linguistically attested that lexical reflexives produce only the sloppy reading in comparative constructions[8]. Recall that generally the Japanese comparative ellipsis allows the sloppy reading more readily than the strict one; therefore, with these two (language-specific and cross-linguistic) factors combined, only the sloppy reading should be available. This expectation is born out.

(24)

Taroo-ga	Hanako-yori	hayaku	hankoo-o	**zi**-kyoo-shita
Taroo-NOM	Hanako-than	soon	crime-ACC	self-offer-did

'Taroo confessed his crime sooner than Hanako'
a. 'Taroo confessed his own crime sooner than Hanako confessed her own crime.'
b. '*Taroo confessed his own crime sooner than Hanako confessed his crime.'

(25)

Taroo-ga	Hanako-yori	ooku	sooryoo-o	**ziko**-hutan-shita
Taroo-NOM	Hanako-than	much	shipping-ACC	self-charge-did

'Taroo paid the shipping on his own'
a. 'Taroo paid more for his shipping than Hanako paid for hers.'
b. '*Taroo paid more for his shipping than Hanako paid for Taroo's.'

[8] The comparative construction used in Lidz' papers is the comparative 'ellipsis' construction in our term although he calls it comparative 'deletion'.

For (24), suppose that Taroo and Hanako committed different crimes individually and they know about each other's crimes. That is, (24) means that Taroo was less tenacious than Hanako in the police station. The crime Taroo confessed must be his and the one Hanako confessed must be hers. There is no interpretive possibility that Hanako confessed Taroo's crime. Thus, the strict interpretation, (24b), is unavailable. For (25), imagine a situation like Taroo and Hanako living in the same area, buying the same item individually from the same seller and somehow Taroo had to pay more for the shipping due to the seller's miscalculation. Again only the sloppy reading is available. It is possible for both (24) and (25) to have the split antecedent interpretation in which both of them committed the same crime together in (24) or bought the same item together in (25); however, that is not the reading intended to be examined here.

Next, the comparative deletion construction will be examined. Hoji (1998: 135) demonstrates that the Japanese comparative deletion construction does not allow the sloppy reading in general and the strict reading is preferred over the sloppy reading when both are available. Given the semantic reflexive nature of the lexical reflexives, it is expected that the lexical reflexives should produce the sloppy reading despite the general preference for the strict reading. This expectation is born out. Imagine the same contexts as above for comparative ellipsis construction

(26) Taroo-ga Hanako-ga zi-kyoo-suru-yori hayaku hankoo-o
Taroo-NOM Hanako-NOM self-offer-do-than soon crime-ACC
zi-kyoo-shita
self-offer-did
'Taroo confessed his crime sooner than Hanako.'

a. (sloppy)
'Taroo confessed his own crime sooner than Hanako confessed her own crime.'
b. (*strict)
'*Taroo confessed his own crime sooner than Hanako confessed his crime.'

(27) Taroo-ga Hanako-ga ziko-hutan-suru-yori ooku sooryoo-o
Taroo-NOM Hanako-NOM self-charge-do-than much shipping-ACC
ziko-hutan-shita
self-charge-did
'Taroo paid the shipping on his own more than Hanako.'

a. (sloppy)
'Taroo paid more for his shipping than Hanako paid for hers.'
b. (*strict)
'*Taroo paid more for his shipping than Hanako paid for Taroo's.'

The null object construction (NOC) can be also used to show the reflexivity of the *zi(ko)*-verbs[9]. (28) is an example of the construction. As shown in (28), both sloppy and strict readings are available in some cases (Otani and Whitman 1991).

(28) John-wa zibun-no-tegami-o suteta.
John-TOP self-GEN-letter-ACC discarded
'John discarded self's letter.'

Mary-mo [e] suteta.
Mary-also discarded
a. 'Mary$_i$ also threw out self's$_i$ letters.'
b. 'Mary also threw out John's letters.'

But more generally, the strict reading tends to be preferred over the sloppy reading just as in the comparative deletion construction. Hoji (1998) points out that in many cases, the NOC allows the strict reading only as in (29b).

(29) a. John$_i$-wa zibun(-zisin)$_i$-o nagusameta.
John-TOP self(-self)-ACC consoled
'John$_i$ consoled himself$_i$.'

b. Bill$_j$-mo [ ] nagusameta.
Bill-also consoled
'Bill$_j$ consoled him$_i$/*himself$_j$ too.'

[9] As Hoji (1998) says, comparative deletion and NOC are expected to show the same behavior since the comparative deletion is a construction which 'embeds' NOC in the subordinate (comparative) juncture. In other words, the difference between comparative deletion and NOC is that the null element of the former is at intra-sentential position while that of the latter at inter-sentential position. However, there is also a difference. NOC has a focus particle (*mo* 'also') in the second sentence which comparative deletion does not have.

Thus NOC provides another robust diagnostic test to show the bound variable nature of the lexical reflexive construction. (30) and (31) show that the strict reading is blocked for *zi(ko)*-verbs, as expected.

(30) a. Taroo-ga hankoo-o **zi**-kyoo-shita
Taroo-NOM crime-ACC self-offer-did
'Taroo confessed his crime.'

b. Hanako-mo [ ] **zi**-kyoo-shita
Hanako-also self-offer-did
= 'Hanako confessed her own crime.' (sloppy)
= '*Hanako confessed Taroo's crime.' (*strict)

(31) a. Taroo-ga sooryoo-o **ziko**-hutan-shita
Taroo-NOM shipping-ACC self-charge-did
'Taroo paid the shipping on his own.'

b. Hanako-mo [ ] **ziko**-hutan-shita
Hanako-also self-charge-did
= 'Hanako paid the shipping on her own.' (sloppy)
= '*Hanako paid the shipping for Taroo.' (*strict)

In this section, it was observed that, with the Japanese lexical reflexives, only the bound variable (i.e. pure-reflexive) interpretation is possible under any elliptical constructions examined. The fact that the Japanese lexical reflexives behave as expected from the Lidz' proposal, Condition R, is further support for the universality of the principle.

However, many other regular predicates in Japanese can not be morphologically reflexive-marked and do not seem to have any properties of lexical reflexivity. Nonetheless, syntactic reflexives in Japanese (i.e. regular verb + reflexive) produce the pure reflexive interpretation as we will see below. Before looking at the unexpected behaviors of the syntactic reflexives, it will be argued in the next section that the morphologically unmarked regular predicates are neither lexically reflexive nor do they have an underlying lexical entry for lexical reflexivity.

5.3.2 Lexically non-reflexive verbs

In the previous section, it was shown that the lexical reflexives in Japanese share the distributional property of Dutch (a subset of the lexicon) and the morphological property of Kannada (morphologically overt marking on the verb). Then, given the cross-linguistic variation on lexical reflexivity (section 5.2), what about other regular verbs that are not morphologically reflexive-marked? I argue that they have only one lexical entry which is lexically non-reflexive like Malayalam.

First, I will illustrate how the Japanese introverted verb 'shave' works in the reflexive context. Second, it will be shown that extroverted verbs work exactly in the same way as the introverted verbs. The observation suggests that the introvertedness does not constitute one of the semantic features the organization of the lexicon hinges upon in the language and that there is only one lexical entry for the regular verbs irrespective of (non)reflexivity they denote.

The 'shave' verb in Japanese does not take the simple reflexive *zibun* 'self'. This is illustrated in (32). At a glance, this is similar to the Malayalam case (see 13) and looks like the so-called antilocality in which a reflexive pronoun cannot be locally bound (see 5 for the Dutch case).

(32) a. *Taroo-ga zibun-o sotta
Taroo-NOM self-ACC shaved
'(int.) Taroo shaved himself.'

What is expected from the previous data (e.g. Malayalam and Dutch), is that the complex form can solve this type of constraint. What is interesting in Japanese is, however, that the complex form zibun-zisin 'self-self' can not serve either as the locally bound pronoun as demonstrated in (32b). This is unexpected from the entire discussion above. Instead, an NP

that denotes the exact body-part to be shaved has to be specified as object as in (32c)[10].

b. *Taroo-ga zibun-zisin-o sotta
Taroo-NOM self-self-ACC shaved
'(int.) Taroo shaved himself.'
c. Taroo-ga hige-o sotta
Taroo-NOM beard-ACC shaved
'(lit.) Taroo shaved beard.'

The following, (33), is another example that shows the relevant point. The verb, *kiru* 'cut', is generally not regarded as an introverted verb.

(33) Hanako-ga daidokoro-de { *zibun/*zibun-zisin/yubi }-o kitta
Hanako-NOM kitchen-LOC { self/self-self/finger }-ACC cut
'(lit.) Hanako cut { self/self-self/finger } in the kitchen'

Thus, the seeming antilocal constraint on the reflexive pronouns has nothing to do with the introvertedness (i.e. reflexivity) of the event the verb denotes. Rather it can be hypothesized that the verb has peculiar selectional restriction in which it simply requires an object NP that denotes the locale the event takes place. This prediction can be demonstrated to be true by comparing the above reflexive sentences with transitive ones.

If the above prediction is correct, the verb should require the same NP in transitive constructions as well. Indeed, this expectation is born out. The sentences in (34) are both transitive constructions in which two separate entities are involved. As expected, the verb requires an NP that denotes the locale where the event takes place as in the reflexive construction (compare 32c and 34b). The contrast between (34a) and (34b) shows that the

[10] As in (i) below, the possessor can be specified by the reflexive pronoun, but it is generally unexpressed and is pragmatically controlled.

(i) Taroo-ga zibun(-zisin)-no-hige-o sotta
Taroo-NOM self(-self)-GEN-beard-ACC shaved
'Taroo shaved his own beard.'

seeming antilocality is not due to the constraint on the reflexive pronouns but due to the language-specific selectional restriction of the verbs[11].

(34) a. *Taroo-ga Ken-o sotta
Taroo-NOM Ken-ACC shaved
'(int.) Taroo shaved Ken.'

b. Taroo-ga Ken-no-{ hige/atama/kao }-o sotta
Taroo-NOM Ken-GEN-{ beard/head/face }-ACC shaved
'Taroo shaved Ken's { beard/head/face }.'

Given the above observation that the verbs require the same type of noun as object irrespective of the introvertedness or the transitivity/reflexivity of the construction, it seems reasonable to assume that the verbs that do not have any morphological reflexive-marking have only one lexical entry of the same type (irrespective of the introvertedness or the transitivity/reflexivity). When there is only one lexical entry, it must be transitive (i.e. lexically non-reflexive) because it is conceivable to derive reflexives from transitive verbs, but not vice versa (cf. Sells et al. 1987).

Now we are ready to turn to our primary concern, the behaviors of the Japanese syntactic reflexives. What we can predict based on the entire discussion so far, especially the lexical non-reflexiveness of the predicates, is that they should produce both statue reading and sloppy/strict ambiguity. In the next section, however, it will be shown this is not born out.

5.3.3 Syntactic reflexives

As is well-known, there are three major reflexive forms in Japanese, *zibun* 'self', *zisin* 'self', and the combination thereof, *zibun-zisin* 'self-self.' As shown in (35), any of the three forms can

[11] The verbs that denote physical activities, especially those that involve change of state, show this peculiarity in a very consistent manner. See Chapter 4 for more details on this.

be used at the preverbal 'object' position.

(35) Hanako-wa { zibun/zisin/zibun-zisin }-o hazita/semeta
Hanako-TOP { self/self/self-self }-ACC ashamed/blamed
'Hanako is ashamed of/blamed herself.'

It was argued in the previous section that there is good reason to assume that the Japanese verbs that are not morphologically reflexive-marked do not have a lexical entry for lexical reflexivity. Given the lexically non-reflexive entry of the verb, Condition R expects the reflexives to produce both the pure-reflexive and the near-reflexive readings.

First, it will be examined if the so-called 'statue' reading is available or not for the syntactic reflexives. Given the lexically non-reflexive nature of the predicate, the Japanese syntactic reflexives are expected to allow the near-reflexive (e.g. statue) interpretations. Furthermore, the interpretation should be obtained irrespective of the morphological complexity of the reflexive forms since Condition R does not make reference to the morphological complexity of reflexive forms (recall the example in 13b from Malayalam). As shown in (36), these expectations are not born out, however.

(36) a. Koizumi-shushoo-ga zibun-ni sawatta (actual person/*?statue)
Koizumi-PM-NOM self-DAT touched
'The prime minister Koizumi touched himself.'

b. Koizumi-shushoo-ga zibun-zisin-ni sawatta (actual person/*statue)
Koizumi-PM-NOM self-self-DAT touched
'The prime minister Koizumi touched himself.'

Assume the same context as the Ringo sentence. The Prime Minister Koizumi is wandering in a wax museum and finds his statue. Even though the reflexive in (36a) could be used to refer to the statue of the prime minister, the acceptability would be highly marginal and

there is some speaker variation on the judgment. The near-reflexive (statue) interpretation is just not available for the complex form, (36b). Generally, the Japanese contact verbs such as *sawaru* 'touch', which do not denote change of state, can take a reflexive pronoun as object so that the unacceptability cannot be ascribed to the selectional restriction discussed in the previous section (although I admit this is still an arguable point).

