Chapter 3

Ditransitives and Applicative

1 Introduction

-Derivationally-Related View vs. Split-Head View

The relationship between the double object construction (DOC) and the Dative construction (DC) has been extensively studied since the birth of Generative grammar. The DOC is exemplified by (ia); the DC by (ib).

- The DOC and the DC in English
- (i) a. John sent Mary a letter. (DOC)
 - b. John sent a letter to Mary. (DC)

Our main concern here is whether these two sentences share the same underlying structure or not. Related to this problem, two proposals, Larson (1988) and Pylkkänen (2002), will be reviewed in Section 2. Larson (1988) advocates that the DOC and the DC share the same underlying structure, and that the former is derived from the latter. In Larson's hypothesis, the Goal argument in both the DOC and the DC are thematically the same, hence they should be base-generated in the same position assuming the uniformity of theta assignment hypothesis (UTAH, Baker 1985), though they appear in different positions at S-Structure (SS). Let us refer to this standpoint "the derivationally-related view" (cf. Hoji 1985, Takano 1998, and Yatsushiro 1998, 2003 for research in Japanese). The term is used following the discussion in Miyagawa and Tsujioka (2002). On the other hand, Marantz (1993)

argues for the existence of Applicative (Appl) head in the DOC, which introduces an additional "Goal" argument through the derivation. That is, the "Goal" arguments in the DOC and in the DC are different. We will call this position "the split-head view." The argument proposed by Marantz has been developed by Harley (1995) and Pylkkänen (2002), and the latter will be reviewed in Section 2. Miyagawa and Tsujioka (2004) apply a split-head view to Japanese and convincingly argue that there are different positions for a "Goal" argument in the DOC and the DC; each one introduced by a different head, so that the DOC and the DC do not share the original structure. They further argue that Japanese ditransitives are ambiguous between two derivations, which correspond to the DOC and the DC in English. More details will be presented in Section 3, where Japanese ditransitive structures are examined.

Building on these studies, we will propose in Section 4 that an Appl head can be added to ditransitives. This Appl is morphologically realized as *age-ru/yar-u* 'give' in Japanese, which we will term the "Give Benefactive/Malefactive Construction (GBC)."

• The GBC

- (ii) a. Taroo-ga <u>Hanako-ni</u> hon-o okut-ta.

 Taroo-Nom Hanako-ni book-Acc send-Past

 'Taroo sent Hanako a book.'/ 'Taroo sent a book to Hanako.'
 - b. Taroo-ga <u>Hanako-ni</u> hon-o okut-te-<u>age</u>-ta.
 Taroo-Nom Hanako-ni book-Acc send -Give-Past
 'Taroo sent Hanako a book (for the good of her).'

Section 5 is devoted to the GBC. A *ni*-marked phrase often (but not always) appears in the GBC, however, whether the *ni*-phrase is introduced by the "lexical" verb, or by the upper "functional" head 'Give,' Appl in our terms, has been an issue and extensively argued (Nakau 1973, Inoue 1976, Shibatani 1978, 1994, 2000, Machida 1996, 1998, Hasegawa 2000a, and Okura 2006, among many others). In

examining the statuses of *ni*-phrases, it becomes clear that a *ni*-phrase is in fact an argument of Appl. Further, comparative study unveils that English DOCs are ambiguous between simple ditransitives and the GBC. That is to say, an invisible Appl head may be included in English DOCs to introduce the Benefactive. Further, we will discuss that the Benefactive is not only introduced by external Merge, but also raised from VP to that position in the course of the derivation by internal Merge. This invisible movement of the Benefactive is confirmed by syntactic diagnostics such as indeterminate binding, pronoun binding, and scope interpretation. Benefactive raising is also supported by data of Alamblak (Iwamoto 1999a, b). Finally, Section 6 concludes the chapter.

2 Two Types of Approaches for Double Objects

2.1 A derivationally-related view: Larson (1988)

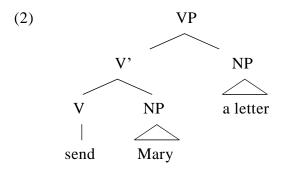
Consider the constructions in (1), where two internal arguments appear in one sentence:

- The DOC and the DC in English
- (1) a. John sent Mary a letter. (DOC)
 - b. John sent a letter to Mary. (DC)

We will call (1a) the "Double Object Construction (DOC)," and (1b), the "Dative Construction (DC)." This alternation phenomenon is termed "Dative alternation." The argument in question is *Mary* in (1a) and (1b). We tentatively call this "Goal" in both (1a) and (1b), but later we will elucidate that the status of *Mary* is not a simple "Goal" in (1a). As for grammatical functions, we will refer to *a letter* in both (1a) and (1b) as the "direct object"; *Mary* in (1a) as "the indirect object" and *to Mary* in (1b) as a "to-Dative phrase."

Assuming the X'-theory schema (Chomsky 1986) and binary branching (Kayne 1984), a structure for (1a) could be represented as (2):

• A traditional analysis for the DOC



However, puzzling data which show binding asymmetry are brought to attention by Barss and Lasnik (1986). They report that the first NP always binds the second NP, but not vice versa.

- Asymmetry in binding
- (3) a. I showed Mary herself. /* I showed herself Mary. (DOC)
 - b. I showed Mary to herself. / * I showed herself to Mary. (DC)

To accommodate the data, a Goal argument must be in a higher position and c-command a Theme argument in the DOC, contrary to (2).

In addition, Larson (1988) presents data from "discontinuous idioms," noted in Emonds (1972), which show that a verb and a Goal, realized as a *to*-Dative phrase, form a constituent in the DC.

- A verb and a to-Dative form a constituent
- (4) a. Lasorda sent his starting pitcher to the showers.

b. Mary
$$\underline{took}$$
 Felix
$$\left\{\begin{array}{l} \underline{to \ the \ cleaners} \\ \underline{to \ task} \\ \underline{into \ consideration} \end{array}\right\}.$$

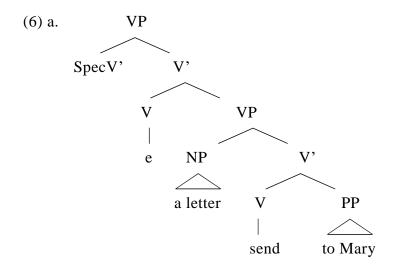
- c. Felix threw Oscar to the wolves.
- d. Max carries such behavior to extremes.

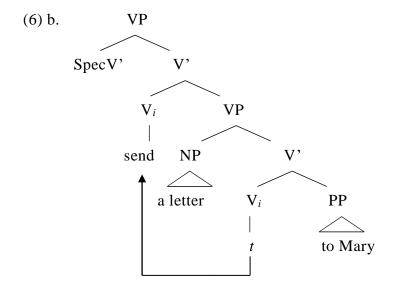
(Larson 1988: 340)

From a conceptual point of view, Larson maintains that all the arguments of a predicate must be realized within a projection of the predicate, which coincides with the "VP-internal hypothesis" advocated by Fukui and Speas (1986), Kitagawa (1986), Kuroda (1988), and Sportiche (1988).

Taking these puzzling data and conceptual discussions into consideration, Larson proposes an innovative derivation in (6) for the DC in (5).

- The Dative Construction (DC)
- (5) John sent a letter to Mary.





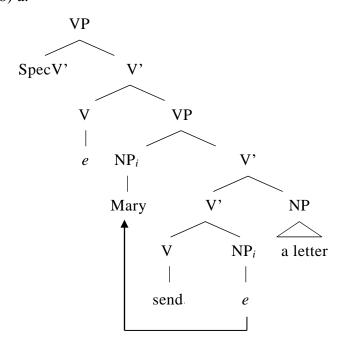
(Larson 1988: 342, 343)

In (6a) and (6b), the Theme argument c-commands the Goal argument, which accounts for the asymmetrical binding in (3b). The verb takes the Dative phrase *to Mary* as its complement and forms a constituent, which functions as the predicate: *send-to Mary*. Notice that the lower VP in (6b) corresponds to an unaccusative VP. On this VP, the higher VP is built up to accommodate the external argument in its Spec. The lexical verb *send* is raised to a higher abstract verb and compositionally assigns a θ -role to the external argument. As for Case, the raised verb governs the direct object, *a letter*, and is able to assign Case. Note that verb raising itself is not an unfamiliar phenomenon at all; it is widely assumed in VSO languages such as Irish. Thus, verb raising guarantees Case and agreement, as Larson points out.

Larson proposes that the DOC in (7) is derived from the DC by a kind of passivization, which he calls a modern version of "Dative Shift," shown in (8a-b).

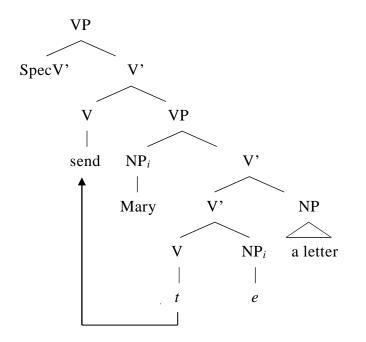
- The Double Object Construction (DOC)
- (7) John sent Mary a letter.

(8) a.



(Larson ibid.: 353)

(8) b.



(Larson ibid.: 353)

The operation in (8a) is assimilated to passives in the following two ways. First, just as the suppressed subject θ -role is optionally realized as an adjunct *by*-phrase in ordinary passives, Larson assumes that the subject θ -role is assigned to an adjunct, which he calls "Argument Demotion."

Argument Demotion

(9) If α is a θ -role assigned by X^i , then α may be assigned (up to optionality) to an adjunct of X^i .

(Larson ibid.: 352)

Thus, a letter in (8a), which appears in the subject position (Spec, VP) in the DC in (6a), is demoted to an adjunct position, and assigned a θ -role.

Second, similar to the way in which Case for the object is absorbed in ordinary passives, Case for the indirect object is absorbed in the DC. More precisely, the preposition *to* assigns Case to the indirect object, so *to* is absorbed. In (8a), the indirect object *Mary*, the Case of which is absorbed, moves to Spec-VP, a dethematized position, but Case is available. This is analogous to the ordinary passive in which the object NP moves to Spec-IP for Case.

The main difference in these "passive" operations is whether the operation applies within IP, as the ordinary passive, or within VP, as the DC. Larson gives the term "Passive" to the ordinary passive, NP movement which takes place within IP, whereas he gives the term "Dative Shift" to NP movement which takes place within VP, as in (8a). He subsumes these operations under the term "PASSIVE."

Another difference between Passive and Dative Shift is the status of the demoted adjunct phrases. Although a *by*-phrase in Passives is optional, the demoted object *a letter* in (8a) is not optional but necessary, as can easily be seen: *John sent Mary* *(*a letter*). According to Larson, morphology is responsible for this difference. In the Passive, the passive morpheme *-en* receives an "absorbed" θ -role from the subject (Jaeggli 1986). This is possible because the IP subject position is not subcategorized for, in other words, not linked to any lexical category, so that the θ -role can be assigned to the suffix *-en*. On the other hand, the VP subject is subcategorized for and linked to a θ -role. As a result, θ -role assignment to another morpheme like *-en* is impossible in Dative Shift. The θ -role must be assigned to an adjunct NP and the adjunct's existence is required, not optional. Larson removes the distinction between argument and adjunct positions for θ -role assignment and assumes that "...an argument position for a given role is projected even when the role in question is demoted and assigned in an adjunct configuration" (Larson ibid.: 383).

The proposal made by Larson was ground-breaking. In order to accommodate two internal arguments, he presents a VP-layer system, which has significant implications. In terms of syntax, the VP-layer solves puzzling data which suggest asymmetrical positions of the two internal arguments. It also captures constituency formed by a verb and a Dative phrase, which is empirically shown by idioms. In terms of semantics, a VP-layer system captures argument-predicate relations and compositionality, i.e., a letter - [send-to-Mary]; John - [send-a letter-to-Mary]. Conceptually, Larson shows that θ -role can be assigned in the course of the derivation, and this leads to elimination of D-Structure, where all the θ -roles are assumed to be assigned. Also, θ -role assignment to an adjoined position leads to reconsideration of X'-theory configuration.

Although the system presented by Larson is innovative, a few points remain to be developed. First, though the external argument is excluded from the lower verb's projection and taken care of by a higher verb, two internal arguments still have to be handled by the lower verb, which makes a structure complicated. Second, the two constructions, the DOC and the DC, are derivationally related: a part of their base structure is shared. However, as has been discussed, the Goal arguments appearing in the DOC and in the DC are different in many respects (Bresnan 1978, 1982, Pinker 1989, Gropen et al. 1989, and Pesetsky 1995). The Minimalist framework has shed new light on these problems. Pylkkänen (2002) focuses on semantic properties in DOCs and proposes Applicative to introduce the Goal argument in question, which will be reviewed in the next section. Further, Miyagawa and Tsujioka (2004), which will be discussed in Section 3.2, successfully reveal how English DOCs, DCs, and Japanese Ditransitive constructions are different as well as what they have in common.

2.2 A split-head view: Pylkkänen (2002)

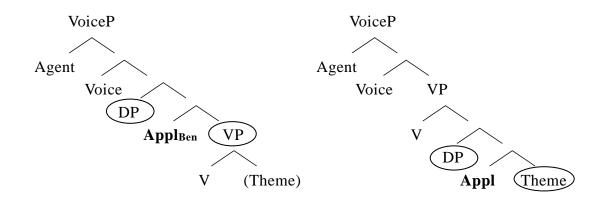
In developing a new concept of verbal argument structures in which Agent is "externally" introduced out of VP (Marantz 1984, Larson 1988, Hale and Keyser 1993, and Chomsky 1998, 2000, 2001), Pylkkänen (2002) argues that "additional arguments," distinct from "core arguments," are introduced by Applicative (Appl) heads, in the same way that Agent is introduced by little verb. She inspects various types of constructions where "additional arguments" appear from a cross-linguistic perspective, and clarifies how properties of constructions can be reduced to different types of Appl.

Pylkkänen investigates Appls involved in DOCs. In DOCs, thematic interpretations of indirect objects vary depending on the language: in English, the indirect object is interpreted as Goal/Possessor of the Theme, while in languages such as Chaga, a Bantu language, the indirect object is regarded as the Benefactive, benefiting from the event denoted by VP (Marantz 1993). In capturing this difference, Pylkkänen proposes two Applicative constructions, high and low:

Two Applicatives

(10) a. High Applicative (e.g. Chaga)

b. Low Applicative (e.g. English)



(Pylkkänen 2002: 19 with relevant notation)

Pylkkänen exploits the functional head "Voice" (Kratzer 1996) instead of v^* to introduce an external argument. The high Applicative in (10a) represents a relationship between an individual, which is realized as a DP, and an event, which is realized as a VP. The DP is interpreted as the Benefactive, which benefits from the event. On the other hand, the low Applicative in (10b) denotes a relationship between two individuals, DP and Theme. The DP is interpreted as Recipient/Possessor of the Theme. These different derivations account for the fact that only the high Applicative allows a Benefactive argument to be "added" or "applied" to an event which is denoted by an unergative verb.

• Chaga

(11) N-a-i-zrìc-í-à mbùyà

Foc-1Sg-Pres-run-Appl-Fv 9-friend

'He is running for a friend.'

(Pylkkänen ibid.:17, originally in Bresnan and Moshi 1993)

- English
- (12) a. I ran.

b. * I ran him.

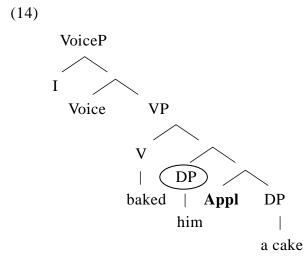
(Pylkkänen ibid.:17)

As shown in (10b), the low Applicative requires the relationship between the applied DP and Theme. This structure does not match the unergative sentence in (12b), hence the sentence is never generated. The structure in (10b), however, can generate the sentence in (13b), which is illustrated in (14).

• English

- (13) a. I baked a cake.
 - b. I baked him a cake.

(Pylkkänen ibid.:17)



(Pylkkänen ibid.: 19 with modification)

In Pylkkänen's work, possible argument structures of verbs in a language are attributed to possible Applicative constructions in the language. We will develop this view in the following discussions. In this chapter, we will show an example in which Appl head for the Benefactive is realized by a morpheme, age-ru/yar-u 'give' in Japanese. Further, we argue that an argument introduced in the subevent may move to ApplP and bears an applied θ -role, just like Possessor raising in the PRC, which we discussed in Chapter 2.