There are two unexpected behaviors here. First, given that Condition R guarantees the 'unambiguous' pure-reflexive reading only through lexical reflexivity, it is unexpected that only the pure-reflexive interpretation is 'unambiguously' available in (36) despite the absence of lexically reflexive predicate. Second, the difference in the acceptability between the two reflexive forms is unexpected since Condition R does not make any reference to morphology, namely the morphological complexity of the reflexive forms.

More compelling data can be given in the comparative constructions. Condition R expects that both strict and sloppy interpretations should be available for the comparative ellipsis construction because the predicate is not lexically reflexive; however, this expectation is not born out. Here again, only the sloppy (i.e. pure-reflexive) interpretation is 'unambiguously' produced without a lexically reflexive predicate as in (37a) (cf. Sells et al. 1987). This is contrary to what Condition R predicts. (37b) further shows that the sloppy reading is obtained irrespective of the complexity of the reflexive forms. Thus Condition R clearly fails to account for the behaviors of the Japanese syntactic reflexives in this case.

(37) a. Taroo$_i$-wa Jiroo$_j$-yori umaku zibun-o bengo-shita
Taroo-TOP Jiroo-than well self-ACC defense-did
'Taroo$_i$ defended himself$_i$ better than Jiroo$_j$ defended himself$_j$.' (sloppy)
'*Taroo$_i$ defended himself$_i$ better than Jiroo$_j$ defended him$_i$.' (*strict)

b. Taroo$_i$-wa Jiroo$_j$-yori umaku zibun-zisin-o bengo-shita
Taroo-TOP Jiroo-than well self-self-ACC defense-did
'Taroo$_i$ defended himself$_i$ better than Jiroo$_j$ defended himself$_j$.' (sloppy)
'*Taroo$_i$ defended himself$_i$ better than Jiroo$_j$ defended him$_i$.' (*strict)

It should be noted that Condition R does not make any prediction on lexically non-reflexive predicates since the principle simply regulates the bidirectional relation between lexical reflexivity and semantic reflexivity. On the other hand, however, the principle implies that the ambiguity between the pure- and near-reflexive readings freely arises in the absence of lexical reflexivity because there is no system to regulate the interpretive possibilities of lexically non-reflexive predicates.

In this section, it was demonstrated that the Japanese syntactic reflexives produce the pure-reflexive interpretation 'unambiguously' without lexical reflexivity. This means that there is another way, other than lexical reflexivity, to achieve semantic reflexivity. In other words, the pure-reflexive interpretation does not guarantee the predicate is lexically reflexive. Accordingly, the current bidirectional relation in Condition R should be weakened to a unidirectional one (i.e. lexical reflexive → pure-reflexive). The unidirectional relation reads: when the predicate is lexically reflexive, only the pure-reflexive interpretation is unambiguously available, but not vice versa.

There are two questions to be answered: (1) why do the Japanese syntactic reflexives yield only a pure-reflexive interpretation unambiguously despite the absence of a lexically non-reflexive predicate and, (2) why does the difference in the morphological complexity of the reflexive forms affect the judgment in some cases.

As we saw, some of the data show acceptability variation. This implies that the phenomena at issue are pragmatic in nature rather than lexical or semantic. In what follows, it will be argued, in the spirit of Liu (2003), that the interpretations obtained are a consequence of the interaction of focus structures.

5.4 Focus

In the remainder of the chapter, I argue that two types of focus structures are involved in the phenomena: focus by intensifier and focus by construction. They will be discussed in order.

5.4.1 Focus by intensifier

Reflexives and intensifiers are identical in form in many languages (König and Siemund 2005)[12]. Modern English is a good example of this. (38) is a typical reflexive construction and (39) an intensifier construction. König and Siemund acknowledge two types of intensifier constructions and call (39a) and (39b) 'adnominal intensifier' and 'adverbial intensifier' respectively[13].

(38) John saw himself in the mirror.

(39) a. The actor himself opened the letter.

b. The actress opened the letter herself.

Although reflexives and intensifiers are morphologically indistinguishable in many languages, they are different and the intensifiers have their own morphosyntactic status in grammar. Syntactically, the (adnominal) intensifiers are adjoined to the host NP as in (40a) whereas the reflexives generally occur as an independent argument as in (40b). In other words, the intensifiers occur in adjunct position while the reflexives occur in argument position in general.

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[12] Their paper and data have been included in WALS (the World Atlas of Language Structures; Haspelmath et al. 2005) as "(#47) Intensifiers and Reflexive Pronouns". Among 168 languages they investigated, 94 languages use identical forms for both functions and 74 languages differentiated ones. They also have a web site and the all the information about the languages they investigated is available there.

[13] Adnominal and adverbial intensifiers are quite different both syntactically and semantically. I will limit the discussion to the adnominal type and so in what follows, the term intensifier means 'adnominal intensifier' unless mentioned otherwise. König and Siemund's (2005) discussion is based on the cross-linguistic data (around 100 languages), but for the sake of simplicity I'll use English data unless the English data misses the points of their arguments.

(40) a. [NP[NP The actor] himself] opened the letter

b. They criticized [NP themselves] in the conference room.

König and Siemund further claim that although the primary function of the intensifiers is focusing, they are also different from focus particles (e.g. *only*, *even*). Intensifiers inflect for number, gender, person in many languages whereas the focus particles do not (by definition). The relevant English data are shown in (39). There are invariant intensifiers as well in some languages. For example, German has a morphologically invariant ("particle-like") intensifier, *selbst*, which is morphologically different from the reflexive. (41a) is a reflexive construction and (41b) intensifier construction. The intensifier can be adjoined to the reflexive and focus it as in (41c).

(41) a. Johann sah sich im Spiegel.
Johann saw himself in the mirror
'Johann saw himself in the mirror.'

b. Der Direktor selbst begrüßte uns.
the director himself welcomed us
'The director himself came to welcome us.'

c. Paul kritisierte sich selbst.
Paul criticized himself himself
'Paul criticized himself.'

There are prosodic differences between intensifiers and focus particles. Intensifiers are invariably stressed, whereas focus particles are not. Compare (42a) and (42b).

(42) a. Even the PRESIDENT came.

b. The President HIMSELF came.

We can roughly summarize that although intensifiers have some properties of both

reflexives (form) and focus particles (function), they constitute their own category.

The most important for us is the semantic effect of the focus structure produced by such intensifiers. Focus structure has been argued in terms of various linguistic orientations (cf. Rooth 1992), but roughly, the central concern has been how to formally regulate the relation between the identity of the focused NP and the alternatives evoked by the focusing process. My discussion is based on the basic ideas in Rooth (1985, 1992) and Eckardt (2001).

Rooth's (1985, 1992) focus theory, called alternative semantics, has been widely assumed in the literature. He claims, basing his argument on the analysis of focus particles such as *only*, that the general function of focus is to evoke alternatives and focus determines other focus semantic values. Eckardt (2001) argues that although focus particles and intensifiers are similar to each other in having focusing function, they are different. He claims that the (adnominal) intensifiers are linguistic elements whose function is to establish identity; namely they have the identity function (ID). (43) shows how this works. The ID function takes the referent of the focused NP as an input and exactly the same referent as the input is cashed out as an output.

(43) [[the president himself]] = ID([[the president]]) = [[the president]]

The semantic operation above looks trivial, but it is not so. Jackendoff (1992, 1997) observes that in the Ringo sentence, for example, the 'subject' Ringo must be the very individual and it must not be some other entity associated with the person (e.g. portrait or statue). Compare (44a) and (44b). This constraint suggests that the ID function is a necessary operation independent of focus structure, although it is beyond the scope of this chapter to explore how the ID function works in the domains other than focus structure.

(44) Ringo fell on himself.
a. = Ringo fell on the statue of himself.
b. = *The statue of Ringo fell on himself.

5.4.2 Japanese intensifier

Now it is examined how the Japanese intensifiers work. Given the typological fact that reflexives and intensifiers are identical in form in many languages, there are three candidates in Japanese: *zibun*, *zisin* and *zibun-zisin*. As shown in (45a), only *zisin* is used as adnominal intensifier while all of them can be used as adverbial intensifier as in (45b).

(45) a. shushoo-{ *zibun/zisin/*zibun-zisin}-ga sore-ni dooi-shita
PM-{ self/self/self-self }-NOM it-DAT agreement-did
'The prime minister himself agreed to it.'

b. shushoo-ga zeiritsu-o { zibun/zisin/zibun-zisin}-de kimeta
PM-NOM tax.rate-ACC { self/self/self-self }-by decided
'The prime minister decided the tax rate by himself.'

To my knowledge, the intensifier use of *zisin* has not been detailed in the literature. It might be of interest to observe some basic facts about it in passing. As seen above, intensifiers have two classes: the morphologically invariant type (like particles) and the morphologically variant type that shows some inflections. The adnominal *zisin* does not have agreement for gender, number and person unlike European languages. This is shown in (46)[14].

(46) a. Taroo-{ zisin/*?kare-zisin }-ga sore-o kimeta
Taroo-{ self/3.sg.m-self }-NOM it-ACC decided
'(int.) Taroo himself decided it.'

14 The following sentence is fine. It is reasonable to assume that the pronominal subject is adjoined by the intensifier in the following sentence.

(i) { Kare-zisin/kanojo-zisin/karera-zisin }-ga sore-o kimeta
{3.sg.m-self/3.sg.f-self/3.pl-self }-NOM it-ACC decided
'{ He himself / She herself / They themselves } decided it.'

b. Hanako-{ zisin/*?kanojo-zisin }-ga sore-o kimeta
Hanako-{ self/3.sg.f-self }-NOM it-ACC decided
'(int.) Hanako herself decided it.'

c. sensee-gata-{ zisin/*?karera-zisin }-ga sore-o kimeta
teacher-PL-{ self/3.sg.pl-self }-NOM it-ACC decided
'(int.) Teachers themselves decided it.'

Given the absence of the so-called phi-feature agreement, it seems reasonable at glance to conclude that the Japanese intensifier is the invariant type (like German). However, Japanese has another agreement-like system: honorifics. Honorifics have been generally regarded as agreement of some sort in the literature (see Chapter 3). Therefore, it is expected that there is agreement between the host noun and the intensifier. This expectation is born out as in (47). The Japanese focus particles never have honorific agreement like this; therefore, intensifiers and focus particles are two distinct classes in Japanese[15].

(47) a. Ishiguro-sensee-{ go-zisin/?zisin }-ga hooshin-o kime-rare-ta
Ishiguro-teacher-{ HON-self/self }-NOM policy-ACC decide-HON-PST
'Prof. Ishiguro himself decided the policy.'

b. Taroo-{ *go-zisin/zisin }-ga hooshin-o kimeta
Taroo-{ HON-self/self }-NOM policy-ACC decided
'Taroo himself decided the policy.'

The default prosodic pattern also supports the distinction. (48) shows that the same patterns as (42) are also observed in Japanese. The focus particles (*sae* 'even' here) generally do not receive prosodic peak whereas the intensifiers generally do.

15 The honorific agreement is also observed in the adverbial use of the intensifier as in (i) as well as the reflexive construction as in (ii) below.

(i) Ishiguro-sensee-ga { go-zisin/*?zisin }-de hooshin-o kimer-are-ta
Ishiguro-teacher-NOM { HON-self/self }-by policy-ACC decide-HON-PST
'Prof. Ishiguro decided the policy by himself.'

(ii) Ishiguro-sensee-ga { go-zisin/*?zisin }-o hihans-are-ta
Ishiguro-teacher-NOM { HON-self/self }-ACC criticize-HON-PST
'Prof. Ishiguro criticized himself.'

(48) a. TAROO-sae kita
Taroo-even came
'Even Taroo came.'

a'. ??Taroo-SAE kita

b. Taroo-ZISIN-ga kita
Taroo-self-NOM came
'Taroo himself came.'

b'. ??TAROO-zisin-ga kita

Thus it seems reasonable to assume that *zishin* is an intensifier in the language and to analyze it on a par with the intensifiers in the other languages discussed in the previous section. Namely, *zishin* has focusing function that imposes the ID function on the referent of the NP that it focuses.

Now let us turn to the interpretive problems of the Japanese reflexives. I will begin with the complex form, *zibun-zisin*. Given the discussion above, the semantic operation imposed by the intensifier, i.e. the identification function, is represented in (49).

(49) [[zibun-zisin]] = ID ([[zibun]])

Zibun is a variable which does not refer to any individual by itself. The identified referent as the final output of the above operation must be nothing but the original referent of the antecedent (i.e. 'subject' argument) since the interpretation of the variable is dependent on the antecedent. In other words, the ID function applied to a functional variable makes the variable into an identical variable. As a natural consequence, the pure reflexive interpretation is guaranteed. This focus-driven operation is represented in (50).