3 Japanese Ditransitives

3.1 Derivationally-related by scrambling: Hoji (1985)

As we reviewed in the previous section, it has been an issue whether the Dative Construction (DC) in (15a) and the Double Object Construction (DOC) in (15b) share the underlying structure.

- Two word orders/constructions (English)
- (15) a. John sent a letter to Mary. (DC)
 - b. John sent Mary a letter. (DOC)

Larson (1988) argues that part of the base structure is shared.

Now, consider what happens in Japanese ditransitive constructions. In Japanese, it is difficult to distinguish two structures corresponding to the DC and the DOC, for the Goal phrase in question always appears with *ni*-marking, examples of which are underlined in (16a-b) below:¹

- Two word orders (Japanese)
- (16) a. Taroo-ga <u>Hanako-ni</u> tegami-o okut-ta.

 Taroo-Nom Hanako-ni letter-Acc send-Past

 'Taroo sent a letter to Hanako' / 'Taroo sent Hanako a letter.'
 - b. Taroo-ga tegami-o <u>Hanako-ni</u> okut-ta.
 Taroo-Nom letter-Acc Hanako-ni send-Past

The word orders in both (16a) and (16b) are possible and seem to express almost the same meaning, such as 'Taroo sent a letter to Hanako' or 'Taroo sent Hanako a letter.'

The ditransitive patterns in (16) can be schematized as follows:²

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¹ As we mentioned, the status of ni is an issue, so we just gloss it as ni for now.

² We tentatively call the ni-marked NP "Goal," though further investigation in this chapter will reveal that ni-phrases have different properties.

• Two word orders (Japanese, schematized)

Hoji (1985) proposes that the word order in (17a) represents the base structure and that (17b) is derived from (17a) by scrambling (see also Saito 1992, Fukui 1993, Takano 1998, Yatsushiro 1998, 2003, and Ueda 2002). The evidence for Hoji's proposal comes from quantifier scope. As is well known, Japanese is a scope rigid language. Scope is generally decided by the word order and the inverse scope is not allowed.

- Possibility of the inverse scope
- (18) a. Someone loves everyone. some > every, every > some
 - b. Dareka-ga daremo-o aisi-te-iru.
 Someone-Nom everyone-Acc love-Pres
 'Someone loves everyone.'
 some > every, *every > some

The sentence in (18b) shows that inverse scope is impossible in Japanese, contrary to the English case in (18a). However, a trace of scrambling counts in scope interpretation (Saito 1985).

- Scrambling leads to the inverse scope
- (19) a. Dareka-ga daremo-o aisi-te-iru.

 Someone-Nom everyone-Acc love-Pres

 'Someone loves everyone.'

 some > every, *every > some
 - b. Daremo-o $_i$ dareka-ga t_i aisi-te-iru. Everyone-Acc someone-Nom love-Pres 'Someone loves everyone.' some > every, every > some

In (19b), the object *daremo-o* 'everyone' is scrambled to the sentence-initial position, and scope ambiguity appears. This fact shows that both the scrambled phrase and its trace can take scope. Exploiting this fact, whether the word order in question is original or derived is examined: if inverse scope is observed, it is due to a trace, and the word order is a derived one.³

Keeping this in mind, let us go back to Hoji (1985). He examines quantifier scope in two word orders in Japanese ditransitives as in (20).

• Quantifier scope

(20) a. Taroo-ga <u>dareka-ni</u> dono-tegami-mo okut-ta.

Taroo-Nom someone-ni every letter-also send-Past

'Taroo sent someone every letter.'

some > every, *every > some

b. Taroo-ga dono-tegami-mo <u>dareka-ni</u> okut-ta.
 Taroo-Nom every letter-also someone-ni send-Past some > every, every > some

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³ We do not go into an analysis of why the inverse scope becomes possible, but see Hoji 1985, Saito 1985, 1992, 2003, Miyagawa 1995, 2001, Bošković and Takahashi 1998, and Takano 1998, among others.

The inverse scope is not possible in (20a), but it becomes possible in (20b). Based on this fact, Hoji concludes that the sentence in (20b) is derived by scrambling, as shown in (21), in which a trace makes the inverse scope possible.

- Derivation of ditransitives (Hoji 1985)
- (21) Taroo-ga dono-tegami-mo $_i$ dareka-ni t_i okut-ta.

 Taroo-Nom every letter-also someone-ni send-Past

In sum, Hoji argues that the Theme-Goal order is derived from the Goal-Theme order in Japanese ditransitives, but not vice versa. This is a version of derivationally-related views. Hoji's observation has inspired discussions and had a great influence on research on Japanese ditransitives (e.g. Takano 1998, and Yatsushiro 1998, 2003, just to mention a few). However, some additional facts are observed, which do not seem to be completely covered by Hoji's analysis of scrambling.

3.2 The two-Goal hypothesis: Miyagawa and Tsujioka (2004)

Miyagawa and Tsujioka (2004) (henceforth M&T), argue that a semantic difference between the DOC and the DC in English is also found in the Goal-Theme order and the Theme-Goal order in Japanese ditransitives.

It has been observed that a *to*-Dative phrase in the DC and an indirect object in the DOC, which are underlined in the sentences in (22) below, are semantically different (e.g. Bresnan 1978, 1982, Larson 1988, Pinker 1989, Gropen et al. 1989, and Pesetsky 1995).

- Semantic differences in two Goals
- (22) a. John sent a package to Mary/London. (DC)
 - b. John sent Mary/*London a package. (DOC)

As shown in (22b), the indirect object in the DOC is constrained by the animacy restriction, while the *to*-Dative phrase in (22a) is not. This fact seems to suggest that although both phrases are generally analyzed as "Goal" in terms of thematic roles, they should be distinguished. These different properties of a *to*-phrase in the DC and the indirect object in the DOC seem to suggest that they are introduced by different heads which assign different thematic roles, and that the structures are not derivationally related. We have called this view a split-head view. Taking this direction and developing Larson's VP-layer system, Marantz (1993), Harley (1995), and Pylkkänen (2002) propose an additional head, Appl, in DOCs to introduce a Recipient/Possessor argument. See Section 2.2 for more details on Pylkkänen (2002).

On the other hand, in Japanese, there have been studies which observe semantic differences in *ni*-marked Goal phrases and relate them to different positions in syntactic structures (e.g. Miyagawa 1995, 1997, Harley 1995, Kishimoto 2001b, and Matsuoka 2001, 2003). Among them, M&T (2004) claim that there are two distinct Goals, high and low, in Japanese ditransitives; the high Goal corresponds to the indirect object in the DOC in English, whereas the low Goal corresponds to the *to*-Dative phrase in the DC. For example, *Mary* in (23a) is analyzed as a high Goal, whereas *to Mary* in (23b) is as a low Goal.

• High and low Goals

(23) a. John sent Mary a package. (high Goal)

b. John sent a package to Mary. (low Goal)

M&T claim that high Goals are DPs introduced by Appl, whereas low Goals are PPs selected by a verb. High Goals are interpreted as Possessor, coming to possess something, and must be animate. Low Goals, on the other hand, may be animate or inanimate.

M&T illustrate their analysis with Japanese data in (24). First, the two Goals,

high and low, actually may appear in one sentence in Japanese, as in (24c).

- Evidence 1: two goals may appear in one sentence
- (24) a. Taroo-ga <u>Hanako-ni</u> nimotu-o okut-ta.

 Taroo-Nom Hanako-ni package-Acc send-Past

 'Taroo sent Hanako a package.'
 - b. Taroo-ga <u>Tokyo-ni</u> nimotu-o okut-ta.
 Taroo-Nom Tokyo-ni package-Acc send-Past
 'Taroo sent a package to Tokyo.'
 - c. ?? Taroo-ga <u>Hanako-ni</u> <u>Tokyo-ni</u> nimotu-o okut-ta.

 Taroo-Nom Hanako-ni Tokyo-ni package-Acc send-Past

 'Taroo sent Hanako a package to Tokyo.'

(M&T ibid.: 9)

M&T analyze *Hanako-ni* in (24a) as being either a high or a low Goal and *Tokyo-ni* in (24b) as unambiguously a low Goal, due to the animacy restriction. (24c) is an example where both a high and a low Goal appear (the judgment indicated by "??" is mine).⁴

Secondly, M&T observe a word order restriction that prohibits Theme from preceding a high Goal.

• Evidence 2: the "high Goal-Theme" order is rigid

(25) a. Taroo-ga <u>Hanako-ni</u> <u>nimotu-o</u> Tokyo-ni okut-ta.

Taroo-Nom Hanako-ni package-Acc Tokyo-ni send-Past

<u>high Goal</u> Theme <u>low Goal</u>

'Taroo sent Hanako a package to Tokyo.'

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⁴ As is mentioned by M&T themselves in footnote 9, the occurrence of two *ni*-phrases in one sentence sounds weird to some speakers' ears. A *ni*-phrase may be either a high Goal or a low Goal, but they do not commonly both appear in one sentence.

b. */? Taroo-ga <u>nimotu-o</u> <u>Hanako-ni</u> Tokyo-ni okut-ta.

Taroo-Nom package-Acc Hanako-ni Tokyo-ni send-Past

Theme high Goal low Goal

'Taroo sent Hanako a package to Tokyo.'

(M&T ibid.: 9, 10)

Another interesting discussion is scope ambiguity. As we have seen in the previous section, Hoji (1985) observes scope ambiguity only in the "Theme-Goal" order, which supports his claim that a trace of scrambling is included, hence it is a derived structure. The relevant data are repeated in (26), and Hoji's claim is schematized in (27).⁵

- (26) a. Taroo-ga <u>dareka-ni</u> <u>dono-nimotu-mo</u> okut-ta.

 Taroo-Nom someone-ni every package-also send-Past

 'Taroo sent someone every package.'

 some > every, *every > some
 - b. Taroo-ga $\underline{\text{dono-nimotu-mo}_i}$ $\underline{\text{dareka-ni}}$ $\underline{t_i}$ okut-ta. Taroo-Nom every package someone-ni send-Past some > every, every > some
- (27) a. NP-Nom NP-ni NP-Acc V (base order)
 (Agent) (Goal) (Theme)
 - b. NP-Nom NP-Acc_i NP-ni t_i V (derived by scrambling)

 (Agent) (**Theme**) (**Goal**)

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⁵ The Accusative marker o is deleted when it is followed by the particle mo.

However, M&T discover that if the *ni*-marked animate Goal, *dareka-ni* 'someone' in (26a), is replaced by an inanimate Goal, such as *dokoka-ni* 'some place' in (28), then scope ambiguity appears.

- Evidence 3: low Goal leads to scope ambiguity
- (28) Taroo-ga dokoka-ni dono-nimotu-mo okut-ta.

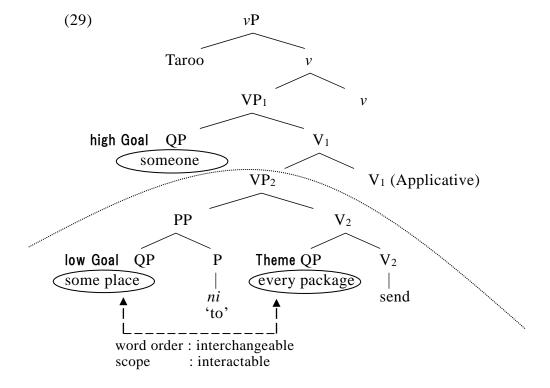
 Taroo-Nom some place-ni every package send-Past

 'Taroo sent every package to some place.'

 some > every, every > some

(M&T ibid.: 6)

This is unexpected under Hoji's analysis, represented in (27), which postulates that the Goal-Theme order is original, so ambiguity should not appear. M&T explain the facts in (25) and (28) by the two-Goal hypothesis, depicted in (29).



The Goal phrase in (28) is inanimate, and is therefore unambiguously a low Goal, which corresponds to the *to*-Dative phrase in the DC in English. M&T speculate that

a low-Goal QP can interact with a Theme QP in scope interpretation because they are in the same domain, VP₂, which Quantifier Raising (QR) may target, and either QP can take scope over the other, as illustrated in (29). On the other hand, a high-Goal QP cannot interact with a Theme QP and always takes wide scope, as in (26a), because the high-Goal QP belongs to the higher domain, VP₁, which the Theme QP cannot target. Thus, inverse scope is possible only between a Theme QP and a low-Goal QP. The Goal *dareka-ni* 'someone' in (26b) is a low Goal, due to the word order restriction observed in (25). This word order restriction is also reducible to the domain, namely, VP₂ in (29), within which a low-Goal QP and a Theme QP are interchangeable by scrambling. M&T assume that neither the low Goal nor the Theme within VP₂ can be adjoined/scrambled to VP₁, for VP₁ (i.e. ApplP) does not have an EPP feature.⁶

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Shibatani and Kageyama (1988) argue that when a Sino-Japanese nominal and its argument form a compound, the First Sister Principle (FSP) (Roeper and Siegel 1978) is respected, which requires that the first sister noun be compounded with the verb. In the examples below, the brackets mark a compound formed with a Sino-Japanese nominal, and the colon indicates a phonological boundary. These compounds are analyzed as "Postsyntactic Compounding" by Shibatani and Kageyama.

(Shibatani and Kageyama 1988: 463)

⁶ Another piece of supporting evidence for assuming structurally and thematically distinct Goals, high and low, is provided by Sino-Japanese nominals (Miyake 1996: 97-98). Sino-Japanese nominals are subsumed to the "verbal noun" (VN), for they bear properties of both verbs and nouns: they can occur alone as a noun, as shown in (ia), but they may also be combined with the semantically empty verb *su-ru* 'do' and behave like a regular verb, as shown in (ib), hence they are considered to have argument structure (Martin 1975, Kageyama 1977, 1989, Shibatani and Kageyama 1988, Grimshaw and Mester 1988, Hasegawa 2000b, and Saito and Hoshi 2000).

⁽i) a. kenkyuu 'study'

Sooseki-ga Syeikusupia-o kenkyuu -si -ta Sooseki-Nom Shakespeare-Acc study -do -Past 'Sooseki studied Shakespeare.'

⁽ii) a. Sooseki-ga [Syeikusupia:kenkyuu]-tyuu ni.. Sooseki-Nom Shakespeare study middle in 'While Sooseki was studying Shakespeare...'

⁽ii) b. *Syeikusupia-o [Sooseki:kenkyuu]-tyuu ni... Shakespeare-Acc Sooseki study middle in 'While Sooseki was studying Shakespeare...'

In (iia), the Sino-Japanese nominal *kenkyuu* 'study' forms a compound with its Theme 'Shakespeare,' hence the FSP is satisfied and the compound is well-formed. In contrast, in (iia), *kenkyuu* 'study' forms a compound with its Agent *Sooseki*, which violates the FSP, and the compound is ungrammatical. Based on these data, observe the ditransitive Sino-Japanese nominals:

Further, M&T discuss the categorical status of high Goals and low Goals. As we mentioned, Japanese ni is ambiguous between a postposition and a Dative Case marker. The former projects PP, but the latter does not have its own projection just as Nominative Case marker ga or Accusative Case marker o do not (Miyagawa 1989). Generally, a postposition has its own meaning, but a Case marker does not. It is inferred that if ni is a postposition which means 'to,' it may be replaced by another postposition, e, which also expresses heading direction and marks a Goal. However, if ni is a Case marker, then it will not be replaced by the postposition e. This strategy to distinguish PP from DP is applied to two Goals.

- (iii) a. Hitobito-ga kinai-ni syokumotu-o hannyuu-si-ta. people -Nom plane-in food-Acc bring -do-Past 'People brought food in the plane.'
 - b. Hitobito-ga kinai-ni [syokumotu:hannyuu]-go... People -Nom plane-in food bring after 'After people brought food in the plane...'
 - c. Hitobito-ga syokumotu-o [kinai:hannyuu]-go...

 People -Nom food -Acc plane bring after
 'After people brought food in the plane...'

(Shibatani and Kageyama ibid.: 464 with modification)

The Sino-Japanese nominal *hannyuu* 'bring' takes three arguments as (iiia) shows: Agent *hitobito* 'people'; low Goal *kinai* 'plane'; and Theme *syokuryoo* 'food.' In this case, either low Goal or Theme may be incorporated to form a compound, as shown in (iiib) and (iiic). Now, witness the Sino-Japanese nominal *zooyo* 'present,' which is considered to take high Goal.

- (iv) a. Taroo-ga musuko-ni zaisan-o zooyo -si-ta.

 Taroo -Nom son *ni* property-Acc present -do-Past 'Taroo presented his son his property.'
 - b. Taroo-ga musuko-ni [zaisan:zooyo] -go...
 Taroo -Nom son *ni* property present after
 'After Taroo presented his son his property...'
 - c. * Taroo-ga zaisan-o [musuko:zooyo] -go... Taroo -Nom property-Acc son present after 'After Taroo presented his son his property...'

The Sino-Japanese nominal zooyo 'present' in (iva) takes the high Goal musuko 'son' and the Theme zaisan 'property.' Although the Theme may form a compound, as shown in (iiib), the high Goal may not, as in (ivc). The ungrammaticality in (ivc) is attributable to the violation of the FSP, which suggests that high Goal is in a higher position, as shown in (30), and not as close to the predicate as low Goal in (iiic) or the Theme in (iiib)/(ivb), which can be the first sister of the predicate. The phenomenon can also be explained in terms of structural closeness of the thematic roles, namely, the thematic hierarchy (e.g. Grimshaw and Mester 1988, and Saito and Hoshi 2000). Thus, M&T's claim that Japanese ditransitives are ambiguous between two structures involving a low Goal and a high Goal is supported, and we will follow their claim.

(30) Taroo-ga <u>Hanako-ni/*-e</u> <u>Tokyo-ni/-e</u> nimotu-o okut-ta.

Taroo-Nom Hanako-ni Tokyo-ni package-Acc send-Past

'Taroo sent Hanako a package to Tokyo.'

(M&T ibid.: 17)

As can be seen, ni in a low Goal may be replaced by the postposition e, which suggests that ni in a low Goal is a postposition, so that a low Goal is a PP. In contrast, ni in a high Goal cannot be replaced by e, which shows that ni in a high Goal is a Dative Case marker, and a high Goal is a DP. Interestingly, when only one Goal, Hanako-ni, appears in a sentence, substitution by e becomes possible. Compare (31) with (30):

(31) Taroo-ga <u>Hanako-ni/-e</u> nimotu-o okut-ta.

Taroo-Nom Hanako-ni package-Acc send-Past

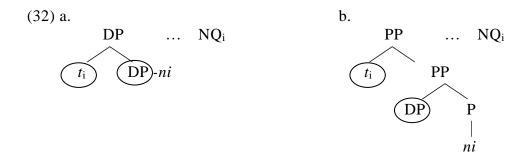
'Taroo sent Hanako a package to Tokyo.'

(M&T ibid.: 17)

This fact shows that *Hanako-ni* in (31) can be a low Goal, which supports M&T's analysis that a low Goal may be animate or inanimate, though a high Goal is subject to the animacy restriction.

Another supporting argument for analyzing high Goal as DP and low Goal as PP is presented by exploiting a floating numeral quantifier (Miyagawa 1989). Miyagawa argues that DP allows a floating numeral quantifier (NQ), but PP does not, because in the former, the mutual c-command between the host DP and the trace of the NQ is achieved, as illustrated in (32a), but in the latter, the mutual c-command is blocked by PP, as shown in (32b).

• The mutual c-command condition



M&T observe that if a Goal is inanimate, a floating NQ is blocked, as shown in (33b), concluding that a locative Goal is PP. On the other hand, if a Goal is animate and can be a high Goal, a floating NQ is allowed, as in (33a), which indicates that the high Goal is DP.

- Evidence 4: low Goal does not allow a floating NQ
 - (33) a. Taroo-ga gakusei-ni huta-ri nimotu-o okut-ta.

 Taroo-Nom student-ni 2-CL package-Acc send-Past

 'Taroo sent two students a package.'
 - b. * Daitooryoo-ga kokkyoo-ni huta-tu heitai-o okut-ta.
 The president-Nom borders-ni 2-CL soldiers-Acc send-Past
 (Lit.) 'The President sent two borders soldiers.'

(M&T 2004: 7)

M&T's argument so far is summarized below:

(34)

	high Goal (in ApplP)	low Goal	
• realization	the indirect object in the DOC	the <i>to-</i> Dative phrase in the DC	
• category	DP	PP	
• semantic restriction	animate	animate / inanimate	
• meanings	Possessor (come to possess)	<u>Goal</u> of transfer	

4 Proposal: Morphologically Realized Applicative Head

4.1 Applicative for Possessor

As we have seen in the previous section, Miyagawa and Tsujioka (M&T) (2004) argue that Japanese ditransitives have two Goals, high and low, the former corresponding to the indirect object in the Double Object Construction (DOC) in English, while the latter corresponds to the *to*-Dative phrase in the Dative Construction (DC) in English. They also propose that a high Goal, which is subject to the animacy restriction, is not a mere locative Goal, but denotes Possessor and that it is introduced by an Appl head, following Marantz (1993), Harley (1995), and Pylkkänen (2002). M&T give a unified explanation to English and Japanese ditransitives through bringing Appl to the theory of the Japanese language. We would like to follow their Applicative hypothesis. However, the Appl head which they postulate is invisible. In many languages, an Appl head is often morphologically realized. Is there any visible Appl head in Japanese, which introduces an "applied" argument? We will argue that a 'give' verb in Japanese actually provides such a case.

4.2 Applicative for the Benefactive/Malefactive

In Japanese, there is a construction in which another Appl head seems to be involved. The Appl head is morphologically realized as age-ru/yar-u, which is originally a "lexical" donative verb such as give, but it may be connected to another verb with the participle -te, which has been regarded as a sort of "auxiliary" use (On analyses of the relevant constructions, see Nakau 1973, Inoue 1976, Shibatani 1978, 1994, 2000, Machida 1996, 1998, Hasegawa 2000a, and Okura 2006, among many others). We will use the gloss 'give' for the "lexical" use of age-ru/yar-u, and the gloss 'Give' for the "auxiliary" use. The two usages of age-ru/yar-u are depicted later. We will discuss the status of the participle -te in Chapter 4, so tentatively regard it just a connector without any gloss.

Now, observe the sentences in (35) and (36), where the (a)-sentences are ditransitives, as discussed by M&T, and the (b)-sentences involve another head, which is morphologically reflected as *age-ru/yar-u* 'Give.'

- (35) a. Taroo-ga Hanako-ni hon-o okut-ta.

 Taroo-Nom Hanako-ni book-Acc send-Past

 'Taroo sent Hanako a book.' / 'Taroo sent a book to Hanako.'
 - b. Taroo-ga Hanako-ni hon-o okut-te -age -ta.
 Taroo-Nom Hanako-ni book-Acc send -Give -Past
 'Taroo sent Hanako a book (for the good of her).'
- (36) a. Taroo-ga onnanoko -ni gurasu-o watasi-ta.

 Taroo-Nom girl -ni glass -Acc pass -Past

 'Taroo passed the girl a glass.'/ 'Taroo passed a glass to the girl.'
 - b. Taroo-ga onnanoko -ni gurasu-o watasi-te -<u>yat</u> -ta.
 Taroo-Nom girl -ni glass -Acc pass -Give -Past
 'Taroo passed the girl a glass (for the good of her).'

Although the (a)-sentences and the (b)-sentences look similar, they are semantically different. When the *ni*-marked phrases are focused, *Hanako-ni* in (35b) and *onnanoko-ni* 'girl-*ni*' in (36b) are understood as the Benefactive, not only as Goal, as in (35a) and (36a). We will use the term "Give Benefactive/Malefactive Construction (GBC)" to refer to the construction represented by the (b)-sentences, where (i) the morphemes *age-ru/yar-u* 'Give,' originally donative verbs, are involved, and (ii) the Benefactive (/Malefactive) argument is introduced. On the other hand, we will refer to ditransitive sentences which involve only one verb stem like (35a) and (36a) as "simple ditransitives." In the next subsection, we clarify the different properties between the *ni*-phrases in the GBC and those in simple ditransitives. We

will argue that a *ni*-phrase in the GBC is a Benefactive argument, introduced by the Appl head realized as *age-ru/yar-u* 'Give,' and therefore the *ni*-phrase in the GBC should be distinguished from the *ni*-phrase in simple ditransitives.

4.3 The existence restriction

We reviewed M&T's argument that in a simple ditransitive such as (37), a *ni*-phrase (i.e., *Hanako-ni*,) can be a low Goal or a high Goal. On the other hand, sentence (38) is an example of the GBC, where the verb stem *okur*- 'send' is connected to the other verb *age-ru* 'Give,' accompanied by the participle *-te*.

- Simple ditransitive
- (37) Taroo-ga <u>Hanako-ni</u> nimotu-o okut-ta.

 Taroo-Nom Hanako-ni package-Acc send-Past

 'Taroo sent Hanako a package.'

M&T (ibid. 9)

- GBC
- (38) Taroo-ga <u>Hanako-ni</u> nimotu-o okut-te -<u>age</u> -ta.

 Taroo-Nom Hanako-*ni* a package-Acc send -Give -Past

 'Taroo sent Hanako a package (for the good of her).'

In appearance, the argument structure and Case marking in (37) do not seem to change in (38), and one might consider that the *ni*-phrase *Hanako-ni* in (37) is carried over to (38). However, careful observation unveils different properties in (37) and (38).

First, remember that in simple ditransitives, a *ni*-phrase may be either a high Goal or a low Goal, involving different heads, but two occurrences of a *ni*-phrase in one sentence sounds somehow awkward to some speakers, as mentioned in footnote 4. The examples in (24), with my judgment indicated by "??," are repeated as (39) below:

- (39) a. Taroo-ga <u>Hanako-ni</u> nimotu-o okut-ta.

 Taroo-Nom Hanako-ni package-Acc send-Past

 'Taroo sent Hanako a package.'
 - b. Taroo-ga <u>Tokyo-ni</u> nimotu-o okut -ta.
 Taroo-Nom Tokyo-ni package-Acc send-Past
 'Taroo sent a package to Tokyo.'
 - c. ?? Taroo-ga <u>Hanako-ni</u> <u>Tokyo-ni</u> nimotu-o okut -ta.

 Taroo-Nom Hanako-ni Tokyo-ni package-Acc send-Past

 'Taroo sent Hanako a package to Tokyo.'

M&T (ibid.: 9)

In contrast, two occurrences of a *ni*-phrase is perfectly acceptable in the GBC, as observed in (40).

(40) Taroo-ga <u>Hanako-ni</u> <u>Tokyo-ni</u> nimotu-o okut-te -age -ta.

Taroo-Nom Hanako-ni Tokyo-ni package-Acc send -Give -Past

'Taroo sent Hanako a package to Tokyo (for the good of her).'

The well-formedness in (40) is naturally accounted for if we assume that *Hanako-ni* in (40) is a new argument introduced by *age-ru* 'Give'.⁷

One might still consider that age-ru 'Give' is not a realization of a different Appl head and that the ni-phrase in the GBC is also a high Goal in M&T's terms. If so, it is predicted that a ni-phrase behaves in the same way in either sentence with or without age-ru 'Give.' However, this prediction is not borne out in either syntax or semantics. First, the ni-phrase in simple ditransitives may be passivized, while the ni-phrase in the GBC may not.

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⁷ I am grateful to Enoch Iwamoto for bringing this point to my attention.

- Simple ditransitive
- (41) a. Taroo-ga <u>Hanako-ni</u> (Tokyo-ni) nimotu-o okut -ta.

 Taroo-Nom Hanako-ni Tokyo-ni package-Acc send-Past

 'Taroo sent Hanako a package (to Tokyo).'
 - b. <u>Hanako-ga</u> (Tokyo-ni) nimotu-o oku -<u>rare</u> -ta.
 Hanako-Nom Tokyo-ni package-Acc send- Pass -Past
 'Hanako was sent a package (to Tokyo).'

• GBC

- (42) a. Taroo-ga <u>Hanako-ni</u> (Tokyo-ni) nimotu-o okut-te -age -ta.

 Taroo-Nom Hanako-ni Tokyo-ni package-Acc send -Give -Past

 'Taroo sent Hanako a package (to Tokyo) (for the good of her).'
 - b. * <u>Hanako-ga</u> (Tokyo-ni) nimotu-o okut-te -age -<u>rare</u> -ta.
 Hanako-Nom Tokyo-ni package-Acc send -Give Pass -Past
 'Hanako was sent a package (to Tokyo) (for the good of herself).'

Thus, the syntactic status of *Hanako-ni* in (41a) and in (42a) is different. We will discuss the impossibility of passivization of the *ni*-phrase in Section 5.7.

Next, consider semantic differences. To begin with, consider the animacy restriction, which is imposed on high Goals in simple ditransitives.

- Simple ditransitive
- (43) Taroo-ga <u>Tokyo-ni</u> nimotu-o okut-ta.

 Taroo-Nom Tokyo-to package-Acc send-Past

 'Taroo sent a package to Tokyo.'

• GBC

(44) * Taroo-ga <u>Tokyo-ni</u> nimotu-o okut-te -<u>age</u> -ta.

Taroo-Nom Tokyo-Dat a package-Acc send -Give -Past

'Taroo sent Tokyo a package (for the good of it).'

Remember that a *ni*-marked phrase in simple ditransitives is ambiguous between a high Goal and a low Goal. Due to the animacy restriction on high Goals, the *ni*-phrase in (43) is unambiguously a low Goal. The grammaticality in (43) suggests that a high Goal and its Appl head do not necessarily appear in simple ditransitives. On the other hand, (44) is ungrammatical, unless a null Benefactive (*pro*) is understood in the context. This fact suggests that there is a head in the GBC which requires a *ni*-phrase to be animate, and that the existence of this head is not optional; it necessarily appears in the GBC. The discussion so far is summarized in (45).

(45)		
	Simple ditransitives	Goal (low Goal)	← divided by
		Possessor (high Goal)	the animacy restriction
	GBC	Benefactive	

In addition to the animacy restriction, which separates a simple Goal from Possessor, we observe another restriction, which differentiates the Benefactive from Possessor. Observe the sentences in (46):

(46) a. Tokyo-no syoogakusei-ga Syaarokku Hoomuzu-ni tegami-o okut -ta.

Tokyo-Gen pupil-Nom Sherlock Holmes-ni letter-Acc send -Past

'Pupils in Tokyo sent a letter to Sherlock Holmes.'

b. * Tokyo-no syoogakusei-ga Syaarokku Hoomuzu-ni tegami-o okut-te-age-ta.
 Tokyo-Gen pupil-Nom Sherlock Holmes-ni letter-Acc send-Part-Give-Past
 'Pupils in Tokyo sent a letter to Sherlock Holmes (for the good of him)'

The simple ditransitive in (46a) is grammatical, while the GBC in (46b) sounds strange. The difference cannot be accounted for by the animacy restriction. In order to capture the difference, we would say that the *ni*-phrase in the GBC is required not only to be animate [+animate], but also to exist/be alive in the real world; that is, the individual must not be fictional, for it must be [+affected] and *benefit* from the event. This semantic restriction on the Benefactive, to be termed "the existence restriction," is considered to be imposed by the head *age-ru* 'Give.' One might think that (46a) is acceptable because the *ni*-phrase can be understood as a low Goal, which is free from such restrictions. However, even if we force the *ni*-phrase to be a high Goal by inserting a low Goal, the difference in grammaticality observed between (46a) and (46b) still remains.

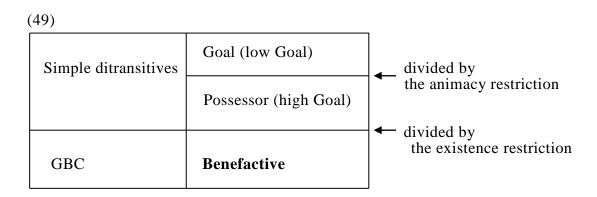
- (47) a. ?? Tokyo-no syoogakusei-ga Syaarokku Hoomuzu-ni London-ni
 Tokyo-Gen pupil-Nom Sherlock Holmes-ni London-ni
 tegami-o okut -ta.
 letter-Acc send-Past
 'Pupils in Tokyo sent a letter to Sherlock Holmes to London.'
 - b. * Tokyo-no syoogakusei-ga <u>Syaarokku Hoomuzu-ni</u> London-ni
 Tokyo-Gen pupil-Nom Sherlock Holmes-ni London-ni
 tegami-o okut -te -age -ta.
 letter-Acc send -Give -Past
 'Pupils in Tokyo sent a letter to Sherlock Holmes to London (for the good of him)'

The simple ditransitive in (47a) may sound less natural than that in (46a), but this is

simply due to the two occurrences of a *ni*-phrase in one sentence. The GBC in (47b) is crucially ungrammatical, just as the one in (46b). The ungrammaticality in (47b) is not due to the two occurrences of a *ni*-phrase, for the GBC is not influenced by the two occurrences of a *ni*-phrase as observed in (40). Witness that if the higher *ni*-phrase in the GBC is replaced by a nonfictional individual, the sentence becomes perfect, as in (48).