(50) $\lambda.x\ [P(x, [f(x)]_F)]$ → $\lambda.x\ [P(x, x)]$

In the comparative ellipsis construction, the entire structure, except for one argument, is missing in the subordinate juncture. I assume the copy theory (Heim and Kratzer 1998) that claims that the elided structure has the same structure as the matrix clause. The bound variable semantic structure of the matrix juncture is copied onto the subordinate semantic structure replacing the subject argument which serves as the binder of the bound variable in the subordinate semantic structure. The sloppy reading is a natural consequence of this operation.

Thus, the interpretations of the complex form, *zibun-zisin*, seem to naturally follow from the system hitherto detailed in the previous literature. On the other hand, however, it must be remembered that the simple (bare) reflexive *zibun* produces the same interpretations as the complex *zibun-zisin*.

The bare *zibun* construction does not have *zisin* as the intensifier that brings in the ID function. We still need to account for why the same semantic interpretations as the complex reflexive *zibun-zisin* result for the simple *zibun*. I would like to point out that there is another source for focus in the language that aids the interpretation: constructional focus.

5.4.3 Focus by construction

Before jumping onto the issue of the simple *zibun*, I would like to introduce Chinese data, argued by Liu (2003), that are highly similar to the Japanese case we are dealing with. Liu claims that the Chinese reflexive, *ziji-benshen*, produces only the pure-reflexive interpretation unambiguously in the absence of a lexically reflexive predicate. (51) and (52) are examples that show the (un)availability of the statue reading and the sloppy reading in the comparative construction respectively.

(51) (Liu 2003: 24)

a. Jiang Jie-Shi$_i$ henhen-de da-le ziji$_i$ yi-xia.
Jiang Jie-Shi furiously hit-Asp self one-Cl
'Jiang Jie-Shi hit himself furiously.' (ziji = Jiang Jie-Shi/statue)

b. Jiang Jie-Shi$_i$ henhen-de da-le ziji-benshen$_i$ yi-xia.
Jiang Jie-Shi furiously hit-Asp self-self one-Cl
'Jiang Jie-Shi hit himself furiously.' (ziji-benshen = Jiang Jie-Shi/*statue)

(52) (Liu 2003: 36)

a. Zhangsan xianzai bi Lisi guoqu geng guanxin ziji-de liyi.
Zhangsan now compare Lisi past more care-about self-DE benefit
i. 'Zhangsan$_i$ cares about his$_i$ benefit more than Lisi$_j$ cared about his$_j$ benefit.'
ii. 'Zhangsan$_i$ cares about his$_i$ benefit more than Lisi$_j$ cared about his$_i$ benefit.'

b. Zhangsan xianzai bi Lisi guoqu geng guanxin ziji-benshen-de liyi.
Zhangsan now compare Lisi past more care-about self-self-DE benefit
i. 'Zhangsan$_i$ cares about his$_i$ benefit more than Lisi$_j$ cared about his$_j$ benefit.'
ii. *'Zhangsan$_i$ cares about his$_i$ benefit more than Lisi$_j$ cared about his$_i$ benefit.'

Although the Japanese data (36 and 37) and Chinese data (51 and 52) look alike, there is a crucial difference between them. The difference is that the Chinese simple reflexive, *ziji*, produces pure- and near-reflexive ambiguity unless used with *benshen*. On the other hand, as was shown in (36) and (37), the Japanese simple reflexive, *zibun*, shows, without *zisin*, the pure-reflexive interpretation such as the unavailability of the statue reading or producing the sloppy reading in elliptical constructions. It is reasonable to assume that Japanese has another system which imposes the identification (ID) function that Chinese does not have. I argue that the system is a language-specific construction-based focus structure.

It has been pointed out in the literature that preverbal position is the default focus position for SOV languages (e.g. Kim 1988, Krifka1998). Japanese is one such SOV language. The examples in (53), from Ishihara (2000), show the canonical SOV word order in Japanese. The constructional focus is indicated by capitals (it should be noted that, in the examples that follow, extra (i.e. additional) prosodic stress is not intended by the capitals).

(53) a. Taroo-ga HON-o katta
Taroo-NOM book-ACC bought
'Taroo bought a BOOK.'

b. Taroo-ga kyoo HON-o katta
Taroo-NOM today book-ACC bought
'Taroo bought a BOOK today.'

Ishihara argues that the preverbal position is indeed the default focus position in Japanese by the following scrambling data. In (54), the focal NPs in (53) are fronted, losing the positional focal status, and instead, the new preverbal elements receive the positional focal status of the sentence. This claim can be confirmed by the mini-dialogues in (55) and (56). As predicted from the constructional focus assignment, (55B) is less acceptable as an answer to the question like (55A) whereas (53a) is an acceptable answer. The same thing can be observed in (56). (56B) is less acceptable as an answer to the question in (56A), though (53b) is fine.

(54) a. hon-o TAROO-ga katta
book-ACC Taroo-NOM bought
'TARO bought a book.'

b. hon-o Taroo-ga KYOO katta
book-ACC Taroo-NOM today bought
'Taroo bought a book TODAY.'

(55) A: Taroo-ga nani-o katta-no ?
Taroo-nom what-acc bought-sfp
'What did Taroo buy?'

B: #hon-o TAROO-ga katta
book-ACC Taroo-NOM bought
'TAROO bought a book.'

(56) A: kyoo Taroo-ga nani-o katta-no?
today Taroo-nom what-acc bought-sfp
'What did Taroo buy today?'

B: #Taroo-ga hon-o KYOO katta
Taroo-nom book-acc today bought
'Taroo bought a book today.'

This shows that, everything else being equal, there is a construction-based inherent focus assignment system. According to Ishihara, the above observation is acoustically attested as well (e.g. higher F0 on the focal NP). In sum, this observation means that the object of the canonical SOV sentences is always in focus as the past literature (e.g. Kim 1988) claims[16].

Kiss (1998) argues, discussing Hungarian data, that two focus structures, identificational focus and information focus, must be distinguished. The former expresses exhaustive identification and the latter new information. It is claimed that the focus at preverbal position in Hungarian, an SOV language, is identificational focus. (57) is an example (Kiss 1998: 247).

(57) Tegnap este **Marinak** mutattam be Pétert.
last night Mary.DAT introduced.I PERF Peter.ACC
'It was **to Mary** that I introduced Peter last night.'

The sentence means, as is clear from the English translation, that, among the set of individuals present in the domain of discourse, it was Mary and no one else that the person referred to by 'I' introduced Peter to last night. To put it simply, Peter was introduced only to Mary. The semantic operation implemented by the exhaustive identification, which is due to the preverbal identificational focus, is equivalent to the identification (ID) function (see 43) by Eckardt (2001).

I also assume that the identification function is imposed by the focus in preverbal position also in Japanese. However, the strength of the focus in preverbal position seems to vary even

[16] The constructional focus is, however, not so strong as to always decide the focus structure of the sentence. As noted in Ishihara (2000), the focus can be easily overridden by an additional prosodic stress. The sentences in (i) below are possible prosodic variation of (56a). Virtually, any element can be assigned an additional prosodic stress (see Ishihara 2000 for more details).

(i) a. Taroo-ga kyoo HON-O katta
b. Taroo-ga KYOO hon-o katta
c. TAROO-GA kyoo hon-o katta
Taroo-NOM today book-ACC bought
'Taroo bought a book today'

among the same SOV languages. According to Kiss (1998), the preverbal focus of Hungarian is functionally equivalent to *it*-cleft focus constructions in English. There is some distributional evidence for this. For example, universal quantifiers cannot occur in preverbal position in Hungarian (Kiss 1998: 251). Japanese, another SOV language, does not have such a restriction in preverbal position as shown in (58). The preverbal focus function in Japanese seems weaker than that of Hungarian.

(58) sensee-ga subete-no-seeto-o hometa
teacher-nom all-gen-student-acc praised
'The teacher praised all the students.'

The focus by intensifiers, focus by focus particles or focus by stress (prosody) is additive focus whereas the constructional focus is language-specific and structurally inherent focus, so to speak. The robustness of the constructional focus is not as strong as such additive-type focus (see footnote 18), but nevertheless the preverbal focus counts as focus that imposes the ID (identification) function. This means that since it is focused in preverbal position, even the simple reflexive, *zibun*, is required to have the identity reading even in the absence of the intensifier, *zisin*, that lexically assigns the ID function to the NP it adjoins to.

This analysis makes an interesting prediction. If *zibun* is scrambled out of the canonical preverbal focus position, the near-reflexive interpretation should become available since the ID function is not imposed on it any longer. We saw that only the sloppy reading is unambiguously produced in the comparative ellipsis construction (see 37). If *zibun* is scrambled out of the preverbal position, it is expected that the strict reading (i.e. near-reflexive reading) should become easier to get (at least). Although there seems to be speaker variation, this expectation

is born out as in (59)[17][18].

(59) Taroo-wa zibun-o Jiroo-yori umaku bengo-shita
Taroo-TOP self-ACC Jiroo-than well defense-did
a. 'Taroo$_i$ defended himself$_i$ better than Jiroo$_j$ defended himself$_j$.' (sloppy)
b. '(?)Taroo$_i$ defended himself$_i$ better than Jiroo$_j$ defended him$_i$.' ((?)strict)

It is further expected that the interpretive possibility of the complex *zibun-zisin* should not be affected by scrambling since the intensifier (i.e. focus assigner), *zisin*, is scrambled out together with the reflexive. This expectation is also born out as in (60)[19]. This observation suggests that the focus structure-based analysis is on the right track.

(60) Taroo-wa zibun-zisin-o Jiroo-yori umaku bengo-shita
Taroo-TOP self-self-ACC Jiroo-than well defense-did
a. 'Taroo$_i$ defended himself$_i$ better than Jiroo$_j$ defended himself$_j$.' (sloppy)
b. '*Taroo$_i$ defended himself$_i$ better than Jiroo$_j$ defended him$_i$.' (*strict)

5.4.4 A formal treatment of intensifier constructions in RRG.

Information structure is relevant not only at the pragmatic level but also the semantic level. The phenomenon examined in this chapter, i.e. identity under focus, is clearly related to the pragmatic-semantic interface. Lambrecht (1994) defines 'focus' as 'the semantic component of a pragmatically structured proposition whereby the assertion differs from the presupposition.' In other words, 'focus,' or focus structure, can be cashed out from the difference in information between presupposition and assertion. In this last section, I will propose a possible formal

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[17] Sells et al. (1987) also note the same point. Some of their Japanese informants judged (59b) as acceptable.

[18] Scrambling does not seem to change the (un)availability of the statue reading (cf. 36). There seem to be several options to solve this. One is to assume that the scrambled element is assigned another focus which outweighs the structural preverbal focus. The other is to assume that *zibun* has an inherent [+f(ocus)] feature (cf. Kiss 1998). I leave this issue open.

(i) zibun-ni Koizumi-shushoo-ga sawatta
self-DAT Koizumi-PM-NOM touched
'The prime minister Koizumi touched himself.' (actual person/*?statue)

[19] I owe this observation to Takashi Yoshida.

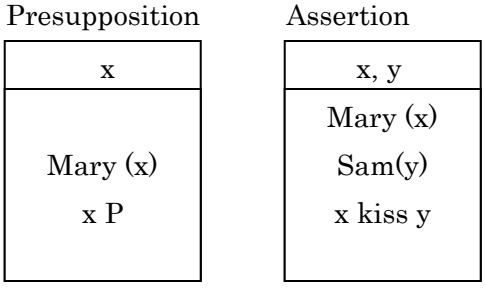
treatment of the intensifier construction, using the simplified DRT recently incorporated in RRG (VV05).

RRG (VV05) now incorporates Discourse Representation Theory (DRT; Kamp and Reyle 1993, von Heusinger 1999) into its focus structure theory. By using the discourse representation structures (DRS), for example, three focus structure patterns, predicate focus, completive focus and contrastive focus, can be illustrated as follows (VV05: 172).

The focus structure type of the sentence in (61) is predicate focus. The derivation of predicate focus is shown in Figure 1. In predicate focus, the 'subject' is a topical argument. The topical 'subject,' *Mary*, is, therefore, present in the first presupposition DRS, but the focal predicate part, [x kiss Sam], is not ('P' in the DRS means 'predicate'). The part whose information is uniquely supplied in the assertion DRS constitutes the actual focus domain. The type of the focus structure of the sentence (i.e. predicate focus), as well as the target of the focus (i.e. predicate), can be thus cashed out from the two DRSs.

(61) Mary KISSED SAM.

Figure 1.

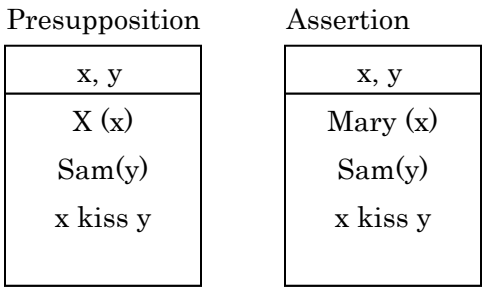


In the case of completive narrow focus, (62), the question *Who kissed Sam?* in (62Q) establishes the first presupposition DRS in which the information of the predicate and an

unspecified referent variable are represented. The value of the variable, *Mary*, is uniquely supplied in the second assertion DRS. The completive narrow focus is thus properly assigned on *Mary* in (62A).