(48) Tokyo-no syoogakusei-ga Yamada sensei-ni London-ni
Tokyo-Gen pupil-Nom Yamada teacher-ni London-ni
tegami-o okut -te -age -ta.
letter-Acc send -Give -Past
'Pupils in Tokyo sent a letter to Mr. Yamada to London (for the good of him)'

This leads us to two conclusions. First, although a fictional individual is allowed as a high Goal in simple ditransitives, it is not allowed in the GBC. It means that the animacy restriction and the existence restriction must be distinguished. That is to say, the animacy restriction is imposed on the high Goal in simple ditransitives, while the existence restriction is enforced on the Benefactive in the GBC. This discussion is summarized in (49):



Assuming that semantic restriction is attributed to the properties of a head, we speculate that two distinct Appl heads are involved in simple ditransitives and the GBC respectively. We also observed some contrasts in syntactic behaviors between

the *ni*-phrase in simple ditransitives and the GBC: (i) acceptability of two occurrences of a *ni*-phrase in one sentence, as indicated in (39) and (40); (ii) possibility of passivization of a *ni*-phrase, as demonstrated in (41) and (42). These syntactic contrasts are also reducible to the different heads involved. We propose (50):

• Proposal

(50) The GBC involves an Appl head realized as *age-ru/yar-u*, which introduces a Benefactive/Malefactive argument.

The discussion in this section is summarized in (51). As for simple ditransitives, the properties of the high Goal are in focus.

• Interim summary

(51)

	English	Japanese	
	DOCs	simple ditransitives	the GBC
•morphological realization of the head	no	no	'Give'
•the introduced argument by the head	the indirect Obj.	a <i>ni</i> -phrase	a <i>ni</i> -phrase
•status of the argument: category Case/marker	DP Acc	DP Dative -ni	DP? -ni ⁸
•thematic interpretation	Possessor, Benefactive	Possessor	(Possessor) Benefactive
•semantic restriction	the animacy restriction ⁹	the animacy restriction	the animacy & existence restriction

⁸ As is discussed shortly, the argument is not always marked with -ni.

⁹ We will observe that the existence restriction is also observed in DOCs which show *for*-Dative alternation. See Section 5.2.3.

In this subsection, properties of a *ni*-marked argument in the GBC are discussed in comparison with simple ditransitives. We have observed that the argument, interpreted as the Benefactive, is subject to the existence restriction, which is differentiated from the animacy restriction. Assuming that semantic restriction is attributed to the properties of a head, we hypothesize that the GBC involves another Appl head, realized as *age-ru/yar-u*, which imposes the existence restriction on its argument.

5 The Give Benefactive/Malefactive Construction (GBC)

5.1 Basic properties

5.1.1 The original donative verbs age-ru/yar-u

Before going into further discussion, basic properties of Japanese Benefactive/Malefactive constructions should be described in detail (cf. Nakau 1973, Inoue 1976, Shibatani 1978, 1994, 2000, Machida 1996, 1998, Hasegawa 2000a, and Okura 2006, among many others). As with many other languages, Japanese uses the donative verbs *age-ru/yar-u* 'give' in the Benefactive/ Malefactive construction, which we have called the GBC. (52) shows sentences with the original donative verbs *age-ru/yar-u* 'give.'

- Age-ru/yar-u as original donative verbs
- (52) a. Hanako-ga Taroo-ni keeki-o <u>age</u>-ta.

 Hanako-Nom Taroo-ni cake-Acc give-Past

 'Hanako gave Taroo a cake.'
 - b. Hanako-ga Taroo-ni tokei-o <u>yat</u>-ta.
 Hanako-Nom Taroo-ni watch-Acc give-Past
 'Hanako gave Taroo a watch.'

Age-ru in (52a) is a polite form of yar-u in (52b). Like the English verb give, the

Japanese donative verbs age-ru/yar-u also take two inner arguments: Theme and Recipient/Possessor. In the sentences in (52), the Recipient/Possessor argument Taroo is realized with ni, the status of which has been widely discussed, because Japanese uses the homomorpheme ni as both a Dative marker and a postposition. That is, a ni-marked NP could be DP or PP, as mentioned above. We will discuss this problem later, so we leave the gloss of ni in the example sentences without determining its status, which could be Dative or a postposition.

Next, let us observe the GBC, which involves the donative verbs *age-ru/yar-u* connected to an infinitival form of the verb stem with the participle *-te*. We will discuss the function of *-te* in Chapter 4, for now we leave it without any gloss.

• *Age-ru/yar-u* in the GBC

- (53) a. Hanako-ga Taroo-ni keeki-o yai-te-<u>age</u>-ta.

 Hanako-Nom Taroo-ni cake-Acc bake -Give-Past

 'Hanako baked Taroo a cake for (the good of) him.'
 - b. Taroo-ga musuko-ni tokei-o kat-te-<u>yat</u>-ta.
 Taroo-Nom son-ni watch-Acc buy -Give-Past
 'Taroo bought his son a watch for (the good of) him.'

The *ni*-marked phrases, *Taroo* in (53a) and *musuko* 'son' in (53b), are interpreted as the Benefactive, which benefit from an event. The event is denoted by a lexical verb, and the verb is connected to *age-ru/yar-u* 'give,' which as a whole means 'do something for the good of someone.' This use of the donative verbs *age-ru/yar-u* is glossed as 'Give.' Based on the sentences in (53), the GBC is schematized as (54).

• A schema of the GBC

(54) DP1 DP2 (Object) V -te -age/yar -(r)u/ta

Agent Benefactive/Malefactive Theme verb Give Tense

'DP1 does something and DP2 {benefits from / is adversely affected by} it.'

Note that the verb yar-u can be construed as the Malefactive depending on the context.

- The verb *yar-u* is also available for the Malefactive
- (55) a. Taroo-wa Hanako-ni hanataba-o watasi-te-<u>age/yat</u>-ta.

 Taroo-Top Hanako-ni bouquet-Acc pass -Give -Past

 'Taroo passed Hanako a bouquet (for the good of her).'
 - b. Taroo-wa Hanako-ni mimizu-o watasi-te-<u>yat</u> -ta.
 Taroo-Top Hanako-ni earthworm-Acc pass -Give -Past
 'Taroo passed Hanako an earthworm (to annoy her).'

The verb age-ru is a polite form of yar-u, hence the latter but not the former may be used in the Malefactive sense, although both forms can be used in the Benefactive sense. The fact that the same morpheme is involved in both senses supports our analysis that it is a realization of Appl, conveying highly abstracted semantic contents such as "affectedness," the Benefactive/Malefactive nature of which depends on pragmatics. This dependence on pragmatics or world knowledge is also the case with the PRC, which was investigated in the previous chapter. Carrying an abstract notion is characteristic of functional verbs, for example, v^* carries "transitivity" or "Agentivity." Thus, it is natural to regard a head realized as age-ru/yar-u as an Appl head.

5.1.2 The adverbial phrase *no-tame-ni*

Before going into a further discussion, some remarks are in order: a *ni*-marked Benefactive phrase, which is our area of focus, must be distinguished from a Benefactive phrase which is accompanied by *no-tame-ni* 'for the good of.' The *no-tame-ni* Benefactive phrase is "anywhere Benefactive," which is unrestrictedly available regardless of the predicate involved.

- (56) a. * Taroo-wa <u>Hanako-ni</u> hasit-ta.

 Taroo-Top Hanako-*ni* run-Past

 (Int.) 'Taroo ran for the good of Hanako.'
 - b. Taroo-wa <u>Hanako-no-tame-ni</u> hasit-ta.
 Taroo-Top Hanako for the good of run-Past
 'Taroo ran for the good of Hanako.'
- (57) a. * Taroo-wa <u>Hanako-ni</u> hasit-te-<u>age</u>-ta.

 Taroo-Top Hanako-ni run -Give-Past

 (Int.) 'Taroo ran for the good of Hanako.'
 - b. Taroo-wa <u>Hanako-no-tame-ni</u> hasit-te-<u>age</u>-ta.
 Taroo-Top Hanako for the good of run -Give-Past
 'Taroo ran for the good of Hanako.'

A *ni*-marked phrase is restricted by verb types, as will be discussed in the following sections, and it is not compatible with intransitive verbs, as shown in (56a) and (57a). However, the *no-tame-ni* 'for the good of'/'on behalf of' phrase is not restricted by properties of verbs, and is acceptable in either (56b) or (57b). This is because the adverbial phrase *no-tame-ni* itself has the semantic content 'for the good of'/'on behalf of' and freely appears in any sentence as an adjunct. For this reason, the *no-tame-ni* Benefactive phrase is not treated in this thesis; rather, attention is focused on the *ni* Benefactive phrase.

5.2 Ni-phrases

One of the significant issues of the GBC is to clarify the nature of *ni*-phrases. In the following sections, we will divide sentences into four patterns with respect to the possibility of a *ni*-phrase to appear. First, observe the paired sentences in (58),

which we have discussed in Section 4.

- (58) a. Taroo-ga <u>Hanako-ni</u> hon-o okut-ta.

 Taroo-Nom Hanako-ni book-Acc send-Past

 'Taroo sent Hanako a book'/ 'Taroo sent a book to Hanako.'
 - b. Taroo-ga <u>Hanako-ni</u> hon-o okut-te-<u>age</u>-ta.
 Taroo-Nom Hanako-ni book-Acc send -Give-Past
 'Taroo sent Hanako a book (for the good of her).'

Sentence (58a) is an example of simple ditransitives; (58b) is a GBC. As can be seen, a *ni*-marked phrase, which appears as a Goal of the lexical verb in the simple ditransitive, also appears as the Benefactive in the GBC. Let us classify this type as "Pattern 1," where the *ni*-marking is compatible in a simple ditransitive in which only the lexical verb is involved, and the GBC. Pattern-1 verbs, represented by *okur-u* 'send,' are characterized as "Verbs of transfer."

There have been two proposed explanations to accommodate the *ni*-phrases in (58a) and (58b). Nakau (1973) and Inoue (1976) argue that the Benefactive phrase is "selected" by *age-ru/yar-u*. On the other hand, Shibatani (1978) proposes deletion of the Benefactive phrase in a sentence like (58b), so that the *ni*-phrase realized is a Goal selected by the lexical verb 'send.' Machida (1996), following Shibatani's view that the *ni*-phrase is a Goal selected by the lexical verb, argues for the existence of a null Benefactive phrase, PRO. Hasegawa (2000) proposes a movement analysis, where a Goal phrase selected by the lexical verb moves to the Benefactive position. The latter argument, represented by Shibatani, seems to be supported by the fact that if a DP is not marked with *ni*, but marked with another Case marker which is assigned by the lexical verb, then that marker is maintained in the GBC, without being replaced by a *ni*-phrase.

- (59) a. Hanako-wa <u>Taroo-to</u> ason-da.

 Hanako-Top Taroo-Com play-Past

 'Hanako played with Taroo.'
 - b. Hanako-wa <u>Taroo-to/*ni</u> ason-de-<u>age</u>-ta.
 Hanako-Top Taroo-Com/ni play -Give-Past
 'Hanako played with Taroo (for the good of him).'
- (60) a. Hanako-wa <u>Taroo-no</u> hikkosi-o tetudat-ta.

 Hanako-Top Taroo-Gen move-Acc help -Past

 'Hanako helped Taroo's move.'
 - b. Hanako-wa <u>Taroo-no/*ni</u> hikkosi-o tetudat-te-<u>age</u>-ta.
 Hanako-Top Taroo-Gen move-Acc/ni help -Give-Past
 'Hanako helped Taroo's move (for the good of him).'

If a DP is not marked with *ni* by a lexical verb, as in the (a)-sentences in (59) and (60), that phrase cannot appear as a *ni*-phrase in the (b)-sentences, i.e., GBCs. We will call this type, where *ni*-marking is not available at all, "Pattern 4."

Based on the data so far, one might consider that Case particle is assigned when a DP is selected by a lexical verb. However, there are data that conflict with this generalization, as noticed by Machida (1996, 1998), which are shown in (61)-(62).

- (61) a. Watasi-wa hon-o kai-ta.

 I-Top book-Acc write-Past

 'I wrote a book.'
 - b. ?? Watasi-wa <u>Hanako-ni</u> hon-o kai-ta.
 I-Top Hanako-ni book-Acc write-Past
 (Lit.) 'I wrote a book to Hanako.'

- c. Watasi-wa <u>Hanako-ni</u> hon-o kai-te-<u>age</u>-ta.

 I-Top Hanako-*ni* book-Acc write -Give-Past

 'I wrote a book for (the good of) Hanako.'
- (62) a. Taroo-wa ningyoo-o tukut-ta.

 Taroo-Top doll-Acc make-Past

 'Taroo made a doll.'
 - b. ?? Taroo-wa <u>Hanako-ni</u> ningyoo-o tukut-ta.
 Taroo-Top Hanako-ni doll-Acc make-Past
 (Lit.) 'Taroo made a doll to Hanako.'
 - c. Taroo-wa <u>Hanako-ni</u> ningyoo-o tukut-te-<u>age</u>-ta.

 Taroo-Top Hanako-*ni* doll-Acc make -Give-Past

 'Taroo made a doll for (the good of) Hanako.'

 (The (b) and (c) sentences are cited from Machida 1996: 205)¹⁰

Kak-u 'write' in (61) and tukur-u 'make' in (62) are "Verbs of creation and transformation" (Levin 1993). These verbs take a direct object marked with Accusative o, as in the (a)-sentences, but adding an indirect object marked with ni as in the (b)-sentences sounds awkward or less natural. However, if we use the GBC frame as shown in the (c)-sentences, the acceptability improves and the sentences become perfect. If a ni-phrase is selected and Case-marked by a lexical verb, why does the acceptability of the ni-phrase improve by being connected to the 'give' verb in the GBC frame? We will group these verb types into "Pattern 2."

Based on the data so far, one might consider that if change of possession is involved or implied, *ni*-marking becomes possible. However, there are counterexamples:

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¹⁰ In Machida's original sentences, yar-u is used instead of age-ru. As previously noted, age-ru is a polite form of yar-u.

- (63) a. Boku-wa <u>Hanako-ni</u> to-o ake-te-<u>yat</u>-ta.

 I-Top Hanako-ni door-Acc open -Give-Past

 'I opened the door for (the good of) Hanako.'
 - b. Boku-wa <u>Hanako-ni</u> kutu-o migai-te-<u>age</u>-ta.¹¹

 I-Top Hanako-*ni* shoes-Acc polish -Give-Past

 'I polished the shoes for the good of Hanako.'

(Shibatani 1994: 44)

The *ni*-phrases above are allowed only in the GBC. If the sentences lack the 'give' verb, they are ill-formed, as in (64):

- (64) a. ?* Boku-wa <u>Hanako-ni</u> to-o ake-ta.

 I-Top Hanako-ni door-Acc open- Past

 'I opened the door for Hanako.'
 - b. * Boku-wa <u>Hanako-ni</u> kutu-o migai-ta.
 I-Top Hanako-ni shoes-Acc polish-Past
 'I polished the shoes for Hanako.'

The acceptability of the *ni*-phrase in the GBC in (63) may vary depending on the speaker and the verbs involved, but the contrast in (63) and (64) is clear. This pattern is classified as "Pattern 3."¹²

We have observed four patterns with respect to *ni*-marking, which are summarized in table (65).

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¹¹ In Shibatani's original sentences, te-yar-u is used instead of te-age-ru.

¹² Machida (1995, 1996) also describes that verbs of "tukuru kooi" 'action of creation' (Teramura 1982), and "verbs of preparation," which correspond to our "Pattern-2" verbs and "Pattern-3" verbs respectively, raise conflict in *ni*-marking in simple ditransitives and GBCs, though her analysis is different from ours. See also Section 5.2.2 in this Chapter.

• Four patterns of *ni*-marking

(65)

	a <i>ni-</i> phrase				
Simple Ditransitives	V	??	*	*	
GBCs	$\sqrt{}$	√	$\sqrt{}$	*	
Pattern	1	2	3	4	
Example verbs	okur-u	tukur-u	ake-ru	asob-u	
Example velos	'send'	'make'/'cook'	'open'	'play'	

Several questions arise:

- Questions
- (66) a. What licenses *ni*-marking?
 - b. What is the categorical status of the *ni*-phrase in the GBC? DP or PP?
 - c. How is the Benefactive interpretation obtained in the GBC?(As mentioned before, the number of surface arguments does not change.)