(62) Q: Who kissed Sam?
A: MARY kissed Sam.

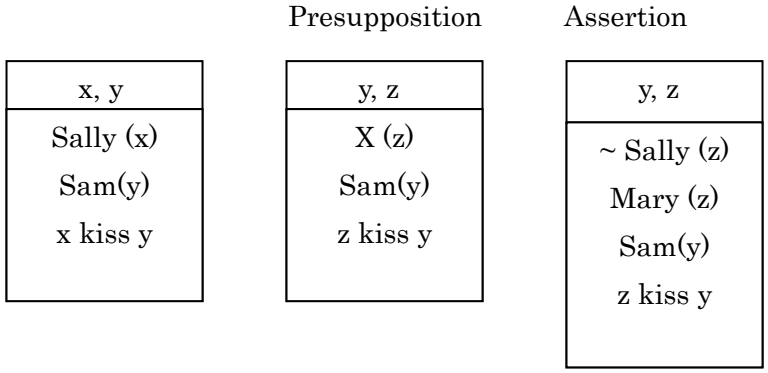
Figure 2.



The last focus pattern in this brief overview is contrastive narrow focus. This focus type derives as follows. The first DRS in Figure 3 represents the assertion by *Sally kissed Sam* in (63A). The second presupposition DRS, which is one of the possible presupposition DRSs established by the first assertion *Sally kissed Sam*, contains an unspecific referent variable (in this particular presupposition DRS). The value for the variable in the presupposition DRS is uniquely supplied in the final assertion DRS. In this contrastive narrow focus, not just the second presupposition DRS and the last assertion DRS but also the assertion DRS initially created are all important. In this case, the type of the focus structure is cashed out by referring to (or negating) the actor individual in the initial assertion DRS.

(63) A: Sally kissed Sam.
B: No, MARY kissed Sam.

Figure 3.



I would like to extend the above DRS analysis of focus structure to the intensifier construction discussed in this chapter. Intensifier constructions are a subtype of narrow focus constructions. The semantic effect of the construction has been already discussed in section 5.4.1 (i.e. identity, ID, function). For simplicity, an English sentence is used here as an example, but the analysis is expected to be universal (i.e. applicable to the Japanese data as well).

(64a) is an example of an intensifier construction. The semantic operation applied to the noun, *Sally*, is shown in (64b).

(64) a. Sally herself praised Sam.

b. [[Sally herself]] = ID([[Sally]]) = [[Sally]]

The context in which (64a) makes sense is the one in which it was not expected that *Sally* would praise *Sam* directly, but it was expected that someone else would. Two possible DRSs for this construction are represented in Figure 4. The context establishes the presupposition DRS

in which three pieces of information, a predicate, an unspecified referent variable and a negated referent, *Sally*, are represented. In the assertion DRS, the referent *Sally* is introduced not as the value of the variable in the presupposition DRS but as a 'new' referent. Given the variable in the presupposition DRS (i.e. X(x)), there must be a value for it in the assertion DRS. The equation in the assertion DRS guarantees the (unexpected) identity of the individual, *Sally*, between the two DRSs. Thus, an intensifier construction can be characterized as an expression of the identity equation in the DRS.

Figure 4

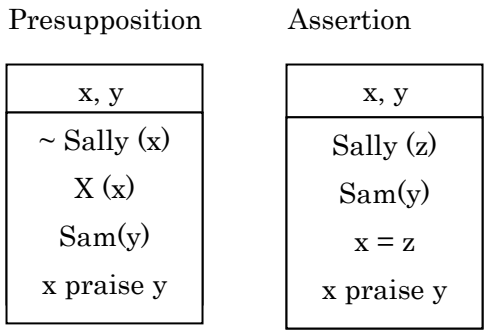
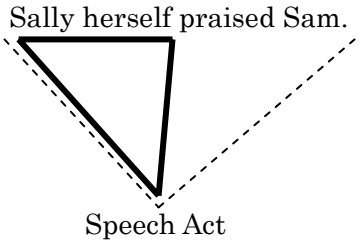


Figure 5 is the traditional RRG focus structure projection for the sentence in (64). The whole NP in which the host noun and the reflexive intensifier are conjoined is under focus. The above DRS analysis of the intensifier construction presents the semantic effect or operation happening under this focus projection.

Figure 5.



In this section, a possible derivational process that connects semantics and pragmatics was briefly presented for an intensifier construction based on the recent developments in RRG's (VV05) focus structure theory.

5.5 Concluding remarks

In this chapter, I demonstrated two things. First, the Japanese lexical reflexives (i.e. morphologically reflexive-marked) behave exactly as expected from the universal principle of Condition R (Lidz 2000, 2001). Lexical reflexives are expected to show only the pure-reflexive interpretations unambiguously. We could not examine the availability of the statue reading due to lexical gaps, but we found that they produce only the sloppy reading unambiguously in the comparative constructions as expected. It can be concluded that the validity of the principle has been further confirmed by the Japanese data.

Second, more importantly, it was pointed out that the Japanese syntactic reflexives (i.e. unmarked verb + reflexive) do not show the expected behaviors. The lexically unmarked predicates were demonstrated to be lexically non-reflexive. In other words, they are simply transitive verbs. Given this lexically non-reflexive nature of the predicates, the near-reflexive interpretations are expected to be available. Contrary to this expectation, however, they

consistently produce the pure-reflexive interpretation. They do not allow the statue reading. They do not produce the sloppy/strict ambiguity, but they robustly yield only the sloppy reading unambiguously. It was discussed that the Japanese pure-reflexivity without lexical reflexivity is due to two types of focus structure: focus by intensifier and focus by construction.

Overall, it was demonstrated by the Japanese data, as Liu (2003) demonstrated by Chinese data, that there is a pragmatically driven way to achieve semantic reflexivity (i.e. pure-reflexive interpretation in Lidz' term). As a theoretical consequence, it was claimed that the current bidirectional relation between lexical reflexivity and semantic reflexivity in Condition R should be weakened to a unidirectional one which says that lexical reflexivity necessitates semantic reflexivity but not vice versa.

Chapter 6 Pseudo-Raising

6.1 Introduction

6.1.1 'Raising' in Japanese?

As briefly discussed in section 3.3.3.4 (Chapter 3), (1b) has been analyzed as a 'raising' construction since Kuno (1976)[1]. In the 'raising' analysis, the accusative-marked element in (1b) is considered as 'raised' into the matrix from the linked unit in (1a). This position has been more recently defended by Tanaka (2002).

(1) a. Taroo-wa [Hanako-ga tensai-da]-to omotteita
Taroo-TOP Hanako-NOM genius-cop -Cto thought
'Taroo thought that Hanako was a genius.'

b. Taroo-wa Hanako-o [tensai-da]-to omotteita
Taroo-top Hanako-ACC genius-cop -Cto thought
'Taroo thought Hanako to be a genius.'

In section 3.3.3.4, it was demonstrated that the behavior of the alleged Japanese 'raising' construction does not hinge on grammatical relations (i.e. a pivotless construction). Generally, the construction cross-linguistically recognized as 'raising' in the literature targets an NP that has a certain grammatical relational status. For example, 'subject' in the linked unit is the target (i.e. pivot) of the construction in the case of so-called 'subject-to-object raising' ('matrix-coding as non-PSA' in RRG terminology). Given this general consensus in the linguistic community, it is reasonable to doubt whether the alleged Japanese 'raising' construction is an instance of 'raising'.

Though there are preceding studies that argue against such 'raising' analysis (e.g. Saito

[1] The construction is called 'matrix-coding' in the RRG literature, but in this chapter, I will use the term 'raising' just for simplicity.

1983, Mihara 1994), the issue does not seem to be settled. In this chapter, an argument along with the anti-raising analysis will be presented on the basis of new evidence. The aim of this chapter is to show that there is no 'raising' construction in Japanese and the construction hitherto claimed as 'raising' should be analyzed as a control construction.

6.1.2 Arguments for a 'raising' analysis?

There are many pieces of evidence that show the accusative-marked element in (1b) is a matrix element (see Kuno 1976, Tanaka 2002 for details). Among them, adverb placement is the most standard test to examine whether the argument is a matrix argument or not.

In (2), the adverb *orokanimo* 'foolishly' must modify only the matrix verb due to its meaning. (2a) is unacceptable since the adverb is located within the linked unit and cannot modify the matrix verb. On the other hand, the acceptability of (2b) indicates that the adverb is outside the linked unit, modifying the matrix verb. This further indicates that the accusative argument is also outside the linked unit, namely a matrix argument.

(2) a. *Taroo-wa [Hanako-ga orokanimo tensai-da]-to omotteita
Taroo-TOP Hanako-NOM stupidly genius-cop -Cto thought
'(lit.) Taroo thought that Hanako was stupidly a genius.'

b. Taroo-wa Hanako-o orokanimo [tensai-da]-to omotteita
Taroo-TOP Hanako-ACC stupidly genius-cop -Cto thought
'Stupidly Taroo thought Hanako to be a genius.'

The proponents of the raising analysis use the above data as supporting evidence for their analysis, combining this with the hidden assumption that the Japanese verbs that take this construction, (1b), correspond to the 'raising verbs' in English. The crucial point is, however, that this type of data merely shows that the accusative argument in (1b) is outside the linked

unit and they are obviously compatible with other competing analyses[2] such as a control analysis.

6.1.3 Arguments against a 'raising' analysis

In the previous section, we saw some data allegedly for the 'raising' analysis. On the other hand, there are some data that argue against the 'raising' analysis (Kuno 1976, Takano 2003, Mihara 1994, among others). Two arguments will be presented: (1) clausehood of the linked unit and (2) *no-koto* attachment.

'Raising' is generally considered to be a core-level process as shown in the typical English 'raising' example in (3). Contra this general expectation, there are several pieces of evidence that the linked unit in (1b) is a clause.

(3) a. Pat believes that Chris ate the bagel.
b. Pat believes Chris to have eaten the bagel.

Among many criteria, tense, which is a clausal operator, is one of the most important features to determine the level of the juncture. However, there is some speaker variation in the judgment of the relevant data as in (4)[3].

(4) ?Taroo-wa zibun-o [orokana otoko-datta]-to omotteita
Taroo-TOP self-ACC stupid man-cop.pst -Cto thought
'Taroo thought himself to have been a stupid man.'

Even though we put aside the tense issue, there are other clausal features such as clause

[2] Sells' (1990) scrambling analysis, Kaneko's (1988) ECM analysis, Kawai's (2006) small clause analysis are some of them.
[3] The example (4) is from Kuno (1976) including the judgment. Some people (e.g. Kaneko 1988) explicitly claim that the linked unit is an infinitive (i.e. core) that carries [-tense] feature. See the examples in 3.4.3.4 (Chapter 3) for the linked units that are past-tense-marked.

final particles or modal markers that can occur in the linked unit as shown in (5a) and (5b) respectively (Kuno 1976: 40). *Zo* in (5a) is one of many so-called sentence(clause)-final particles and functions to put an emphasis on the clause. *Daroo* in (5b) is an epistemic modal marker which is one of the status operators at clause-level. The fact that these sentences are perfectly acceptable strongly suggests that the linked unit is a clause[4].

(5) a. Taroo-wa Hanako-o [baka-da-zo]-to omotteita
Taroo-TOP Hanako-ACC fool-cop-CFP -Cto thought
'Taroo thought Hanako to be a fool.'

b. Hanako -wa Taroo-o [hannin-daroo]-to suiteishita
Hanako-TOP Taroo-ACC culprit-may.be -Cto guessed
'Hanako guessed Taroo to be the culprit.'

No-koto attachment offers additional crucial data against the 'raising' analysis. This phrase can be used for the 'object' of the verbs that denote feeling, thinking or verbs of saying. Therefore, (6a) and (6b) are equivalent.

(6) a. Taroo-ga Hanako-o aishiteiru
Taroo-NOM Hanako-ACC love
'Taroo loves Hanako.'

b. Taroo-ga Hanako-no-koto-o aishitieru
Taroo-NOM Hanako-GEN-thing-ACC love
'Taroo loves Hanako.'

If (1b) were an instance of 'raising', there should not be any blockage in the alternation between the two corresponding structures, (1a) and (1b). Unexpectedly, however, there is no alternation possibility once the *no-koto* phrase is attached as shown in (7).

[4] It should be noted that the juncture levels of the linked unit between the Japanese examples and the correspoding English translations do not always match ('clause' in Japanese but 'core' in English).

(7) a. *Taroo-wa [Hanako-no-koto-ga baka-da]-to omotteita
Taroo-TOP Hanako-GEN-thing-NOM fool-cop -Cto thought
'(int.) Taroo thought that Hanako was a fool.'

b. Taroo-wa Hanako-no-koto-o [baka-da]-to omotteita
Taroo-TOP Hanako-GEN-thing-ACC fool-cop -Cto thought
'Taroo thought Hanako to be a fool.'