We will address these questions in the following discussion.

5.2.1 Categorical status of a *ni*-phrase: Pattern 1

Let us begin with Pattern 1 from table (65). What Miyagawa and Tsujioka (M&T) (2004) deal with is actually Pattern-1 verbs (See Section 3.2 in this chapter). They examine the status of *ni*-phrases and conclude that a *ni*-phrase as a low Goal is a PP, whereas a *ni*-phrase as a high Goal is a DP. That is, *ni* in the former is a postposition, while in the latter it is a Dative marker. Their argument is summarized in (67):

• Miyagawa & Tsujioka (2004)

(67)

		low Goal		high Goal = ApplP	
realization	English	to-Dative phrase in the DC		the indirect object in the DOC	
	Japanese	<i>ni</i> -phrase		<i>ni</i> -phrase	
category		PP		DP	
semantic restriction		inanimate	animate		
meanings		Goal of transfer		Possessor (come to possess)	

Their argument is mainly based on the verbs which consistently take a *ni*-phrase, namely, Pattern-1 verbs, in our terms. Pattern-1 verbs are represented by Verbs of transfer, such as *send* verbs (cf. Levin 1993).

One strategy to distinguish DP from PP when both are marked with *ni* is by a floating numeral quantifier (Miyagawa 1989). DP allows a floating numeral quantifier (NQ), but PP does not, because its projection blocks the mutual c-command between the host DP and the trace of the NQ, which is illustrated in (68).

• The mutual c-command condition

M&T observe that if a Goal is inanimate, a floating NQ is blocked, as shown in (69b), concluding that a locative Goal is a PP, as in (67). On the other hand, if a Goal is animate and can be a high Goal, a floating NQ is allowed, as in (69a), which indicates that the high Goal is DP.

- A low Goal does not allow a floating NQ
- (69) a. Taroo-ga gakusei-ni huta-ri nimotu-o okut-ta.

 Taroo-Nom student-ni 2-CL package-Acc send-Past

 'Taroo sent two students a package.'
 - b. * Daitooryoo-ga kokkyoo-ni huta-tu heitai-o okut-ta.
 The president-Nom borders-ni 2-CL soldiers-Acc send-Past
 (Lit.) 'The President sent two borders soldiers.'

M&T (2004: 7)

- Summary of discussion
- (70) a. Floating NQ is allowed \rightarrow it is DP \rightarrow it is a high Goal
 - b. Floating NQ is not allowed \rightarrow it is PP \rightarrow it is a low Goal

Now consider the GBC. In the GBC, the animacy restriction, included in the existence restriction, is respected, and the *ni*-phrase involved must not be a low Goal.

- The animacy restriction is observed in the GBC
- (71) a. Taroo-ga Tokyo-ni nimotu-o okut-ta.

 Taroo-Nom Tokyo-ni package-Acc send-Past

 'Taroo sent a package to Tokyo.'
 - b. * Taroo-ga Tokyo-ni nimotu-o okut-te-<u>age</u>-ta.
 Taroo-Nom Tokyo-ni a package-Acc sent -Give-Past
 'Taroo sent Tokyo a package (for the good of it).'

Sentence (71b) is ungrammatical, so far as a null Benefactive phrase (*pro*) is not implied in the context. Next, a floating NQ is allowed in the GBC, as shown in (72).

- A floating NQ is allowed in the GBC
- (72) a. Hanako-ga gakusei-ni san-nin nimotu-o okut-ta.

 Hanako-Nom student-ni 3-CL package-Acc send-Past

 'Hanako sent three students a package.'
 - b. Hanako-ga gakusei-ni san-nin nimotu-o okut-te-age-ta.
 Hanako-Nom student-ni 3-CL package-Acc send -Give-Past
 'Hanako sent three students a package (for the good of them).'

Thus, we safely conclude that the categorical status of a *ni*-phrase in the Pattern-1 GBC is DP, but not PP.

The relation between surface constructions and categorical statuses of the phrases in question are depicted in (73).

• The relevant constructions in Japanese and English (73)

	Constructions		Category	Thematic role	
	Japanese	English	"Dative"	Tote	
A	simple ditransitive	DC	PP	low Goal (Goal of transfer)	
		DOC	DP	high Goal (Possessor)	$oxed{egin{array}{c} oxed{\mathbb{B}}}$
	GBC	DOC		Affectee (Benefactive, Malefactive)	

M&T investigated the area represented by A in (73). One of M&T's contributions is showing that Japanese simple ditransitives cover English DCs, where a low Goal appears, and English DOCs, where Possessor (i.e. high Goal) appears. In other words, Japanese ditransitives have two Goals, high and low, the former of which corresponds to the indirect object in the DOC in English, while the latter corresponds to the *to*-Dative phrase in the DC.

Now, what we are trying to clarify is the area represented by B. That is, English DOCs cover Japanese simple ditransitives, where Possessor appears, as well as Japanese GBCs, where the Benefactive(/Malefactive) argument appears and the head is realized by *age-ru/yar-u*. In terms of thematic role, we have already seen in Section 4.3 that the existence restriction differentiates the Benefactive argument in the GBC from Possessor in simple ditransitives.

5.2.2 Categorical status of a *ni*-phrase: Pattern 2

Next, we will examine a *ni*-phrase in Pattern 2. The relevant data in (61) - (62) are repeated as (74) - (75) below.

Pattern 2

- (74) a. Watasi-wa hon -o kai -ta.

 I -Top book-Acc write-Past
 'I wrote a book.'
 - b. ?? Watasi-wa <u>Hanako-ni</u> hon -o kai -ta.
 I -Top Hanako-ni book-Acc write-Past (Lit.) 'I wrote a book to Hanako.'
 - c. Watasi-wa <u>Hanako-ni</u> hon -o kai-te -<u>age</u> -ta.

 I -Top Hanako-*ni* book-Acc write -Give-Past

 'I wrote a book for (the good of) Hanako.'

- (75) a. Taroo-wa ningyoo-o tukut-ta.

 Taroo-Top doll -Acc make-Past

 'Taroo made a doll.'
 - b. ?? Taroo-wa <u>Hanako-ni</u> ningyoo-o tukut-ta.

 Taroo-Top Hanako-ni doll -Acc make-Past

 (Lit.) 'Taroo made a doll to Hanako.'
 - c. Taroo-wa <u>Hanako-ni</u> ningyoo-o tukut-te-<u>age</u> -ta.

 Taroo-Top Hanako-*ni* doll -Acc make -Give-Past

 'Taroo made a doll for (the good of) Hanako.'

(The (b) and (c) sentences are cited from Machida 1996: 205)

The verbs involved in (74) and (75) are Verbs of creation. These verbs necessarily take a direct object marked with Accusative o, as in the (a)-sentences, but adding an indirect object with ni to the sentence, as in the (b)-sentences, sounds less natural. However, if the GBC frame is used, as shown in the (c)-sentences, the acceptability improves and the sentences become perfect.

Machida (1996), following Shibatani's (1978) view, advocates that the *ni*-phrase in a GBC is selected and licensed by the lexical verb. If so, why does the acceptability of the *ni*-phrase improve by being connected to the 'give' verb in the GBC frame, rather than being selected only by the lexical verb? Machida assumes that licensing of the *ni*-phrase by a Verb of creation requires a pragmatic condition of "affectedness," which is extended from the proposal by Sadakane and Koizumi (1995).¹³ That is to say, although a *ni*-phrase is selected by a lexical verb in syntax, lack of "affectedness" must be satisfied by some other (pragmatic) methods, such as being connected to the GBC frame. Instead, we take this "affectedness" notion to be encoded in another head, Appl in the GBC, which leads to the Benefactive/

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¹³ Sadakane and Koizumi state that when the object is affected by the event, it realizes as a DP with Dative Case marker ni, while if it is less affected, it realizes as a PP accompanied by the postposition ni.

Malefactive interpretation of a *ni*-phrase.

First, let us examine and clarify the syntactic status of a *ni*-phrase in Pattern 2. Clefting shows the difference in the category. In the focus position of a cleft sentence, a PP may not appear without the postposition, whereas a DP may appear without a Case-marker and the sentence still sounds rather natural. This is because postpositions are not deletable, for they have semantic contents to assign a DP. Machida (1996), adopting Sadakane and Koizumi's (1995) proposal, applies this diagnostic to sentences with Verbs of creation and concludes that the *ni*-phrase which marginally appears is a PP, not a Dative DP, as shown in (76).

- A ni-phrase in simple ditransitives is a PP
- (76) a. Haha-wa Michiko-ni spagetti-o tukut-ta.

 mother-Top Michiko-ni spaghetti-Acc make-Past

 'Mother made spaghetti for Michiko.'
 - b. Haha-ga spagetti-o tukut-ta -no-wa Michiko-ni da.
 mother-Nom spaghetti-Acc make-Past-NL-Top Michiko-ni Cop
 'It was for Michiko that mother made spaghetti.'
 - c. * Haha-ga spaghetti-o tukut-ta-no-wa Michiko da.

 mother-Nom spaghetti-Acc make-Past-NL-Top Michiko Cop

 (Machida 1996: 211-213)

A parallel test applied to the GBC sentences in (77) reveals that the *ni*-phrase is a Dative DP, not a PP.

- A ni-phrase in the GBC is a DP
- (77) a. Haha-wa Michiko-ni spagetti-o tukut-te-<u>age</u>-ta.

 mother-Top Michiko-ni spaghetti-Acc make -Give-Past

 'Mother made Michiko spaghetti (for the good of her).'

- b. ?? Haha-ga spagetti-o tukut-te-age-ta-no-wa Michiko-ni da. mother-Nom spaghetti-Acc make -Give-Past-NL-Top Michiko-ni Cop 'It was for Michiko that mother made spaghetti.'
- c. Haha-ga spagetti-o tukut-te-<u>age</u>-ta-no-wa Michiko da.

 mother-Nom spaghetti-Acc make-Give-Past-NL-Top Michiko Cop

The contrast between (76c) and (77c) shows:

- (i) A Verb of creation may marginally take a *ni*-phrase by itself, the status of which is PP. A Verb of creation does not take a Dative DP by itself.
- (ii) When a verb of creation is connected to the 'give' verb in the GBC, it readily takes a *ni*-phrase, which is a Dative DP.

We conclude that the Appl head *age-ru/yar-u* is what makes it possible to introduce a DP. We speculate that a PP which marginally appears with a lexical verb is a Goal; change of possession is not necessarily implied by Verbs of creation, which leads to the marginality. On the other hand, a DP introduced by Appl is a Benefactive argument, which benefits from possessing the object.

It is becoming clear that we have to take verb types into consideration to understand the puzzling data in (65). In the next section, we examine *ni*-marking phenomena by referring to verb types explored by Levin (1993). In doing so, correlations between English and Japanese Benefactive constructions are also exhibited.

5.2.3 Verb types: Levin (1993)

We have already observed *ni*-marking patterns in Japanese simple ditransitives and the GBC. A similar phenomenon is detectable in English if we focus on verb classes and Dative alternation. To begin with, Japanese verbs in Pattern 2, which we

have just examined above, seem to correspond to "Verbs of creation and transformation" in Levin's (1993) classification of English verbs. According to Levin, "*Build* verbs" and "Verbs of preparing" are subsumed under "Verbs of creation and transformation." Examples of each class are as follows:

Verbs of creation and transformation 14

(78) Build verbs

carve, build, knit, sew, make

- (79) a. * Martha <u>carved</u> a toy to the baby.
 - b. Martha <u>carved</u> the baby a toy.
 - (cf. Martha carved a toy for the baby.)

(Levin 1993: 49 for sentence (79b))

- (80) a. ?* Hanako-ga kodomo-ni omotya-o <u>hot-ta</u>.

 Hanako-Nom child-*ni* toy-Acc carve-Past

 (Lit.) 'Hanako carved a toy to the child.'
 - b. Hanako-ga kodomo-ni omotya-o <u>hot-te-age-ta</u>.
 Hanako-Nom child-ni toy-Acc carve -Give-Past
 'Hanako carved the child a toy (for the good of him)'

(English verbs such as bake, arrange, assemble, blow (bubbles, glass), cast, chisel, churn, compile, crochet, develop, embroider, fashion, fold, forge (metal), grind, grow, hack, hammer, hatch, mold, pound, roll, sculpt, shape, spin (wool), stitch, weave, and whittle belong to Build verbs according to Levin (1993: 173))

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¹⁴ Other than *Build* verbs, Verbs of preparing, and Performance verbs, English verb classes such as *Grow* verbs, *Create* verbs, *Knead* verbs, and *Turn* verbs belong to this type.

(81) Verbs of preparing

boil (egg), cook (meal), fix (meal), bake (cake), brew (coffee)

- (82) a. * Donna boiled an egg to Bill.
 - b. Donna boiled Bill an egg.
 - (cf. Donna boiled an egg for Bill.)
- (83) a. ?* Hanako-ga Taroo-ni tamago-o <u>yude-ta</u>.

 Hanako-Nom Taroo-ni egg-Acc boil-Past

 (Lit.) 'Hanako boiled an egg to Taroo.'
 - b. Hanako-ga Taroo-ni tamago-o <u>yude-te-age-ta</u>.
 Hanako-Nom Taroo-ni egg-Acc boil -Give-Past
 'Hanako boiled Taroo an egg (for the good of him).'

(English verbs such as *blend* (*drink*), *clean*, *clear* (*path*), *fry* (*egg*), *grill*, *hardboil* (*egg*), *iron*, *light* (*fire*), *mix* (*drink*), *poach* (*egg*), *pour* (*drink*), *prepare* (*meal*), *roast* (*chicken*), *roll*, *run* (*bath*), *scramble* (*egg*), *set* (*table*), *softboil* (*egg*), *toast*, *toss* (*salad*), and *wash* belong to Verbs of preparing according to Levin (ibid.: 175))

Levin states that "Build verbs" denote "the creation of a product through the transformation of materials." As for "Verbs of preparing," the term comes from Wierzbicka (1988), who states that these also denote the creation of a product through the transformation of materials, especially food.

Importantly, these verbs fail to show *to*-Dative alternation as indicated in (79) and (82), though *for*-Dative is available.¹⁵ This is similar to the behavior of the *ni*-phrase in Japanese Pattern-2 verbs, in that a *ni*-phrase cannot (or at best marginally)

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¹⁵ Note that English *for*-Dative has a homophonous *for*-phrase which is an adverbial PP and has its own semantic contents, 'for the good of' or 'on behalf of,' and hence it appears anywhere without any syntactic restrictions. This is similar to the Japanese adverbial phrase *no-tame-ni* 'for the good of' (See Section 5.1.2.) These adverbial phrases should be distinguished from the true Dative phrase, which may be involved in Dative alternation.

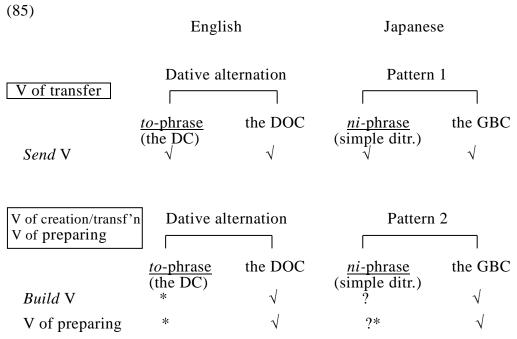
appear in simple ditransitives, though it may occur in the GBC.

Note that this behavior is contrastive to "Verbs of transfer." Remember that the Japanese verb *okur-u* 'send' is grouped into Pattern 1. Pattern 1 allows a *ni*-phrase in both the simple ditransitive and the GBC. In a parallel fashion, Verbs of transfer allow Dative alternation, as shown below:

- (84) a. John sent a package to Mary.
 - b. John sent Mary a package.

This parallelism is captured in (85): it becomes clear that the possibility of Dative alternation in English and that of a *ni*-phrase in simple ditransitives in Japanese are correlated.

• Availability of Dative alternation and a *ni*-phrase are correlated



English verbs such as Verbs of creation, transformation, or preparing, do not involve *to*-Dative alternation, but show *for*-Dative alternation, as observed in (79) and (82). This phenomenon correlates with the availability of a *ni*-phrase in Japanese Pattern-2

verbs.¹⁶ That is, these verbs marginally show a *ni*-phrase in simple ditransitives, as in (80a) and (83a), but readily show one in the GBC, as observed in (80b) and (83b). These facts are illustrated in (85). Goal is realized as a *to*-phrase (PP) in the English DC. Similarly, a *ni*-phrase marginally appears in Japanese simple ditransitives is also a PP, as attested by exploiting Clefting test in (76)-(77). In the Clefting test, we also observed that a *ni*-phrase in the GBC is DP, as the first object in the English DOC is DP. Moreover, in English, the Benefactive argument seems to correspond to the first object in the DOC which shows *for*-Dative alternation. We do not discuss the position of the *for*-Dative here, but there is supporting evidence for our argument that the DOC in English which shows *for*-Dative alternation corresponds to the GBC in Japanese. Observe the data in (86) below:

- (86) a. I knitted this sweater for our baby.
 - b. I knitted our baby this sweater.