It is obvious that when the allegedly original structure, (7a), is nonexistent, the accusative-marked phrase in (7b) cannot be 'raised' from nowhere. Kuno (1976) claims that *no-koto* is attached after the 'raising' operation is finished, but this type of analysis is not tenable in the current framework and perhaps even in a more recent version of the derivational theory Kuno based his argument upon. Tanaka (2002), one of the most recent proponents of the 'raising' analysis, does not address this issue at all. Thus, it is highly doubtful in terms of both juncture level and the *no-koto*-attachment possibility that the construction in question is a 'raising' construction.

6.2 Additional arguments against a 'raising' analysis

Kuno (1976) pointed out two things about the construction at issue: (1) the 'subject' of the linked unit is raised into the matrix; (2) the predicate type of the linked unit is limited to intransitive predicates such as nominals or adjectives. Although these basic observations by Kuno have been scarcely challenged until recently, a different picture emerges when more recent arguments are considered.

6.2.1 Non-subject 'raising': possessor

The 'subject' NP of the linked unit in (1a) corresponds to the matrix accusative element in

(1b). Given this, the alternation between (8a) and (8a') is expected since *Hanako-no-atama* 'Hanako's head' is the 'subject' of the linked unit in (8a) and the matrix element in (8b). However, there is one more possible structure, (8a''), in which only the possessor is 'raised' into the matrix, leaving behind the possessed head noun in the linked unit (cf. Kawai 2006).

(8) a. Taroo-wa [Hanako-no-atama-ga ii]-to shinjiteiru.
Taroo-TOP Hanako-GEN-head-NOM good -Cto believe
'Taroo believes that Hanako is smart.'
'(lit.) Taroo believes that Hanako's head is good.'

a'. Taroo-wa Hanako-no-atama-o [ii]-to shinjiteiru.
Taroo-TOP Hanako-GEN-head-ACC good -Cto believe
'Taroo believes Hanako to be smart.'
'(lit.) Taroo believes Hanako's head to be good.'

a''. Taroo-wa Hanako-o [atama-ga ii]-to shinjiteiru.
Taroo-TOP Hanako-ACC head-NOM good -Cto believe
'Taroo believes Hanako to be smart.'
'(lit.) Taroo believes Hanako (her) head to be good.'

(8a'') seems to be a straightforward counter-example to the 'subject raising' analysis; however, it is not a strong piece of evidence. This is because, in addition to (8a), (8b) below is another possible counterpart for (8a"). (8b) is a 'possessor raising' construction and, as shown in (8c), the nominative-marked 'raised' possessor, *Hanako*, shows 'subject' properties. It is reasonable to assume that the nominative-marked possessor, *Hanako*, in the linked unit in (8b) is also given 'subject' status. Actually, in Kuno (1977), an example of this sort is cited as an instance of a '(subject) raising' construction.

b. Taroo-wa [Hanako-ga atama-ga ii]-to shinjiteiru.
Taroo-TOP Hanako-NOM head-NOM good -Cto believe
'Taroo believes that Hanako is smart.'
'(lit.) Taroo believes that Hanako('s) head is good.'

c. Hanako$_i$-ga zibun$_i$-no-imooto-yori atama-ga ii
Hanako-nom self-gen-younger.sister-than head-nom good
'Hanako is smarter than her younger sister.'

Thus, (8a'') does not necessarily constitute a strong piece of evidence against the '(subject) raising' analysis. This example merely suggests that the matrix accusative argument may not be the 'subject' of the linked unit. However, there is stronger evidence against a 'raising' analysis.

6.2.2 Non-subject 'raising': object and recipient

In the previous section, it was shown that it may not be 'subject' of the linked unit that appears as the matrix accusative argument. Actually, the accusative element does not have to even be 'subject' or a 'subject'-related argument like possessor. Before looking at other non-'subject' cases, it is necessary to dispel Kuno's (1976) 'intransitive constraint' on the linked unit.

In (9a), the linked unit is a typical transitive structure. As Kuno notes, the 'raised' version, (9b), does not work. However, this unacceptability can be ascribed to a language-specific constraint (cf. Sells 1990). Japanese does not allow sequential accusatives (or accusative-stacking) unlike Korean, for example. This is known as 'double-*o* (double-accusative) constraint' (Harada 1973).

(9) a. Taroo-ga [Hanako-ga tabako-o mukashi sutteita]-to omotteiru
Taroo-NOM Hanako-NOM tobacco-ACC before inhaled -Cto think
'Taroo believed that Hanako used to smoke before.'

b. *Taroo-ga Hanako-o [tabako-o mukashi sutteita]-to omotteiru
Taroo-NOM Hanako-ACC tobacco-ACC before inhaled -Cto think
'Taroo thinks Hanako to have smoked before.'

The claim that the unacceptability of (9b) is due to the double-*o* constraint rather than the intransitive constraint Kuno claims is born out as follows. Once we passivize the accusative in (9b), the sentence becomes acceptable as shown in (9c) below.

c. Hanako-ga Taroo-ni [tabako-o mukashi sutteita]-to omowareteiru
Hanako-NOM Taroo-by tobacco-ACC before inhaled -Cto be.thought
'Hanako is thought by Taroo to have smoked before.'

This demonstrates that the linked unit can be a canonical transitive structure. Thus it turned out that Kuno's basic observation that the type of the predicate in the linked unit must be adjectives or nominals is not correct.

Then, let us go back to the question of what can appear in the matrix core. It was observed above that non-'subject' element like possessor can appear in the matrix core. Given that the linked unit can take a transitive structure, now we can further diagnose other non-'subject' arguments. For example, can 'object' of the linked unit appear in the matrix core? The answer is yes.

As shown in (10a), 'object' in the linked unit can appear in the matrix as pointed out in Takano (2003). Actually, this seems to be an instance of the 'long-distance scrambling' which has been being argued since Saito (1985). Therefore, this construction has been known for a long time, though the process is scarcely argued in the light of the 'raising' construction in question. Since there seems to be no reason we need to treat the case like (10a) differently from other 'raising' examples, we treat (10a) in the same vein here.

(10) a. Hanako-o Taroo-wa [Ken-ga Ø horeteiru]-to omotteiru
Hanako-ACC Taroo-TOP Ken-NOM like -Cto think
'Taroo thinks of Hanako that Ken likes (her).'

Given the above observation on the 'object-raising', we can further expect that the derived 'subject' and the recipient argument in the linked unit can appear in the matrix as well. This expectation is also born out as shown in (10b) and (10c) below respectively.

b. Hanako-o Taroo-wa [Ø Ken-ni horerareteiru]-to omotteiru
Hanako-ACC Taroo-TOP Ken-by be.liked -Cto think
'Taroo thinks of Hanako that (she) is liked by Ken.'

c. Hanako-o Taroo-wa [Ken-ga Ø purezento-o ageta]-to omotteiru
Hanako-ACC Taroo-TOP Ken-NOM present-ACC gave -Cto think
'Taroo thinks of Hanako that Ken gave (her) a present.'

In sum, virtually any argument in the linked unit seems to be able to appear in the matrix construction in question; if this construction were a 'raising' construction, obviously it would be necessary to postulate not just 'subject-to-object raising' rule but also many other types of 'raising' rules.

6.2.3 Non-subject 'raising': no thematic relation

Our final evidence for the claim that there is no 'raising' in Japanese comes from the case in which there is no thematic relation between the accusative-marked matrix argument and the linked unit[5]. Mihara (1994) points out that there is a case in which no extraction from the linked unit seems possible. (11a) is his example (gloss and translation mine).

(11) a. kokumin-wa sono mondai-o [seihukookan-ga seijihushin-o
people-TOP that issue-ACC officers-NOM distrust.of.politics-ACC
maneita-toiu ten-o saki-ni ronjiru-bekida]-to omotteiru
invite-Ctoiu point-ACC first.of.all discuss-should -Cto think

'People think of the issue that it should be discussed before everything else that the governmental officers caused the distrust of politics.'

b. kokumin-wa sono mondai-o [seihukookan-ga seijihushin-o
people-TOP that issue-ACC officers-NOM distrust.of.politics-ACC
maneita-toiu ten-ga saki-ni ronjirareru-bekida]-to omotteiru
invite-Ctoiu point-nom first.of.all be.discussed-should -Cto think

'same as (11a)'

[5] Perhaps it is worth noting that this is similar to the *no-koto* attachment discussed in 6.1.3 in that there is no place to 'put back' the accusative matrix element in the linked clause. In other words, there is no source in the linked clause the accusative argument comes from.

The linked unit in (11a) is a full-fledged clause without gap although 'subject' is missing probably due to a pragmatic reason. That is why the inside of the embedded *that*-clause in English is translated as a passive sentence. Though, actually, the embedded clause can be passivized as in (11b), the following discussion is based on Mihara's original example in (11a). The verb in the linked unit in (11a), *ronjiru* 'discuss', requires its 'subject' to be a human NP. Therefore, the accusative-marked matrix argument, *sono mondai* 'the issue', cannot be the missing 'subject' in the linked unit. Besides, the same verb, *ronjiru* 'discuss', has its own accusative-marked 'object' in the linked unit, *ten-o* 'point-ACC', so the matrix accusative cannot be the 'object' in the linked unit, either. Thus, the matrix accusative-marked argument cannot be extracted from anywhere in the linked unit. The only imaginable option left is that the accusative argument in the matrix is functioning as the topic of the linked unit. As expected from this line of thought, Mihara points out, the *wa*-marked topic of the topic-construction in (11c) can appear in the matrix clause as in (11d).

(11) c. Tokyo-wa mizu-ga kitanai
Tokyo-top water-nom dirty
'As for Tokyo, water is dirty.'

d. Taroo-wa Tokyo-o [mizu-ga kirei-da]-to omotteita
Taroo-top Tokyo-acc water-nom clean-cop -Cto thought
'Taroo thought of Tokyo that water is clean.'

6.2.4 Interim summary

Let us summarize the observations thus far. First, it was confirmed that the accusative-marked argument is a matrix argument but the matrixhood of the argument, by itself, does not constitute any supporting evidence exclusively for the 'raising' analysis. Second, it was demonstrated that there are many pieces of evidence that are incompatible with the '(subject-to-object) raising' analysis (e.g. Kuno 1976, Tanaka 2002). In the process of the

demonstration, it was shown that virtually any type of argument in the linked unit, including topic of the unit, can appear as the accusative-marked matrix argument.

In what follows, given the above observations, it is claimed that the alleged 'raising' construction should be analyzed as a control construction. Although we will develop a control analysis for the construction, there are some peculiarities of this control construction and, especially, the verbs that take this construction are similar to the so-called 'raising verbs' in English. Hereafter I will call the construction 'p-raising' (meaning 'pseudo-raising').

6.3 Arguments for a control analysis

A control analysis for the construction in question is not new; however, it has been criticized and has not been seriously pursued in the literature. Saito (1983) is one of the few studies that explicitly put forth a control analysis. Unfortunately his argument was not strong. In this section, first, it will be argued that the data that have been claimed to be against a control analysis do not constitute evidence against it. Second, the peculiarities of the construction as control will be discussed. Third, the status of the matrix accusative NP is discussed. Fourth, after these three discussions, a possible treatment within Role and Reference Grammar will be proposed.

6.3.1 Data against a control analysis

The proponents of the 'raising' analysis have criticized the control analysis, pointing out the differences between a canonical control construction (see 6.3.2) and the 'p-raising' construction. Among the data presented against a control analysis, the issue of resumptive pronouns seems to be the only real challenge (cf. Tanaka 2002).

(12a) is an example of a canonical control construction with a resumptive pronoun in the linked unit, which is somewhat awkward to many speakers. (12b) is an example of the 'p-raising' construction with a resumptive pronoun, which is unacceptable (12a and 12b are both from Kuno 1976). Although both examples are not fully acceptable, the control example, (12a), is clearly far better than (12b). This argument has been used as the most robust evidence against a control analysis.

(12) a. ?Taroo-ga Ken$_i$-ni [kare$_i$-ga gakkoo-ni iku-yooni](-to) meezita
Taroo-NOM Ken-DAT 3.sg.m-NOM school-to go-Cyooni (-Cto) ordered
'Taroo ordered Ken$_i$ that he$_i$ should go to school.'

b. *Taroo-ga Ken$_i$-o [kare$_i$-ga tensai-da]-to omotteita
Taroo-NOM Ken-ACC 3.sg.m-NOM genius-cop -Cto thought
'Taroo thought of Bill$_i$ that he$_i$ was a genius.'

It can be demonstrated, however, that the low acceptability in (12b) is pragmatic in nature. If the resumptive pronoun is focused by adding a focus particle, *koso*, the sentence becomes acceptable or at least far better as in (13a) (cf. Mihara 1994). Or, as in (13b), a *wa*-marked NP sounds better than (12b). One of the functions *wa* has is to mark an individual-level predicate (Carlson 1977). The predicate *tensai* 'genius' is an individual-level predicate. Therefore, unless the exhaustive listing reading is intended, the 'subject' is usually marked by *wa* for this type of predicate (compare *sora-wa aoi* 'The sky is blue' vs. *sora-ga akai* 'The sky is (temporarily) red'). Therefore, there is no contrastive meaning, either, on the *wa*-marked NP in the linked unit in (13b) unless extra stress is prosodically placed.

(13) a. (?)Taroo-ga Ken$_i$-o [kare$_i$-koso-ga tensai-da]-to omotteita
Taroo-NOM Ken-ACC 3.sgm-FocP-NOM genius-cop -Cto thought
'Taroo thought of Ken$_i$ that he$_i$ was a genius.'

b. (?)Taroo-ga Ken$_i$-o [kare$_i$-wa tensai-da]-to omotteita
Taroo-NOM Ken-ACC 3.sg.m-TOP genius-cop -Cto thought
'Taroo thought of Ken$_i$ that he$_i$ was a genius.'

Thus, even the facts about resumptive pronouns are not a real challenge for a control analysis. It is obvious, however, that the 'p-raising' construction is different from a canonical control construction. In what follows, the peculiarities of the construction and the possible source thereof will be explored.

6.3.2 Peculiarities of the construction as a control

The sentences in (14) are examples of the canonical control constructions in Japanese (from Aoshima 2001). (14a) and (14b) are 'subject'-control and 'object'-control respectively.

(14) a. Taroo$_i$-ga [Ø$_i$ sono ronbun-o yom-oo]-to shita
Taroo-NOM the paper-ACC read-Int.mod -Cto did
'Taroo tried to read the paper.'

b. Taroo-ga Hanako$_i$-ni [Ø$_i$ sono ronbun-o yomu-yooni](-to) itta
Taroo-NOM Hanako-DAT the paper-ACC read-Cyooni (-Cto) said
'Taroo told Hanako to read the paper.'

It must be noted that in these canonical control examples, the type of the linked unit is core, not clause, despite the fact that the unit is linked by the same CLM *to* as in the 'p-raising' construction. The data below in (15) which correspond to (14a), illustrate that clausal operators such as tense, (15a), clause-final particles, (15b), and status, (15c), cannot occur in the linked unit. Exactly the same (un)acceptability obtains also for (14b) when the relevant data are examined.

(15) a. *Taroo$_i$-ga [Ø$_i$ sono ronbun-o yon-da]-to shita
Taroo-nom the paper-ACC read-PST -Cto did
'???'

b.	*Taroo$_i$-ga	[Ø$_i$	sono	ronbun-o	yomu-{ zo/yoo/naa }	]-to		shita
	Taroo-NOM		the	paper-ACC	read-{ CFP }	-Cto		did
	'???'							
c.	*Taroo$_i$-ga	[Ø$_i$	sono	ronbun-o	yomu-daroo	]-to		shita
	Taroo-NOM		the	paper-ACC	read-may	-Cto		did
	'???'							

As observed in 6.1.3, the linked unit of 'p-raising', (1b), is clause (not core). Thus, the 'p-raising' construction is not a canonical control construction with respect to juncture level.

There is one more peculiarity worth noting: S-transitivity augmentation. It is pointed out in FVV84 and VVLP97 that there is a cross-linguistically attested systematic relation between control and 'raising' constructions. In a control construction the S-transitivity is reduced by one in complex construction, as shown in (16a) and (16b), whereas a 'raising' construction retains the same S-transitivity in both constructions, as in (17a) and (17b).

(16) a. [3] Phil told Dana a story / Phil told Dana that …

←→ [2] Phil told Dana to …

b. [2] Eileen remembered her purse / Eileen remembered that …

←→ [1] Eileen remembered to …

(17) a. [2] Juan believed the story

←→ *[1] Juan believed to …

b. [2] Juan believed the story

←→ [2] Juan believed Carole to …

Their generalization about S-transitivity reduction holds for the canonical control constructions in Japanese as well. As shown in (18), the number of the syntactic arguments is reduced by one when complex structure is employed.

(18) a. [3] Taroo-ga Hanako-ni ziken-no-shoosai-o itta
Taroo-NOM Hanako-DAT accident-GEN-detail-ACC said
'Taroo told Hanako about the details of the accident.'

←→ [2] Taroo-ga Hanako-ni [benkyoo-suru-yooni] itta
Taroo-NOM Hanako-DAT study-do-Cyooni said
'Taroo told Hanako to study.'

b. [2] Hanako-ga shukudai-o shita
Hanako-NOM homework-ACC did
'Hanako did her homework.'

←→ [1] Hanako-ga [Taroo-o tatak-oo]-to shita
Hanako-NOM Taroo-ACC hit-Int.mod -Cto did
'Hanako tried to hit Taroo.'

What is peculiar about the 'p-raising' construction is that syntactic transitivity is augmented rather than reduced contra the general expectation about control constructions. This is shown in (19).

(19) [2] Taroo-wa [Hanako-ga tensai-da]-to omotteita (= 1a)
Taroo-TOP Hanako-NOM genius-cop -Cto thought
'Taroo thought that Hanako was a genius.'

←→ [3] Taroo-wa Hanako-o [tensai-da]-to omotteita (=1b)
Taroo-TOP Hanako-ACC genius-cop -Cto thought
'Taroo thought of Hanako that (she) was a genius.'

The change (or invariance) in S-transitivity is summarized in (20). If we try to include the 'p-raising' in the family of control constructions, the 'S-transitivity reduction' turns out not to be a correct characterization of control constructions. Rather, it should be characterized as a construction with variable S-transitivity.

(20) S-transitivity change

2 → 1 Control (canonical type)
2 → 2 Raising
2 → 3 Control ('pseudo-raising' type)

6.3.3 The status of the accusative

The last issue left is the status of the accusative-marked argument in the matrix core. A crucial piece of evidence to answer this question has already been shown in section 6.2.3. Namely, it is functionally the topic of the linked unit. In section 6.2.3, an example that has no gap in the linked unit was presented, (11). In (11), the accusative-marked argument cannot function as either 'subject', or '(indirect) object', or possessor in the linked unit. The only syntactic slot left is topic of the linked unit and the accusative matrix argument has to have some 'aboutness relation' to the linked unit, though the two units (matrix and linked unit) are structurally dissociated. In other words, the accusative matrix argument is undergoer which has the topic-presenting function over the linked unit. The two features of the accusative matrix argument, the undergoerhood (i.e. [U_T]) and the topic-presenting function, can be further clarified by the following two arguments. One is, once again, *no-koto* attachment (cf. section 6.1.3) and the other is passive formation. These two will be discussed in order.

In section 6.1.3, it was shown that *no-koto* can be attached to the accusative matrix argument in a 'p-raising' construction. A relevant example is repeated below in (21).

(21)	Taroo-wa	Hanako-{ o/no-koto-o }	[	baka-da	]-to	omotteita
	Taroo-TOP	Hanako-{ ACC/GEN-thing-ACC }		fool-cop	-Cto	thought
	'Taroo thought of Hanako that (she) was a fool.'					

The exact nature of the *no-koto* phrase is still relatively unclear, but it is known that there are two uses, semantically vacuous and semantically non-vacuous use. It is generally agreed that it is only attached to 'object' ([U_T] and [U_{inv}] in our terms) when it is used as a <u>semantically vacuous</u> element (cf. Sasaguri 1999, Kishimoto 2005). (22a) shows that *no-koto* can be attached to 'object' without changing the truth-value of the sentence. (22b) shows that case does not

matter and the preverbal [U_{inv}] in an inversion construction can be marked by the phrase as well. On the other hand, it cannot be attached to 'subject' ([d-S] and [DCA_{inv}] here), as shown in (22c) and (22d) respectively. This is also true of more canonical 'subject' such as [S] or [A_T] as shown in (22e) and (22f). Thus, it can be a test for the undergoerhood of the argument ([U_T/U_{INV}]) whether this phrase can be attached or not. Accordingly, it can be concluded that the accusative matrix argument of the 'p-raising' construction, for example *Hanako* in (21), has undergoer status.

(22) a. Hanako-ga Taroo-{ o/no-koto-o } hometa/shikatta/tataita
Hanako-nom Taroo-{ acc/gen-thing-acc } praised/scolded/hit
'Hanako praised/scolded/hit Taroo.'

b. Taroo-ga Hanako-{ ga/no-koto-ga } sukida
Taroo-nom Hanako-{ nom/gen-thing-nom } like
'Taroo likes Hanako.'

c. Taroo-{ ga/*no-koto-ga } Hanako-ni homerareta/shikarareta/tatakareta
Taroo-{ nom/gen-thing-nom } Hanako-by was.praised /was.scolded/was.hit
'Taroo was praised/scolded/hit by Hanako.'

d. Taroo-{ ga/*no-koto-ga } Hanako-ga sukida
Taroo-{ nom/gen-thing-nom } Hanako-nom like
'Taroo likes Hanako.'

e. Taroo-{ ga/*no-koto-ga } hashitta/koketa
Taroo-{ nom/gen-thing-nom} ran/fell.down
'Taroo ran/fell down.'

f. Hanako-{ ga/*no-koto-ga } Taroo-o hometa
Hanako-{ nom/gen-thing-nom} Taroo-acc praised
'Hanako praised Taroo.'

The phrase *no-koto* has another <u>semantically non-vacuous</u> use. Especially when combined with a verb of saying or cognition verbs, this phrase, *no-koto*, must be employed to express the topic of the saying or thought in simple sentences. Observe (23a). This is somewhat similar to the English counterpart in which the sentence without 'about' is ungrammatical (**Ken talked/thought the accident*). The typical 'p-raising' verb, *omou*, also exhibits the same behavior

as shown in (23b). The verb *omou* is one of the highly polysemous verbs and the simple accusative is allowed when the verb means 'care' or 'be keen on' (as in *anata-o omou* '(I'm) keen on you'), which is not the intended meaning here.

(23) a. Taroo-ga sono jiko-{ *o/no-koto-o } hanashita/kangaeta
Taroo-NOM the accident-{ ACC/GEN-thing-ACC } talked/thought
'Taroo talked/thought about the accident.'

b. Taroo-ga Hanako-{ *?o/no-koto-o } itsumo omotteiru
Taroo-nom Hanako-{ acc/gen-thing-acc } always be.thinking
'Taroo is always thinking about Hanako.'

That *no-koto* in (23a) is semantically non-vacuous can be shown as in (23c). In (23c), the same slot is specified (substituted) by a content noun, *syoosai* 'detail.' Furthermore, since the phrase *no-koto* has unspecified reference in the current use, it can be passivized, unlike the vacuous *no-koto*, as in (23d'), which corresponds to (23d) (cf. Kishimoto 2005).

c. Taroo-ga sono jiko-no-shoosai-o seito-ni hanashita
Taroo-NOM the accident-gen-detail-ACC student-dat talked
'Taroo talked about the details of the accident to the students.'

d. Taroo-ga { sono-jiko/Hanako }-no-koto-o seito-ni hanashita
Taroo-NOM { the-accident/Hanako }-gen-thing-ACC student-dat talked
'Taroo talked about something about { the accident/Hanako } to the students.'

d'. { Sono-jiko/Hanako }-no-koto-ga seito-ni hanasareta
{ the-accident/Hanako }-gen-thing-NOM student-dat was.talked
'Something about { the accident/Hanako } was told to the students.'

Koto refers to some unspecified topic associated with the *jiko* 'accident' or *Hanako* in (23d) and (23d'). In sum, the above data suggest that one of the functions of the *no-koto* phrase is to vaguely present the topic of the speech or thought without specifying what it is. This topic-presenting function of the phrase is obviously compatible with the view that the

accusative-marked matrix argument functionally serves as the topic of the linked unit[6]. Thus, the *no-koto* attachment supports the current view that the accusative argument is undergoer and has topic-presenting function.

Given the undergoerhood of the matrix accusative, it is expected that it can undergo passivization. Citing the following examples in (24), Kuno (1976) claims that the passive of a 'p-raising' verb is necessarily an adversative passive construction. Adversative passives require that the matrix 'subject' be human (i.e. cognizer) and therefore, (24b) is unacceptable, he claims.

(24) a. Yamada-wa sono hon-o [totemo omoshiroi]-to omotta
Yamada-top the book-acc very interesting -Cto thought
Yamada thought of the book that (it) was very interesting.'

b. *Sono-hon-wa Yamada-ni [totemo omoshiroi]-to omow-are-ta
the-book-top Yamada-by very interesting -Cto think-pass-pst
'To the book's chagrin, Yamada thought that it was very interesting.'

It is certain that there is some sensible adversative meaning in (24b) as Kuno points out; however, it is not necessarily the case that the adversative meaning is a structurally derived one. An adversative passive construction is typically a so-called indirect passive construction which does not have an active counterpart as shown in (25), (26) and (27). Each sentence in (a) is an indirect passive that necessarily contains some adversative meaning whereas each example in (b) is a hypothetical active counterpart which is nonexistent in the language.

(25) [intransitive-based]
a. Hanako-ga Taroo-ni shin-are-ta
Hanako-nom Taroo-dat die-pass-pst
'Taroo died and Hanako was affected by it.'
'(lit.) Hanako was died by Taroo.'