The Data is reported by Kayne (1975), which is cited by Larson (1988: footnote 44) and Harley (2002: 36). They discuss that (86b) is possible only in a situation such that the baby is already born. Larson comments that this is due to the implication of affectedness in the DOC, which requires an extant individual. This is exactly what we have observed as a semantic constraint forced on the GBC in Japanese, which is termed as the existence restriction in Section 4.3.

The descriptive data and generalization above support our hypothesis in (73), repeated as (87) below:

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¹⁶ This point is also suggested by Machida (1998).

• The relevant constructions in Japanese and English (87)

	Constructions		Category	Thematic role		
	Japanese	English	"Dative"	Tole		
A	simple ditransitive	DC	PP	low Goal (Goal of transfer)		
		DOC	DP	high Goal (Possessor)		R
	GBC			Affectee (Benefactive Malefactive)		נש

As indicated by B, English DOCs are ambiguous between simple ditransitives and the GBC, in the latter of which non-overt Appl head is considered to be involved.

Levin states that Verbs of transfer (i.e. Pattern-1 in our terms) and Verbs of transformation/creation (i.e. Pattern-2) are much different in semantics. That is, the former puts focus on movement which has direction and a path, whereas the latter puts focus on creating a product through the transformation of materials. This difference is supported by the fact that the former takes a *from* phrase as a Source of movement, as in (88), while the latter takes an *out of* phrase or a *from* phrase as the Material of transformation, as in (89).

- (88) John sent Mary a letter from Tokyo.
- (89) Martha carved the baby a toy out of a piece of wood.

(Levin ibid.:173 for sentence (89))

Although a concrete object which is transformed or created is involved in (89), the focus is on the transformation or creation. We consider that this leads to the unavailability of a simple Goal phrase, namely, the prohibition of a *to*-phrase in an English DC, as well as the marginality of a *ni*-phrase in Japanese Pattern-2 verbs. As for the difference in the degree of deviance, we speculate that verbs of creation tend to

imply the existence of "Recipient" in Japanese, but not in English.

5.2.4 Performance verbs

With "Performance verbs," such as 'sing' or 'draw,' a *to*-phrase in English DCs is more generously allowed, just as in a *ni*-phrase in simple ditransitives in Japanese, in contrast to the case where Verbs of creation/transformation are involved. Levin's classification and example sentences are cited below.

(90) **Performance verbs**

sing (song), write (book), take (picture), draw (picture), play (music, game)

- (91) a. Sandy sang a song to me.
 - b. Sandy sang me a song.

(Levin ibid.: 178)

- (92) a. Taroo-ga Hanako-ni uta-o <u>utat-ta</u>.

 Taroo-Nom Hanako-ni song-Acc sing-Past
 'Taroo sang a song to Hanako.'
 - b. Taroo-ga Hanako-ni uta-o <u>utat-te-age-ta</u>.
 Taroo-Nom Hanako-ni song-Acc sing -Give-Past
 'Taroo sang Hanako a song (for the good of her).'

(English verbs such as *chant* (*prayer*), *choreograph* (*dance*), *compose* (*symphony*), *dance* (*waltz*), *direct* (*movie*, *play*), *hum* (*tune*), *intone* (*prayer*), *perform* (*play*), *produce* (*movie*), *recite* (*poem*), *silkscreen*, *spin* (*story*), and *whistle* (*tune*) belong to Performance verbs according to Levin (ibid.: 178-179))

Levin points out that Performance verbs are different from Verbs of creation/

transformation in that "performances are themselves the effected object." Accordingly, they do not take a material phrase as shown in (93b) and (93c), in contrast to a Verb of creation/transformation in (93a).

- (93) a. Martha carved the baby a toy out of a piece of wood.
 - b. * Sandy sang me a song out of the air.
 - c. * Mary drew her mother a picture from paper and paints.

We conclude with Levin that performance is not transformation from one thing to another, but rather performance itself is directly presented toward some direction, like a Theme of Verbs of transfer, which makes a Goal phrase more available.

5.3 Benefactive raising

5.3.1 Absence of the *ni*-marked Benefactive phrase: Pattern 4

Before going to Pattern 3, the puzzling data in Pattern 4 are analyzed. The relevant data are repeated below.

Pattern 4

- (94) a. Hanako-wa <u>Taroo-to</u> ason-da.Hanako-Top Taroo-Com play-Past 'Hanako played with Taroo.'
 - b. Hanako-wa <u>Taroo-to/*ni</u> ason-de-<u>age</u>-ta.
 Hanako-Top Taroo-Com/ni play -Give-Past
 'Hanako played with Taroo (for the good of him).'
- (95) a. Hanako-wa <u>Taroo-no</u> hikkosi-o tetudat-ta. Hanako-Top Taroo-Gen move-Acc help -Past (Lit.) 'Hanako helped Taroo's move.'

b. Hanako-wa <u>Taroo-no/*ni</u> hikkosi-o tetudat-te-<u>age</u>-ta.
 Hanako-Top Taroo-Gen/ni move-Acc help -Give-Past
 (Lit.) 'Hanako helped Taroo's move (for the good of him).'

In this case, a *ni*-phrase does not appear in simple ditransitives; instead, in (94a), the verb asob-u 'play' takes an argument marked with the Comitative particle to 'with,' and in (95a), the verb tetuda-u 'help' takes an argument marked with Accusative o. Next, observe the (b)-sentences, where the verbs in the (a)-sentences are connected to the 'give' verb and take the GBC frame. In (94b), what is construed as the Benefactive is *Taroo*, but it is not marked with *ni*: instead, the particle *to*, assigned by the lexical verb, is maintained. In (95b), what is construed as the Benefactive is Taroo, but it is not marked with ni. Moreover, Taroo even remains within the DP Taroo-no hikkosi 'Taroo's move' and is marked with Genitive no. Here arises a question: how is it possible for a DP (Taroo, in this case) to be construed as the Benefactive? Assuming Appl to be involved in the Benefactive/Malefactive interpretations, it is natural to postulate that the Benefactive argument is somewhere in a local relationship with Appl. We hypothesize that the Benefactive argument in question moves to the position where it is interpreted as the Benefactive, following Hasegawa's (2000) intuition, and Iwamoto's (1999a, 1999b) discussion on the Alamblak language.

• Proposal

(96) Benefactive Raising

A Benefactive phrase which is not marked with *ni* in the GBC raises to Appl without phonetic materials.

We will verify this proposal by applying indeterminate binding, pronoun binding, and scope interaction.

5.3.2 Indeterminate binding

In this section, we will present evidence for Benefactive raising, which comes from indeterminate binding.

Japanese indeterminate pronouns, such as *dare* 'anyone,' *doko* 'anywhere,' and *nani* 'anything' function as negative polarity items, as well as universal quantifiers, when bound by the Quantificational particle (Q-particle) *mo* (Kuroda 1965).

- Indeterminate binding by mo
- (97) a. <u>Dare-mo</u> gakkoo-ni ika-nakat-ta.

 anyone-Q school-to go-Neg-Past

 (Lit.) 'Anyone did not go to school.' (= 'No one went to school.')
 - b. John-wa <u>nani-mo</u> yoma-nakat-ta.
 John-Top anything- Q read-Neg-Past
 'John did not read anything.'

It has been observed that the Q-particle *mo* does not have to be adjacent to the indeterminate pronoun which it binds (Kuroda 1965, 1988). In sentence (98a) below, *mo* is attached to the object *nani* 'anything,' while in sentence (98b), *mo* is split from the object and attached to the verb.

- Mo can bind an indeterminate pronoun from a verb position
- (98) a. John-wa <u>nani-mo</u> yoma-nakat-ta.

 John-Top anything- Q read-Neg-Past

 'John did not read anything.'
 - b. John-wa <u>nani</u>-o yomi-<u>mo</u> si-nakat-ta.
 John-Top anything-Acc read-Q do-Neg-Past
 'John did not read anything.'

Kishimoto (2001a) observes asymmetry in grammaticality between an indeterminate object and an indeterminate subject when the Q-particle is not adjacent to them but attached to a verb.

- Object-subject asymmetry
- (99) Indeterminate object
 - Taroo-wa <u>nani</u>-o kai-<u>mo</u> si-nakat-ta.
 Taroo-Top anything-Acc buy-Q do-Neg-Past
 'Taroo did not buy anything.'
 - b. Taroo-wa <u>dare</u>-ni ai-<u>mo</u> si-nakat-ta.
 Taroo-Top anyone-ni meet-Q do-Neg-Past
 'Taroo did not meet anyone.'

(100) Indeterminate subject

- a. * <u>Dare-ga</u> warai-<u>mo</u> si-nakat-ta.
 anyone-Nom laugh-Q do-Neg-Past
 (Lit.) 'Anyone did not laugh.' (= 'No one laughed.')
- b. * <u>Dare-ga</u> Hanako-o home-<u>mo</u> si-nakat-ta.

 anyone-Nom Hanako-Acc admire-Q do-Neg-Past

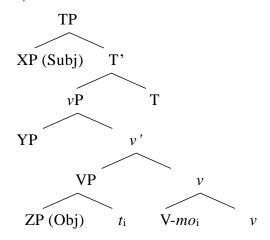
 (Lit.) 'Anyone did not admire Hanako.' (= 'No one admired Hanako.')

 (Kishimoto 2001: 600 with additional gloss)

Based on this asymmetry, Kishimoto argues that when the Q-particle is attached to a verb, the object is inside of the binding domain, whereas the subject is outside of it. This is illustrated in (101).

• The domain of indeterminate binding

(101)



(ibid.: 602 with additional notation)

Kishimoto assumes that the verb, with mo attached, has to be raised to v in overt syntax. He defines the domain of indeterminate binding as follows:

- The definition for the domain of indeterminate binding
- (102) Y is in the domain of a head X if it is contained in Max (X), where Max(X) is the least full-category maximal projection dominating X.

(ibid.: 601)

According to (102), YP and ZP in (101) are inside the domain and the scope of *mo*, whereas XP is outside the domain.

Keeping this discussion in mind, consider sentences in the GBC. First, compare an indeterminate object with a *ni*-marked Benefactive phrase.

- Indeterminate object
- (103) a. Taroo-wa Hanako-ni <u>nani</u>-o hanasi-<u>mo</u> si-nakat-ta.

 Taroo-Top Hanako-ni anything-Acc tell -Q do-Neg-Past

 'Taroo did not tell anything to Hanako.'

- b. ? Taroo-wa Hanako-ni <u>nani</u>-o hanasi-<u>mo</u> site-*age*-nakat-ta.

 Taroo-Top Hanako-*ni* anything-Acc tell -Q do-Give-Neg-Past

 'Taroo did not tell anything to Hanako_i (for the good of her_i).'
- c. ? Taroo-wa Hanako-ni <u>nani</u>-o hanasi-te-*age*-<u>mo</u> si-nakat-ta.

 Taroo-Top Hanako-*ni* anything-Acc tell -Give -Q do-Neg-Past

 'Taroo did not tell anything to Hanako_i (for the good of her_i).'
- Indeterminate Benefactive phrase (*ni*-marked)
- (104) a. Taroo-wa <u>dare</u>-ni densetu-o hanasi-<u>mo</u> si-nakat-ta.

 Taroo-Top anyone-ni legend-Acc tell -Q do-Neg-Past

 'Taroo did not tell the legend to anyone.'
 - b. * Taroo-wa <u>dare</u>-ni densetu-o hanasi-<u>mo</u> si-te-*age*-nakat-ta.

 Taroo-Top anyone-*ni* legend-Acc tell -Q do-Give-Neg-Past

 'Taroo did not tell the legend to anyone; (for the good of him;).'
 - c. Taroo-wa <u>dare</u>-ni densetu-o hanasi-te-*age*-<u>mo</u> si-nakat-ta.

 Taroo-Top anyone-*ni* legend-Acc tell -Give -Q do-Neg-Past

 'Taroo did not tell the legend to anyone; (for the good of him;).'

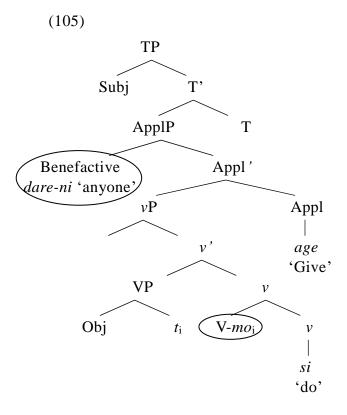
In sentence (103a), the indeterminate object *nani-o* 'anything' is bound by the Q-particle *mo*, which is attached to the verb, and the sentence is grammatical, as we have seen in (99). The sentences in (103b) and (103c) are the GBC, where the 'give' verb *age* is involved. The Benefactive *Hanako* is marked with *ni*, and is analyzed as Pattern 1. The difference between (103b) and (103c) is the location of Q-particle *mo* attachment: in (103b), it is attached to the lexical verb 'tell,' whereas in (103c), it is attached to the 'give' verb *age*. Both sentences are acceptable, though they do not sound perfect, possibly because the verb stem is split from the 'give' verb and its inflection.

Now, let us turn to *ni*-marked phrases in the sentences in (104). As was the case for the indeterminate object in (103a), the indeterminate *ni*-phrase in (104a) is successfully bound by *mo*. The sentences in (104b) and (104c) are examples of the GBC involving the 'give' verb, parallel to the sentences in (103b) and (103c). However, sentence (104b) is ungrammatical, as the indeterminate *ni*-marked phrase fails to be bound by the Q-particle. In contrast, the indeterminate *ni*-marked phrase in (104c) is successfully bound. This fact is readily explained by our proposal that a *ni*-marked phrase in the GBC is a Benefactive argument and occupies a higher position. In (104b), the Q-particle *mo* is attached to the lexical verb stem, and it is too low to bind the indeterminate Benefactive phrase, while in (104c), it is attached to the 'give' verb and high enough to bind the indeterminate Benefactive phrase. Our argument is demonstrated in (105) and (106). NegP is omitted for the sake of simplicity.

(104) b. * Taroo-wa <u>dare</u>-ni densetu-o hanasi-<u>mo</u> si-te-*age*-nakat-ta.

Taroo-Top anyone-*ni* legend-Acc tell -Q do-Give-Neg-Past

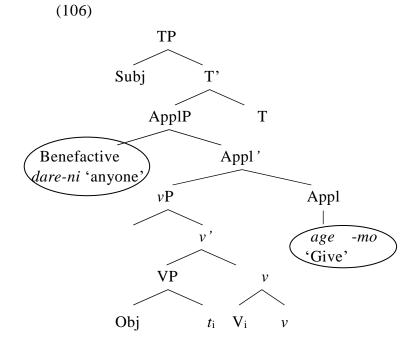
'Taroo did not tell the legend to anyone_i (for the good of him_i).'



(104) c. Taroo-wa <u>dare</u>-ni densetu-o hanasi-te-*age*-<u>mo</u> si-nakat-ta.

Taroo-Top anyone-*ni* legend-Acc tell -Give-Q do-Neg-Past

'Taroo did not tell the legend to anyone; (for the good of him;).'



If we continue to claim that the 'give' verb, a realization of Appl head in Japanese, introduces a Benefactive phrase, we predict, analogously to the *ni*-marked Benefactive phrase, that a Comitative-marked Benefactive phrase and a Genitive-marked Benefactive phrase can be in the domain of indeterminate binding only when the Q-particle *mo* is attached to the 'give' verb *age* in the GBC. This prediction is borne out. First, the data of a Comitative-marked Benefactive phrase are presented in (107), the relevant derivations for which are shown in (108).

- Indeterminate Benefactive phrase (Comitative-marked)
- (107) a. Taroo-wa <u>dare</u>-to asobi-<u>mo</u> si-nakat-ta.

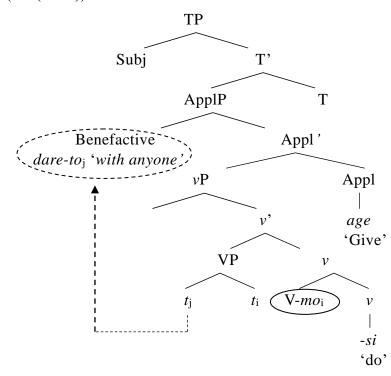
 Taroo-Top anyone-with play-Q do-Neg-Past

 'Taroo did not play with anyone.'
 - b. * Taroo-wa <u>dare</u>-to asobi-<u>mo</u> si-te-*age*-nakat-ta.
 Taroo-Top anyone-with play-Q do-Give-Neg-Past
 'Taroo did not play with anyone_i (for the good of him_i).'
 - c. ? Taroo-wa <u>dare</u>-to ason-de-*age*-<u>mo</u> si-nakat-ta.

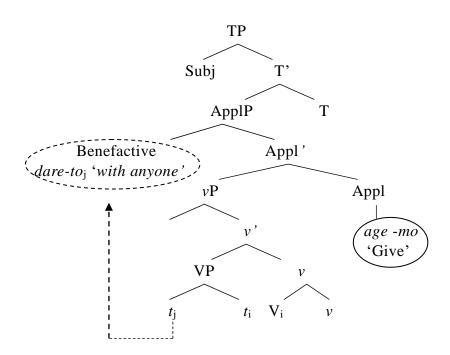
 Taroo-Top anyone-with play -Give-Q do-Neg-Past

 'Taroo did not play with anyone; (for the good of him;).'

(108) a. (for (107b))



(108) b. (for (107c))



In (107), the Comitative *to*-marked Benefactive phrase appears, and the same fact is observed as the *ni*-marked Benefactive in (104). This is accounted for quite naturally by our Benefactive raising approach depicted in (108): despite the surface position,

the Benefactive argument is covertly raised to ApplP.

Next, the parallel fact is attested in the case of a Genitive *no*-marked Benefactive phrase:

- Indeterminate Benefactive phrase (Genitive-marked)
- (109) a. Taroo-wa <u>dare</u>-no hikkosi-<u>mo</u> tetudawa-nakat-ta.

 Taroo-Top anyone-Gen move-Q help -Neg -Past

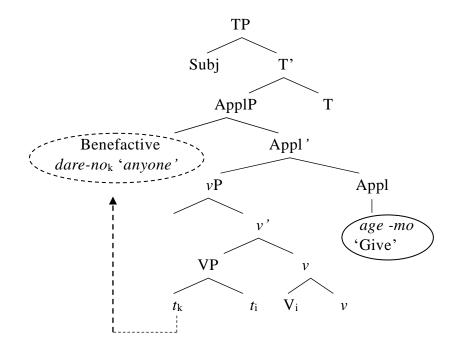
 'Taroo did not help anyone's move.'
 - b. * Taroo-wa <u>dare</u>-no hikkosi-o tetudai-<u>mo</u> si-te-<u>age</u>-nakat-ta.
 Taroo-Top anyone-Gen move-Acc help -Q do -Give-Neg-Past
 'Taroo did not help anyone_i's move (for the good of him_i).'
 - c. ? Taroo-wa <u>dare</u>-no hikkosi-o tetudat-te-<u>age-mo</u> si-nakat-ta.

 Taroo-Top anyone-Gen move-Acc help -Give -Q do -Neg-Past

 'Taroo did not help anyone;'s move (for the good of him;).'

(110) a. (for (109b)) TP T' Subj ApplP T Benefactive Appl' dare-no_i 'anyone νP Appl age- 'Give' VP v DP V- $mo_{
m i}$ t_i si t_{j} 'do'

(110) b. (for (109c))



In the same way as the *ni*-marked or the Comitative *to*-marked phrases, the Genitive *no*-marked Benefactive phrase can be bound in the domain of the 'give' verb, as shown in (109c). We speculate that the *no*-marked phrase *dare-no* 'anyone-Gen' within the larger nominal phrase *dare-no hikkosi* 'anyone-Gen move' is covertly raised to ApplP and interpreted as the Benefactive in the GBC, which is illustrated in (110b).

Thus, we maintain that despite the surface positions, the Benefactive argument is raised to ApplP in the GBC. 17

 17 One might observe that the following sentence is fairly good in addition to (109c) (p.c. Enoch Iwamoto):

(i) Taroo-wa <u>dare-no</u> hikkosi-o tetudat- te -<u>mo</u> -<u>age</u> -nakat-ta. Taroo-Top anyone-Gen move -Acc help Q Give Neg-Past 'Taroo did not help anyone_i's move (for the good of him_i).'

If mo remains in vP projection, then the indeterminate Benefactive dare 'anyone,' which we claim to be raised to ApplP, would be outside the scope of mo and not bound. Actually, in Section 2.6.1 and its footnote 12 in Chapter 4, we will further argue that T under which te is posited is included and raised to Appl. Consequently, mo in (i), which is attached to T and raised to Appl, may bind the Benefactive dare 'anyone.'

5.3.2.1 Comparison with Kishimoto's proposal

Before closing this subsection, we should clarify the difference between our Our argument is based on Kishimoto's proposal and Kishimoto's (2001a). observation and analysis, however, the conclusion diverges. We argue for invisible Benefactive raising, which is driven by Appl head, while Kishimoto claims covert DP raising for Case reason. He assumes that vP-internal arguments need to be raised to the domain of the topmost v, where all the Case features of the v-heads are assembled. We do not go into the details of his argument (see Hiraiwa 2005 for discussion), but just point out that there are some data which cannot be accounted for by Case reason. We have seen above that an indeterminate Benefactive phrase is bound by mo, which is attached to the higher head, the 'give' verb. This is true in the case where a Benefactive phrase is marked with Comitative to 'with,' which is considered to be inherent Case and does not need to further move for Case. One might assume that even inherent Case has to be licensed by the topmost vP. It might be so, but how about the Genitive Case in (109) and (110), which we have argued above? The Genitive-marked DP does not need to move to ν P, since it is already licensed within a larger DP. Thus, a Case-driven analysis does not account for all the data. 18

5.3.3 Pronoun binding

It has been widely assumed that a quantified NP can bind an anaphoric NP in its c-command domain (Reinhart 1983).

(111) a. Everyone_i loves his_i mother.

b. * Hisi mother loves everyone i.

The quantified NP Everyone in (111a) c-commands the pronoun his and the bound

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¹⁸ Kikuchi (1994) also argues covert extraction of a nominal from DP. He assumes that some Genitive-marked DPs are assigned a Zero-Case feature and raised to AGRo, where the Case-feature checking occurs at LF. His argument for extraction of a nominal is compatible with our proposal, though he argues that the extraction is Case-driven. See Section 8.3 in Chapter 2.

pronoun reading is obtained. In Japanese, the anaphoric expression *soitu* corresponds to *he/she* in English and functions as a bound variable (Hoji 1985).

(112) Daremo_i-ga soitu_i-no inu-o tatai-ta.

everyone-Nom he-Gen dog-Acc hit-Past

'Everyone hit his dog.'

Even if an anaphoric NP is scrambled to the sentence initial position, the bound variable reading is marginally attested because the scrambled NP "reconstructs" to its base position (Saito 1985, 1992).

(113) ? Soitu_i-no inu-o daremo_i-ga tatai-ta.

he-Gen dog-Acc everyone-Nom hit-Past

'Everyone_i hit his_i dog.'

An anaphoric adjunct phrase can also be bound, however, if it is scrambled to the front of its binder, the bound variable reading is lost because the scrambled adjunct cannot be "undone" (cf. Bošković and Takahashi 1998).

- (114) a. Daremo_i-ga soitu_i-no muti-de inu-o tatai-ta.

 everyone-Nom he-Gen stick-with dog-Acc hit-Past

 'Everyone_i hit the dog with his_i stick.'
 - b. * Soitu_i-no muti-de daremo_i-ga inu-o tatai-ta.

 he-Gen stick-with everyone-Nom dog-Acc hit-Past

 'Everyone_i hit the dog with his_i stick.'

As can be seen above, the adjunct *soitu-no muti-de* 'with his stick' cannot be "undone," therefore it is impossible to be bound, staying in the position preceding the quantified NP *dare-mo* 'everyone.'

Now, observe the sentences involving a Comitative to-phrase:

- (115) a. Taroo-wa dono-ko_i -to-mo soitu_i-no omotya-de ason-da.

 Taroo-Top every child with he -Gen toy with play-Past

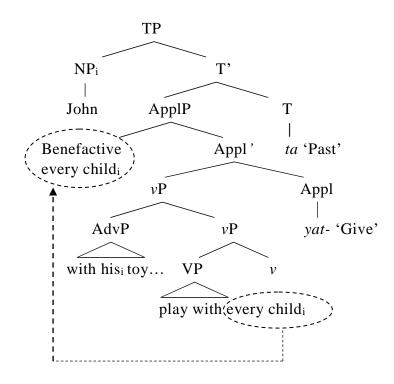
 'Taroo played with every child_i with his_i toy.'
 - b. * Taroo-wa soitui-no omotya-de dono-koi -to-mo ason-da.
 Taroo-Top he -Gen toy with every child with play-Past
 'Taroo played with every childi with hisi toy.'
 - c. ? Taroo-wa soitu_i-no omotya-de dono-ko_i-to-mo ason-de-<u>yat</u>-ta.

 Taroo-Top he -Gen toy -with every child with play -Give-Past

 'Taroo played with every child_i with his_i toy (for the good of him_i).'

In (115a), the quantified NP *dono-ko* 'every child' binds the anaphoric expression *soitu* 'he.' In (115b), the anaphoric expression *soitu* is preposed to the quantified NP *dono-ko* 'every child' by scrambling and adjoined to the *v*P. Consequently, it gets out of the c-command domain of the quantified NP; hence, the bound pronoun reading fails. The sentence in (115c) is a GBC with the 'give' verb *yar-u*. Interestingly, the bound pronoun reading becomes available. This fact suggests that the Benefactive phrase *dono-ko* 'every child' is in a higher position, which we assume to be ApplP. This argument is illustrated below:

(115) d.



The same point is demonstrated in the sentences in (116), where another quantifier *subete* 'every' is used and the adjunct phrase is expressed by a clause.

- (116) a. John-ga [subete-no kodomo] $_i$ -to [[soitu-ga [e] $_j$ tyuumonsi-ta John-Nom every-Gen child with he-Nom order -Past omotya] $_j$ -de ason-da. toy with play-Past 'John played with every child $_i$ with his $_i$ toy which he $_i$ had ordered.'
 - b. * John-ga [[soitu_i-ga [e]_j tyuumonsi-ta omotya]_j-de

 John-Nom he-Nom order-Past toy with

 [subete-no kodomo]_i-to ason-da.

 every-Gen child -with play-Past

 'John played with every child_i with his_i toy which he_i had ordered.'

c. John-ga [[soitui-ga [e]j tyuumonsi-ta omotya]j-de

John-Nom he-Nom order-Past toy with

[subete-no kodomo]i-to ason-de-yat-ta.

every-Gen child -with play -Give-Past

'John played with every childi with hisi toy which hei had ordered (for the good of himi).'

Next, we will examine a Benefactive phrase with Genitive *no*, which has been discussed in (109)-(110). Verbs such as *tetuda-u* 'help' take one object, marked with Accusative o.

- (117) a. Hanako-wa Taroo-o tetudat-ta.

 Hanako-Top Taroo-Acc help -Past

 'Hanako helped Taro.'
 - b. Hanako-wa hikkosi-o tetudat-ta.
 Hanako-Top moving-Acc help -Past
 'Hanako helped (someone's) move.'

In order to express both two arguments, who is helped and what is helped, the two arguments are connected into one nominal phrase by Genitive no, as in (118a). The Dative marker ni is not available, as shown in (118b).

- (118) a. Hanako-wa <u>Taroo-no</u> hikkosi-o tetudat-ta.

 Hanako-Top Taroo-Gen move-Acc help -Past

 'Hanako helped Taroo's move.'
 - b. Hanako-wa <u>Taroo-*ni</u> hikkosi-o tetudat-ta.
 Hanako-Top Taroo-ni move-Acc help-Past
 (Lit.) 'Hanako helped Taroo the move.'

The situation with regard to Case marking above is the same as in the GBC:

- (119) a. Hanako-wa <u>Taroo-no</u> hikkosi-o tetudat-te-<u>age</u>-ta.

 Hanako-Top Taroo-Gen move-Acc help -Give-Past

 'Hanako helped Taroo's move (for the good of him).'
 - b. Hanako-wa <u>Taroo-*ni</u> hikkosi-o tetudat-te-<u>age</u>-ta.
 Hanako-Top Taroo-ni move-Acc help -Give-Past
 (Lit.) 'Hanako helped Taroo the move (for the good of him).'

These data may seem to suggest that the verb *tetuda-u* 'help' takes only one internal argument. However, there is a situation where two internal arguments come to show up in one sentence: a cleft sentence. Even if the two arguments cannot appear because of some Case conflict such as the "Double o constraint" (Harada 1973, Aoyagi 1998, 2006, Hiraiwa 2002, and Fujii 2006, among others), the two arguments may appear if clefted. Observe the sentences in (120). The causative predicate *aruk-ase* 'make walk' takes one o-marked phrase as in (120a). If the two o-marked phrases appear in one sentence, it becomes unacceptable because of the "Double o constraint," as shown in (120b). However, the sentence improves if a cleft sentence is derived, as shown in (120c)

- (120) a. Hanako-ga <u>Taroo-o</u> aruk-ase-ta.

 Hanako-Nom Taroo-Acc walk-Caus-Past

 'Hanako made Taroo walk.'
 - b. *? Hanako-ga <u>Taroo-o</u> <u>hamabe-o</u> aruk-ase-ta.
 Hanako-Nom Taroo-Acc sea shore-Acc walk-Caus-Past
 'Hanako made Taroo walk on the seashore.'

c. Hanako-ga <u>Taroo-o</u> aruk-ase-ta-no-wa <u>hamabe-(o)</u>-da.

Hanako-Nom Taroo-Acc walk-Caus-Past-NL-Top seashore-Acc-Cop

'It was the seashore that Hanako made Taroo walk.'

A similar situation is observed with the predicate *tetuda-u* (cf. Fujii 2006).

- (121) a. Hanako-wa {Taroo-o/hikkosi-o} tetudat-ta.

 Hanako-Top Taroo-Acc/move-Acc help-Past

 'Hanako helped {Taroo/the move}.'
 - b. * Hanako-wa <u>Taroo-o</u> <u>hikkosi-o</u> tetudat-ta.

 Hanako-Top Taroo-Acc move-Acc help-Past

 (Lit.) 'Hanako helped Taroo his move.'
 - c. Hanako-ga <u>Taroo-o</u> tetudat-ta-no-wa <u>hikkosi-(o)</u>-da.

 Hanako-Nom Taroo-Acc help-Past-NL-Top move-Acc-Cop

 (Lit.) 'It was moving that Hanako helped Taroo.'
 - d. Hanako-ga <u>Taroo-o</u> tetudat-te-<u>age</u>-ta-no-wa <u>hikkosi-(o)</u>-da.

 Hanako-Nom Taroo-Acc help -Give-Past-NL-Top move-Acc-Cop

 'It was moving that Hanako helped Taroo with (for the good of him).'

As the contrast between (121a) and (121b) shows, the predicate *tetuda-u* 'help' may take one Accusative *o*-marked phrase. However, the acceptability of the cleft sentence in (121c) indicates that having two arguments, *Taroo* and *hikkosi* 'the move,' is potentially allowed. This is also the case in the GBC in (121d). We postulate that potential arguments, which are prohibited to appear in one sentence due to Case conflict, may appear in a cleft sentence.

Now that the existence of two arguments in a sentence with the predicate *tetuda-u* has been verified, let us examine the Genitive-marked Benefactive phrases in

(118a) and (119a), repeated below as (122a) and (122b) respectively:

- (122) a. Hanako-wa <u>Taroo-no</u> hikkosi-o tetudat-ta.

 Hanako-Top Taroo-Gen move-Acc help -Past

 'Hanako helped Taroo's move.'
 - b. Hanako-wa <u>Taroo-no</u> hikkosi-o tetudat-te-<u>age</u>-ta.
 Hanako-Top Taroo-Gen move-Acc help -Give-Past
 'Hanako helped Taroo's move (for the good of him).'

It is shown that the verb *tetuda-u* 'help' takes one object which is marked with Accusative o as in (122a). In (122b), this verb is connected to the 'give' verb in the GBC frame. In this sentence, what is construed as the Benefactive is *Taroo*, but it is marked with Genitive *no* and remains within the DP *Taroo-no hikkosi* 'Taroo's move.' However, irrespective of this surface position, the Benefactive DP *Taroo* is actually in a higher position, as well as in the case of a Comitative-marked DP, which we have already discussed. Observe pronoun binding in (123).