[6] However, I have no explanation why the accusative in 'p-raising' can serve as a topic without *no-koto*. The accusative argument without *no-koto*, for example in (23a), cannot serve as topic-marking. Besides, I will also leave open the potential semantic differences between the accusative with *no-koto* and without it in a 'p-raising' construction.

b. *Taroo-ga Hanako-o shinda
Taroo-nom Hanako-acc died
'???'

c. Taroo-ga shinda
Taroo-nom died
'Taroo died.'

(26) [transitive-based]

a. Hanako-ga Taroo-ni uta-o utaw-are-ta
Hanako-nom Taroo-dat song-acc sing-pass-pst
'Taroo sang a song and Hanako was affected by it.'
'(lit.)Hanako was sung a song by Taroo.'

b. Taroo-ga Hanako-o uta-o utatta
Taroo-nom Hanako-acc song-acc sang
'???'

c. Taroo-ga uta-o utatta
Taroo-nom song-acc sang
'Taroo sang a song.'

(27) [ditransitive-based]

a. Hanako-ga Taroo-ni tomodachi-o takusan paathii-ni shootais-are-ta
Hanako-nom Taroo-dat friend(s)-acc many party-loc invite-pass-pst
'Taroo invited many friends to the party and Hanako was affected by it.'
'(lit.) Hanako was invited many friends to the party by Taroo.'

b. *Taroo-ga Hanako-o tomodachi-o takusan paathii-ni shootaishita
Taroo-nom Hanako-acc friend(s)-acc many party-loc invited
'???'

c. Taroo-ga tomodachi-o takusan paathii-ni shootaishita
Taroo-nom friend(s)-acc many party-loc invited
'Taroo invited many friends to the party.'

It is generally thought that each indirect passive construction in (a) is derived from a corresponding example in (c) and the additional nominative argument, for example *Hanako* in (25a), is licensed by the passive morpheme, though the status of this morpheme is arguable. In other words, in indirect passive sentences in (a), an argument has been added to the base sentences in (c). In terms of the RRG perspective, the indirect passive formation can be characterized as an obligatory S-transitivity augmentation process.

Now compare (24a) and (24b). It is obvious that there is no such S-transitivity

augmentation process involved in the two sentences in (24). It is highly likely, therefore, that the detectable adversative meaning in (24b) is not a structurally derived meaning but a meaning (or effect) whose root should be sought somewhere else, whatever it turns out to be.

In the following example, (28), another 'p-raising' verb, *danteisuru* 'conclude' is used. As shown, the active and passive sentences are both acceptable and the passive counterpart in (28b) does not produce any adversative meaning. As mentioned above, adversative passive constructions need a nominative-marked human NP which experiences the adversity. It should be noted that the derived 'subject', *sakuhin* 'art work', in (28b) is an insentient entity.

(28) a. kanteishi-ga mitsukatta sakuhin-o [sono-geijutsuka-no-sakuhin-da]-to
connoisseur-nom found art.work-acc the-artist-gen-art.work-cop-Cto
dantee-shita
conclusion-did
'The connoisseur concluded the found art work to be the one by the artist.'

b. mitsukatta sakuhin-ga kanteishi-ni [sono-geijutsuka-no-sakuhin-da]-to
found art.work-nom connoisseur-by the-artist-gen-art.work-cop -Cto
dantee-s-are-ta
conclusion-do-pass-pst
'The found art work was concluded by the connoisseur to be the one by the artist.'

Some researchers recently claim that the adversity of the alleged adversative passives is merely a conversational implicature which is, therefore, cancellable as in (29) (cf. Shibatani 2000, Oshima 2006).

(29) (Oshima 2006: 158)
Taroo-wa totsuzen oogon-ni hutte-ko-rare-te kyookiranbu-shita
Taroo-top suddenly golden-dat fall-come-pass-Cte extreme.joy-did
'Taroo was wild with joy as gold suddenly fell down.'

Though their claim must be scrutinized against the data presented in the past literature, it is true that the mechanism that produces adversative meaning is not fully understood yet and

such a pragmatic approach is a possible solution which has not been seriously taken into consideration in the literature. I follow their claim here as a possible solution, especially given our own data like (28) which do not have any adversity effect.

In this subsection, it was argued that the accusative matrix element functionally serves as a topic of the linked unit and has undergoer status. The first point was discussed in relation to the topic(aboutness)-presenting function of the phrase, *no-koto*. The second point, the undergoerhood of the accusative argument, was discussed in terms of passivization possibility as well as *no-koto* attachment possibility.

6.3.4 A formal treatment of the construction in RRG

Up to this point, it has been demonstrated that the alleged 'raising' construction in Japanese does not exhibit the behaviors cross-linguistically expected for a 'raising' construction. The seemingly 'raised' accusative argument in the matrix core can be associated with virtually any element in the linked unit. Therefore, the construction should be analyzed as a control construction in which the matrix accusative can even work as the topic of the linked unit as well as a missing argument in the linked clause. Given these observations, the representation of the construction as control is presented below in terms of RRG.

In (30), for reference purpose, the English examples of 'raising' and control constructions are shown with their simplified logical structures (VVLP97: 553, 561; VV05: 272). Both 'raising' and control constructions are a core-level process so that the linked units in (30a) and (30b) are both marked by an aspectual operator indicating the juncture has to be realized as a core juncture. The crucial difference between the two LSs is that while every semantic argument position is filled in the LS for the 'raising' construction in (30a), the LS of the control construction in (30b) has a variable in the linked unit which is controlled by a matrix argument.

(30) a. Pat believes Chris to have eaten the bagel.

LS: **believe'** (Pat,[‹$_{ASP}$*PERF* ‹**do'** (Chris, [**eat'** (Chris, bagel)])&INGR **eaten'**(bagel) »])

b. Tom persuaded Sandy to clean the car.

LS: [**do'**(Tom,[**say'**(Tom, Sandy$_i$)])]CAUSE[‹$_{ASP}$*PERF* ‹**want'**(Sandy$_i$,[[**do'**(y$_i$, Ø)] CAUSE [BECOME **clean'**(car)] »]

For a 'p-raising' construction, the latter LS, which has a variable in the linked unit, should be employed to capture the nature of the construction as control, but, as has been revealed, there are two peculiarities we need consider: clausehood of the linked unit and the position of the accusative matrix element in LS.

There is a suggestive analysis in VVLP97 of an English construction, (31), which is similar to a 'p-raising' construction in that there are two undergoer-like elements at the post-nuclear position. In VVLP(1997: 528), the relation between the two post-nuclear elements in (31) is analyzed on a par with that between bound pronominal markers on a verbal stem and the corresponding independent NPs in head-marking languages. For semantic representation of this construction, see the LS given below in (31).

(31) I hate it that she arrived late.

LS: **hate'**(1.sg, [3.sg.N,[**late'**(BECOME**be-at'**(Ø,3.sg.F))]])

In this construction, the pronominal element refers to the following *that*-clause as a whole. This is a construction that has referentially same two elements with split realizations. Since they are referentially the same, obviously there is no control relation between them in this construction. Only the pronominal element is a core argument and the clausal unit is realized

as a core-external element.

On the other hand, the two elements in a 'p-raising' construction are referentially not the same but rather dependent on each other, constituting a single proposition together. As expected from this semantic bond, the linked clause is also core-internal and therefore, both the matrix accusative argument and the linked clause are both core arguments in this construction. Namely both elements need to appear inside a single core. I propose the following schematic LS in (32) for the 'p-raising' construction in Japanese.

(32) **COG'** (x, [$\underline{(y_i)}$ [‹TNS ‹STA ‹... [… y_i …]...»]])

The meta-predicate **COG'** subsumes all the cognition verbs relevant for the construction such as *omou* 'think' or *shinjiru* 'believe'. The position of the matrix accusative argument in (32), represented by the first "y" variable, is out of the scope of the clausal operators for the embedded predicate, which entails that the argument is realized outside the embedded clause, i.e. a matrix element. The first "y" variable is in parenthesis since it is optional as in (33a) below. The underline indicates that, when present, it serves as a main clause core argument (cf. VV05: 146). The clausal operators such as a tense or status operator entail that the embedded part must be realized as a clause. I further hypothesize that the control (or, in other words, 'dependent') relation between the matrix accusative and the embedded clause require both of the two elements to be realized as core arguments since they are syntactically dissociated but semantically united as a whole. They could be pragmatically united as well in the case that the linked unit is a part of a topic-construction and the matrix accusative functions as its topic (i.e. embedded clause without gap). In other words, there must be some (semantic or pragmatic) mutual 'dependency' between the two elements (cf. Shibatani 2001 for the notion of 'dependency')

as a necessary condition.

In (33), the first two sentences we started this chapter with, (1a) and (1b), are repeated with their logical structure representations which are based on the newly developed scheme in (32). Relevant clausal operators such as tense are also represented for the linked clause.

(33) a. Taroo-wa [Hanako-ga tensai-da]-to omotteita (= 1a)
Taroo-TOP Hanako-NOM genius-cop -Cto thought
'Taroo thought that Hanako was a genius.'
LS: **think'**(Taroo, ‹TNS *PRES* [**be'**(Hanako, genius)]›)

b. Taroo-wa Hanako-o [tensai-da]-to omotteita (= 1b)
Taroo-TOP Hanako-ACC genius-cop -Cto thought
'Taroo thought of Hanako that (she) was a genius.'
LS: **think'** (Taroo, [Hanako$_i$, ‹TNS *PRES* [**be'**(x$_i$, genius)]›])

Figure 1 and 2 in (34) show the LSC of each sentence in (33). In Figure 1, the whole embedded element is realized as a clause since it is tense-marked at LS and there is no 'dependent' element outside the embedded unit at LS (i.e. no variable at LS). Clausal arguments marked by the CLM *-to* do not get case-marked (**-to-o* '-Cto-acc') and therefore only the CLM appear at the end of the clause. In this construction, thus, the accusative case-marker does not appear in the whole sentence.

In Figure 2, there are three semantic arguments at LS. The third element is tense-marked and involves a variable. Therefore it must be realized as a clause with a gap (i.e. a missing pivot). There is a control relation between the second argument and the variable in the third argument. Therefore, both of them must be realized as core arguments within a single core. Both the second and the third argument receive undergoerhood and therefore they are eligible for accusative case assignment under Imai's (1998) case-marking rule for Japanese. As mentioned above, however, *to*-linked clausal complements do not get case-marked. Naturally, only the second argument receives accusative case.

(34)

Figure 1

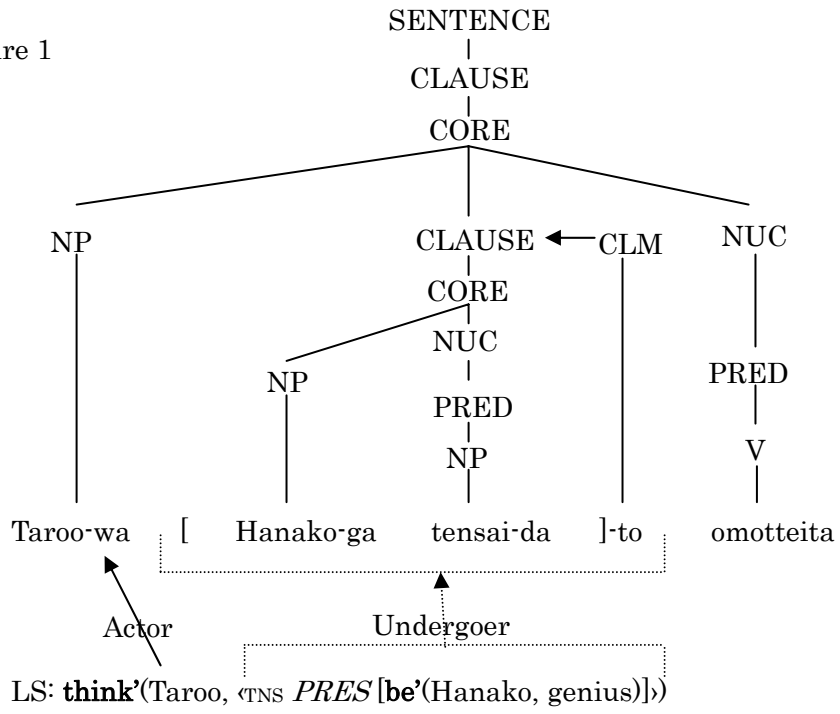
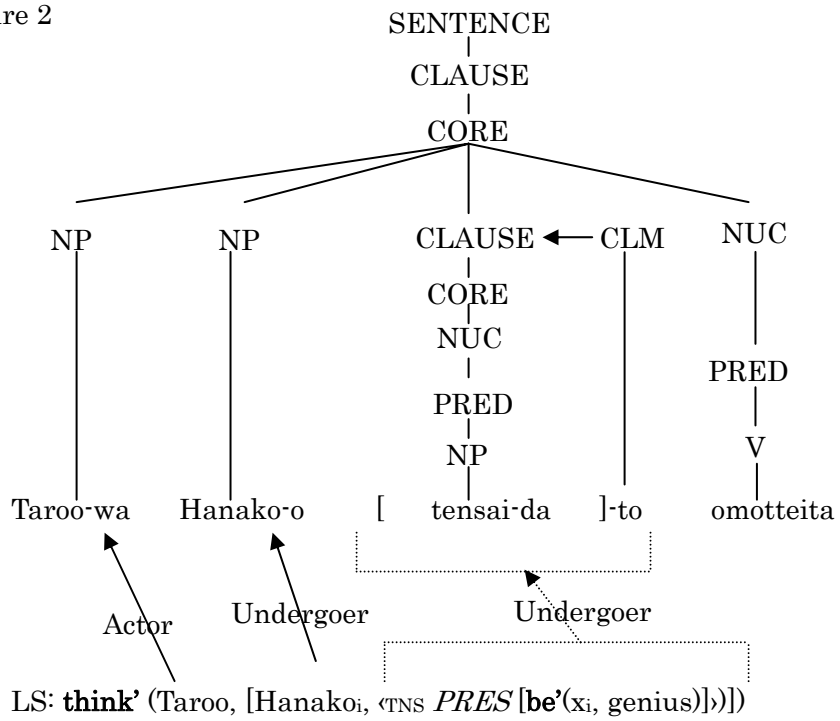


Figure 2



6.4 Concluding remarks

In this chapter, it was claimed that the Japanese construction hitherto analyzed as a 'raising' construction should be analyzed as a control construction. It was shown that the data given for a 'raising' analysis do not constitute evidence exclusively for a 'raising' analysis and there are many more pieces of evidence which are against a 'raising' analysis than reported before. Furthermore, the data which were presented against a control analysis were shown not to pose a genuine problem. The chapter was concluded with a possible logical structure representation that subsumes the peculiarities of the construction as control.

As extensively discussed in Davies and Dubinsky (2004), there are many languages that have a construction similar to the one termed as 'p-raising' construction in this chapter. Our solution might shed some new light on such other cases as well.

Chapter 7 Conclusions

In this dissertation, the following four issues about the Japanese language were addressed: (1) grammatical relations, (2) the antilocality of the reflexive construction, (3) the pragmatically-driven semantic interpretation of the reflexive construction and (4) the nature of the 'pseudo-raising' construction. These four issues were discussed in four separate chapters after two introductory chapters (Chapter 1 and 2).

In chapter 3, grammatical relations of the Japanese language were detailed. It was first pointed out that the preceding studies are neither comprehensive nor conclusive in the following two points. First, the coverage of the constructions examined is rather limited. Second, the frameworks assumed are too coarse and obsolete to pin down the exact nature of the 'subject' properties. Thus, they are insufficient in both quantitative and qualitative aspects.

Based on these observations on the past research, this chapter attempted to give a more comprehensive and fresh look at the grammatical relations of Japanese. As an analytical framework, Role and Reference Grammar (RRG) was employed which has developed a fine-grained system to analyze grammatical relations. As for the coding properties, agreement and case were examined. In particular, oblique PSAs such as an instrumental or locative 'subject,' which have not been detailed in the literature, were examined and it was shown that they retain exactly the same subjecthood as corresponding nominative PSAs. Regarding the behavioral properties (constructions), among the roughly twenty constructions examined, five constructions ('raising' construction, externally-headed relative clause, cleft-construction, wh-construction and one of clause linkage constructions(*-to*-construction)) were argued not to provide any evidence concerning grammatical relations.

As a result of the examination, three conclusions were drawn. The first conclusion is that it is necessary to have the notion of 'subject' to describe the language, which supports the position by Kuno, Shibatani and Tsunoda (contra Mikami). The second conclusion is that while some constructions provide evidence concerning grammatical relations ('subject'), others do not. This conclusion supports the philosophy, which RRG advocates, that grammatical relations are construction-specific. The third conclusion is that, even among the constructions that exhibit 'subject' properties, the type of 'subject' is not necessarily uniform across the constructions. This observation was made possible by employing the fine-grained analytical system RRG has developed for grammatical relations. Thus, this chapter offered, presumably, the most comprehensive study of grammatical relations in Japanese in both qualitative and quantitative aspects.

[Reflexive I]

In Chapter 4, the long-standing issue of the antilocality effect seen in the Japanese reflexive constructions was addressed. It was first shown that the antilocality effect of the Japanese reflexives has nothing to do with the notion of lexical reflexivity which has been employed to account for some cross-linguistic data.

In order to deal with the Japanese-specific antilocality effect, an affectedness constraint was formulated to the effect that the reflexive *zibun* (or *zibun-zishin*) may not be used for the object of the verbs that denote a change of state (affectedness). Though this constraint seems plausible and indeed there was a similar proposal in the past literature, there is a class of 'antilocal' verbs that do not denote any affectedness: perception verbs. Through a detailed examination, it was found that the (auditory) perception verbs do not allow metonymy and require an NP that satisfies the semantics of the verb. Namely, only sound-related nouns are

licensed at the object position in the case of auditory perception verbs.

Given the above finding, all the other non-perception antilocal verbs were examined. As expected, it was found that they also require a specific NP according to the meaning of the verb. Thus it was claimed that the antilocality effect seen in the Japanese reflexive constructions is due to a peculiar subcategorization nature of the 'antilocal verbs'. That is, what we called 'antilocal verbs' do not allow metonymy and require NPs of a certain meaning. Our conclusion of this chapter was that the antilocality effect is not specific to the reflexive constructions and, accordingly, there is no need to posit a constraint on the behavior of the reflexive itself. For a formal treatment, a possible RRG representation was presented incorporating the qualia structure theory.

[Reflexive II]

In Chapter 5, an interpretive issue of the reflexive construction which has not been discussed before in the literature was addressed. The following two things were demonstrated.

First, the Japanese lexical reflexives (i.e. morphologically reflexive-marked) behave exactly as expected from the universal principle of Condition R (Lidz 2000, 2001). Lexical reflexives are expected to show only the pure-reflexive interpretations unambiguously. We could not examine the availability of the statue reading due to lexical gaps, but we found that they produce only the sloppy reading unambiguously in the comparative constructions as expected. It can be concluded that the validity of the principle has been further confirmed by the Japanese data.

Second, and more importantly, it was pointed out that the Japanese syntactic reflexives (i.e. unmarked verb + reflexive) do not show the expected behaviors. The lexically unmarked predicates were demonstrated to be lexically non-reflexive. In other words, they are simply transitive verbs. Given this lexically non-reflexive nature of the predicates, the near-reflexive

interpretations are expected to be available. Contrary to this expectation, however, they consistently produce the pure-reflexive interpretation. They do not allow the statue reading. They do not produce the sloppy/strict ambiguity, but they robustly yield only the sloppy reading unambiguously. It was discussed that the Japanese pure-reflexivity without lexical reflexivity is due to two types of focus structure: focus by intensifier and focus by construction.

Overall, it was demonstrated by the Japanese data, as Liu (2003) demonstrated by Chinese data, that there is a pragmatically driven way to achieve semantic reflexivity (i.e. pure-reflexive interpretation in Lidz' term). As a theoretical consequence, it was claimed that the current bidirectional relation between lexical reflexivity and semantic reflexivity in Condition R should be weakened to a unidirectional one which says that lexical reflexivity necessitates semantic reflexivity but not vice versa.

[Pseudo-raising]

In Chapter 6, it was claimed that a Japanese construction hitherto analyzed as a 'raising' construction should be analyzed as a control construction. The following arguments were developed.

In section 1, it was shown that the data used to support a 'raising' analysis do not constitute evidence exclusively for the 'raising' analysis and are compatible with other approaches including a control analysis. In section 2, several new data that are not compatible with the 'raising' analysis were offered. As a consequence of the observation, the 'raising' analysis was rejected and a control analysis was suggested instead. In section 3, it was shown that the data that have been presented against the control analysis, the issue of resumptive pronouns, do not constitute a genuine problem for a control analysis by demonstrating that the problematic behavior is pragmatic in nature.

In section 3, two more issues were discussed, the peculiarities of the 'p-raising' construction as control and the status of the matrix accusative argument of the 'p-raising' construction. Though control constructions cross-linguistically exhibit S-transitivity reduction, it was shown that the 'p-raising' construction shows S-transitivity augmentation. As for the other issue, the status of the accusative, it was argued that it has undergoer status and is functionally the topic of the linked unit which controls the missing argument, if any, in the linked unit. The undergoerhood was confirmed by the two facts. One is that the (semantically vacuous) *no-koto* can be only attached to an 'objet' argument, i.e. undergoer. The undergoerhood was further confirmed by the second fact, passivization. The same argument at LS can be realized as a nominative PSA via passive voice.

Lastly, at the end of section 3, a schematic LS for 'p-raising' constructions was proposed. The linking patterns for a canonical clausal construction and its corresponding 'p-raising' construction were presented in terms of RRG.

Appendix

Below are the other obligatory control constructions whose data were not shown in 3.4.3.6. Exactly the same restricted neutralization pattern discussed in 3.4.3.6 can be found. Only [U_T] is consistently ruled out as shown below.

[*-te*] 'subject'-control

[S]
a. Taroo-ga sokode { hashit/ne }-te-mita
Taroo-NOM there { run/sleep }-Cte-AUX'saw'
'Taroo tried running/sleeping there.'
[A]
b. Hanako-ga Taroo-o tatai-te-mita
Hanako-NOM Taroo-ACC hit-Cte-AUX'saw'
'Hanako tried hitting Taroo.'
[*U_T]
c. *Taroo-ga Hanako-ga $Ø_i$ tatai-te-mita
Taroo-NOM Hanako-NOM hit-Cte-AUX'saw'
'*Taroo$_i$ tried Hanako hitting $Ø_i$.'
[d-S]
d. Taroo-ga Hanako-ni tatak-are-te-mita
Taroo-NOM Hanako-by hit-PASS-Cte-AUX'saw'
'Taroo tried being hit by Hanako.'

[*-(y)oo-to*] 'subject'-control

[S]
a. Taroo$_i$-ga $Ø_i$ { hashir/nemur }-oo-to { shita/kokoromita/tsutometa }
Taroo-NOM { run/sleep }-AUX-Cto { did/tried/made.an.effort }
'Taroo tried to run/sleep.'
[A]
b. Taroo$_i$-ga $Ø_i$ shukudai-o shi-yoo-to shita
Taroo-NOM assignment-ACC do-AUX-Cto did
'Taroo tried to do the assignment.'
[*U_T]
c. *Taroo$_i$-ga Hanako-ga $Ø_i$ home-yoo-to shita
Taroo-NOM Hanako-NOM praise-AUX-Cto did
'*Taroo$_i$ tried (for) Hanako to praise $Ø_i$.'
[d-S]
d. Taroo$_i$-ga $Ø_i$ Hanako-ni home-rare-yoo-to shita
Taroo-NOM Hanako-by praise-PASS-AUX-Cto did
'Taroo tried to be praised by Hanako.'

[*-koto*] 'subject'-control

[S]
a. Taroo-ga Øi { hashiru/nemuru }-koto-o { kokoromita/kobanda/eranda }
Taroo-NOM { run/sleep }-Ckoto-ACC { tried/refused/chose }
'Taroo tried to run/sleep.'
[A]
b. Taroo-ga ronbun-o kaku-koto-o kokoromita
Taroo-NOM paper-ACC write-Ckoto-ACC tried
'Taroo tried to write a paper.'
[*U_T]
b. *Tarooi-ga sensee-ga Øi tataku-koto-o eranda
Taroo-NOM teacher-NOM hit-Ckoto-ACC chose
'*Tarooi chose (for) the teacher to hit Øi.'
[d-S]
c. Tarooi-ga Øi sensee-ni tatak-are-ru-koto-o eranda
Taroo-NOM teacher-by hit-PASS-NPST-Ckoto-ACC chose
'Tarooi chose Øi to be hit by the teacher.'

[*-koto*] 'object' control (= always undergoer control)

[S]
a. Taroo-ga Hanakoi-ni Øi { hashiru/neru }-koto-o meijita
Taroo-NOM Hanako-DAT { run/sleep }-Ckoto-ACC ordered
'Taroo ordered Hanako to run/sleep.'
[A]
b. Taroo-ga Hanakoi-ni Øi Ken-o tasukeru-koto-o tanonda
Taroo-NOM Hanako-DAT Ken-ACC help-Ckoto-ACC asked
'Taroo asked Hanako to help Ken.'
[*U_T]
d. *Taroo-ga Hanakoi-ni Ken-ga Øi tasukeru-koto-o susumeta
Taroo-NOM Hanako-DAT Ken-ACC help-Ckoto-ACC recommended
'*Taroo recommended Hanako Ken to help her.'

[d-S] (note: (c') sounds more natural.)
c. Taroo-ga Hanako-ni Ø Ken-ni tasuke-rare-ru-koto-o
Taroo-NOM Hanako-DAT Ken-BY help-PASS-NPST-Ckoto-ACC
susumeta
recommended
'Taroo recommended Hanako to be helped by Ken.'

c'. Taroo-ga Hanako-ni Ø Ken-ni tasuke-te-morau-koto-o
Taroo-NOM Hanako-DAT Ken-BY help-Cte-BEN-Ckoto-ACC
susumeta
recommended
'Taroo recommended Hanako to be helped by Ken.'

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