- (123) a. * John-wa soitu_i-no kuruma-de <u>dono-gakusei_i-no</u> hikkosi-mo tetudat-ta.

 John-Top he-Gen car-by every-student-Gen move-also help-Past

 'John helped every_i student's move by his_i car.'
 - b. John-wa soitu_i-no kuruma-de <u>dono-gakusei_j-no</u> hikkosi-mo tetudat-te-<u>yat</u>-ta.
 John-Top he-Gen car-by every-student-Gen move-also help -Give-Past
 'John helped everyone_i's move by his_i car (for the good of him_i).'

In the sentence in (123a), *dono-gakusei* 'every student' is marked with Genitive *no* and connected to the head NP *hikkosi* 'move,' forming the larger DP *dono-gakusei-no hikkosi* 'every student's move.' The DP 'every student' cannot bind the preceding anaphora *soitu* 'he.' Sentence (123b) is a GBC, where the 'give' verb *yar-u* appears.

In this sentence, *dono-gakusei* 'every student' is construed as the Benefactive. Now it becomes possible to bind the preceding anaphora *soitu* 'he,' in contrast with the case in (123a). This fact suggests that the Benefactive phrase *dono-gakusei* 'every student' is raised to a higher position, though it is marked with Genitive Case and embedded in a larger DP on the surface. This is parallel to what we observed in the Comitative *to*-marked DP. Thus, irrespective of its surface position, a Benefactive phrase in the GBC occupies a higher position, which is introduced by an Appl head.

5.3.4 Scope interaction

Japanese has been regarded as a scope-rigid language (Kuroda 1965, Hoji 1985, Saito 1985, Fukui 1986, among many others). A subject and an object show scope interaction in English, as in (124a), but not in Japanese, as in (124b), for the scope in Japanese is rigidly determined depending on the word order.

- English: inverse scope ok
- (124) a. Someone loves everyone.

some > every, every > some

- Japanese: scope depending on the word order
 - b. Dareka-ga daremo-o aisite-iru.

Someone-Nom everyone-Acc love-Pres

'Someone loves everyone.'

some > every, *every > some

In ditransitive sentences, however, it is observed that an object which is marked with Accusative *o* interacts with a "Goal" phrase which is marked with *ni* in certain cases, though the *ni*-marked phrase seems to precede in word order (Takano 1998, Miyagawa and Tsujioka (M&T) 2004; cf. Ueda 2002).

(125) Taroo-ga dokoka-ni dono-nimotu-mo okut-ta.

Taroo-Nom some place-ni every package send-Past

'Taroo sent every package to some place.'

some > every, every > some

(M&T 2004: 6)

M&T argue that if a *ni*-marked phrase is an animate Goal, it is in a higher position, and therefore the subsequent object cannot take scope over it, as conventionally observed. However, if a *ni*-marked phrase is a locative Goal, it is in a lower position, and the Accusative object can take scope over it (See Section 3.2 for the detailed discussion). Based on this phenomenon, we assume that if two quantifiers are sufficiently close (i.e., in the same scope-calculating domain or Quantifier Raising (QR) domain), they can interact with each other irrespective of their surface word order.

Assuming this, let us examine scope interpretations between a subject and another argument. The sentence in (126) is a typical transitive sentence and the scope between the subject and the object is rigid. The sentences in (127) are ditransitive. (127a) is a simple ditransitive sentence and the scope between the subject and a *ni*-marked phrase is rigid, which is compatible with the standard view that Japanese is a scope-rigid language. In contrast, in the GBC in (127b), scope interaction between the subject and a *ni*-phrase becomes possible. This fact, together with the discussion above, leads us to speculate that a *ni*-phrase in the GBC is in a higher position, where scope interaction between the subject and the *ni*-phrase becomes available.

• Transitive

(126) Dareka-ga daremo-o aisi-te-iru. (*daremo > dareka) someone-Nom everyone-Acc love -Pres 'Someone loves everyone.'

• Ditransitive

(127) a. Simple ditransitive

Dareka-ga daremo-ni hon-o okut-ta. (*daremo > dareka) someone-Nom everyone-ni book-Acc send-Past 'Someone sent everyone a book.'

b. The GBC

Dareka-ga daremo-ni hon-o okut-te-<u>age</u>-ta. (daremo > dareka) someone-Nom everyone-*ni* book-Acc send -Give-Past 'Someone sent everyone_i a book (for the good of him_i).'

Let us turn to sentences which contain a non-ni-marked Benefactive phrase.

(128) Comitative: *to*-marked Benefactive phrase

a. Simple transitive

Dareka-ga daremo-to ason-da. (*daremo > dareka) someone-Nom everyone-with play-Past 'Someone played with everyone.'

b. The GBC

Dareka-ga daremo-to ason-de-<u>yat</u>-ta. (daremo > dareka) someone-Nom everyone-with play -Give-Past 'Someone played with everyone_i. (for the good of him_i)'

(129) Genitive: *no*-marked Benefactive phrase

a. Simple transitive

Dareka-ga daremo-no hikkosi-o tetudat-ta. (*daremo > dareka) someone-Nom everyone-Gen move-Acc help-Past 'Someone helped everyone's move.'

b. The GBC

Dareka-ga daremo-no hikkosi-o tetudat-te-<u>yat</u>-ta. (daremo > dareka) someone-Nom everyone-Gen move-Acc help-Give-Past 'Someone helped everyone_i's move (for the good of him_i).'

The sentences in (128b) and (129b) show that even though the Benefactive phrase *daremo* 'everyone' is not marked with *ni*, it may cause scope interaction with the subject just as in (127b). This is explained by our proposal in (96) that a Benefactive argument which is not marked by *ni* in the GBC is raised to Appl without phonological materials.

Interestingly, scope rigidity is preserved in the GBC in (130b), in contrast with (129b):

(130) a. Simple transitive

Dareka-ga daremo-no hon-o kat-ta. (*daremo > dareka) someone-Nom everyone-Gen book-Acc buy-Past 'Someone bought everyone's book.'

b. The GBC

Dareka-ga daremo-no hon-o kat-te-<u>yat</u>-ta. (*daremo > dareka) someone-Nom everyone-Gen book-Acc buy-Give-Past 'Someone bought everyone's book (for the good of a certain person).'

We have observed that a Benefactive phrase XP can be extracted from a larger nominal [XP's [YP hikkosi]] 'XP's move' in the case of (129b). The extractability of XP seems to be dependent on the head noun YP (cf. Kikuchi 1994). If the head noun is a Sino-Japanese nominal, or an "event nominal" in Grimshaw's (1990) terms, and assumed to have argument structure (Kageyama 1977, Grimshaw and Mester 1988), then the extraction is allowed. For example, in (129), *daremo* is an argument of *hikkosi* 'move.' However, if the head noun is a "simple nominal" in Grimshaw's

terms, such as hon 'book' or tukue 'desk,' just denoting an object, then the extraction of the Genitive phrase is prohibited. Hence, *daremo* 'everyone' in (130b) may not move and the inverse scope fails (See also the discussion in Section 8.3 in Chapter 2). Also, in (130b), interpretation of a beneficiary is vague. An individual who benefits from the event should be presupposed or given by a context, or the *no-tame-ni* 'for the good of' Benefactive phrase is required to specify the beneficiary, which is an adverbial phrase and available as "anywhere Benefactive" irrespective of verb types, as discussed in Section 5.1.2. The fact that the interpretations of scope and beneficiary are influenced by the extractability of the DP, which depends on the head noun, suggests that the Benefactive phrase is truly raised from the larger nominal when it is allowed.¹⁹

5.3.5 What undergoes raising?

Before concluding the discussion of Benefactive raising, properties of DPs that may undergo raising should be discussed. First, their landing site is a position which establishes a local relationship with Appl head. Second, this movement is not for Case reason, but for thematic reason: to be assigned an "applied" θ -role, such as Benefactive/Malefactive.²⁰ That is to say, Case may be dealt with by Agree at a distance, but θ -role cannot; it sticks to the local relationship with a head, assuming that thematic interpretation is configurationally obtained at the C-I interface.²¹

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¹⁹ This argument can also be applied to the previous diagnostics: in indeterminate Benefactive binding, sentence (i) below, where the simple nominal *pen* 'pen' is involved, is worse than (109c); in pronoun binding, sentence (ii), where the simple nominal *hon* 'book' is involved, is more degraded than (123b), though the contrast is not as clear as in (129b) and (130b).

⁽i) ?*Taroo-wa dare-no pen-o kat-te-age-mo si-nakat-ta.

Taroo-Top anyone-Gen pen-Acc buy -Give-Q do-Neg-Past

'Taroo did not buy anyone_i's pen (for the good of him_i).

⁽ii) *John-wa soitu_i-no kyoositu-de dono-gakusei_i-no hon -mo yon-de-yat-ta. John-Top he-Gen classroom-in every-student-Gen book-Q read-Give-Past 'John read every student_i's book in his_i class room (for the good of him_i).

 $^{^{20}}$ Technically, we may be able to assume θ -features as a driving force for movement (Bošković and Takahashi 1998).

²¹ I am grateful to Shigeru Miyagawa for suggesting the operation Agree as one of possibilities for obtaining thematic interpretation.

Third, a DP which does not have a "core" θ -role such as Theme may undergo raising to Appl. We have seen the following DPs undergo thematic raising: (i) Possessor, which is licensed as a relational argument by the head noun (Possessee); (ii) a Genitive phrase, which is licensed as an argument by the event nominal"; (iii) a Comitative DP, which is licensed as an argument by the inherent Case. These arguments are "non-core arguments," which are not directly selected by a verb, but licensed within a nominal phrase. They are not associated with structural Case such as Nominative or Accusative, hence not "deactivated," and may move.²² Therefore, Applicative head may raise these DPs.

We will discuss Pattern 3 in next subsection, and come back to the mechanism of Benefactive raising in Section 5.5.

5.4 Introducing a *ni*-marked Benefactive phrase: Pattern 3

Let us now turn to the final case, Pattern 3. In this Pattern, a *ni*-marked phrase does not appear in the simple ditransitive configuration, but it does appear in the GBC.

• Simple ditransitive

(131) a. ?* Boku-wa <u>Hanako-ni</u> to-o ake-ta.

I-Top Hanako-ni door-Acc open- Past
'I opened the door for Hanako.'

b. * Boku-wa <u>Hanako-ni</u> kutu-o migai-ta.
I-Top Hanako-ni shoes-Acc polish-Past
'I polished the shoes for Hanako.'

-

²² As for Genitive Case in Japanese, the Case marker *no* is inserted afterward by the "*no*-insertion rule" (like the "*of*-insertion rule" in English) when two nominals are adjacent (cf. Murasugi 1991), and therefore does not necessarily prevent a nominal from moving.

• GBC

- (132) a. Boku-wa <u>Hanako-ni</u> to-o ake-te-<u>yat</u>-ta.

 I-Top Hanako-ni door-Acc open -Give-Past

 'I opened the door for (the good of) Hanako.'
 - b. Boku-wa <u>Hanako-ni</u> kutu-o migai-te-<u>age</u>-ta.²³

 I-Top Hanako-*ni* shoes-Acc polish -Give-Past

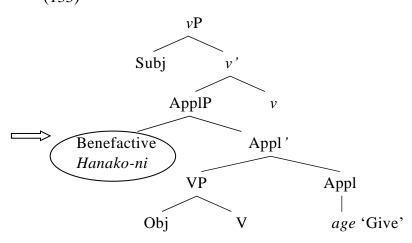
 'I polished the shoes for (the good of) Hanako.

(Shibatani 1994: 44)

The sentences in (131) simply show that this type of verb does not take a ni-marked argument by itself, irrespective of high Goal or low Goal.²⁴ The contrast between (131) and (132) shows that the 'give' verb in the GBC is responsible for introducing the ni-marked Benefactive phrase, which is demonstrated in (133):

• Introducing a Benefactive phrase

(133)



However, not all verbs which inherently fail to take a *ni*-phrase are allowed to have this derivation and become able to take the *ni*-marked Benefactive phrase in the GBC. Observe the sentences in (134) and (135).

²³ In Shibatani's original sentences, *te-yaru* is used instead of *te-ageru*.

²⁴ The adjunct phrase *no-tame-ni* 'for the good of','on behalf of' is "anywhere Benefactive," which is always available and free from any syntactic restrictions. See Section 5.1.2.

- (134) a. Taroo-ga hasit-ta.

 Taroo-Nom run-Past

 'Taroo ran.'
 - b. * Taroo-ga <u>Hanako-ni</u> hasit-ta.

 Taroo-Nom Hanako-*ni* run-Past

 (Lit.) 'Taroo ran Hanako.'
 - c. * Taroo-ga <u>Hanako-ni</u> hasit-te <u>yat</u> -ta.

 Taroo-Nom Hanako-*ni* run Give-Past

 'Taroo ran for the good of Hanako.'
- (135) a. Taroo-ga ninzin-o tabe-ta.

 Taroo-Non carrot-Acc eat-Past

 'Taroo ate a carrot.'
 - b. * Taroo-ga <u>Hanako-ni</u> ninzin-o tabe-ta.
 Taroo-Nom Hanako-ni carrot-Acc eat-Past
 (Lit.) 'Taroo ate Hanako a carrot.'
 - c. * Taroo-ga <u>Hanako-ni</u> ninzin-o tabe-te <u>age</u> -ta.

 Taroo-Nom Hanako-ni carrot-Acc eat Give-Past

 'Taroo ate a carrot for the good of Hanako.'

In (134), the verb *hasir-u* 'run' is involved; in (135), the verb *tabe-ru* 'eat' is included. These verbs cannot have the applied Benefactive phrase *Hanako-ni* in the GBC, as shown in the (c)-sentences. The most salient difference between the well-formed sentences in (132) and the ill-formed sentences in (134c) and (135c) seems to be the function of the *ni*-phrase. In (132a), *Hanako* receives the "path" made by opening

the door; in (132b), *Hanako* receives the polished shoes, such that the *ni*-phrase functions as a sort of "Goal." In contrast, there is nothing to be passed to *Hanako* in (134c) and (135c), in which the pure activity verbs *hasir-u* 'run' and *tabe-ru* 'eat' are involved; the verbs are not Performance verbs, nor do they imply a certain result state or product. As shown in (133), the Benefactive phrase in Pattern 3 is directly introduced by Appl, so it requires Case, and the Dative-marker *ni* is assigned. What is responsible for the Dative *ni* is the head *age-ru* 'Give,' which is originally a donative verb 'give,' or a verb of transfer 'raise,' hence the Dative *ni* is semantically associated with the Goal or Recipient. Therefore, a DP which is not related to Goal or Recipient at all is excluded from Pattern 3, because it is semantically inappropriate with the Dative-marker *ni* assigned by the 'give' verb. Remember that in Pattern 4, Recipient is not involved, but the problem described above does not occur, as shown below:

• Pattern 4

(136) a. Taroo-wa <u>Hanako-to</u> ason-de-<u>yat</u>-ta.

Taroo-Top Hanako-Com play -Give-Past

'Taroo played with Hanako (for the good of her).'

b. Taroo-wa Mary-no hikkosi-o tetudat-te-age-ta.
 Taroo-Top Mary-Gen move-Acc help -Give-Past
 'Taroo helped Mary's move (for the good of her).'

We have discussed that *Hanako* in (136a) and *Mary* in (136b) undergo Benefactive raising. These phrases are already licensed in their base positions, and raised without phonological materials, so they do not have to be assigned the Dative-marker *ni*, hence no problem arises.

Aoyagi (2006) analyzes Japanese Dative ni as "inherent" Case, in that it is

²⁵ As is pointed out by Yoshio Endo (p.c.) and also discussed in a former version of this paper, these characteristics of the verbs involved can be attributed to the properties of ν^* , which is further selected by Appl.

associated with specific θ -roles (See also Sadakane and Koizumi 1995, Matsuoka 2001, 2003, and Miyagawa and Tsujioka 2004). On the other hand, ni is sometimes analyzed as "default Case" or "last resort." We would say that both of these analyses are correct in a sense: ni is assigned to an argument when it is introduced by a specific head, associated with Goal or Recipient; in this sense, ni is "inherent." On the other hand, this Case assignment is conducted only when the argument does not have Case and is not licensed yet. In this sense, ni is "default" or "last resort." These properties of ni-marking result in homophonous ni-phrases in Japanese.

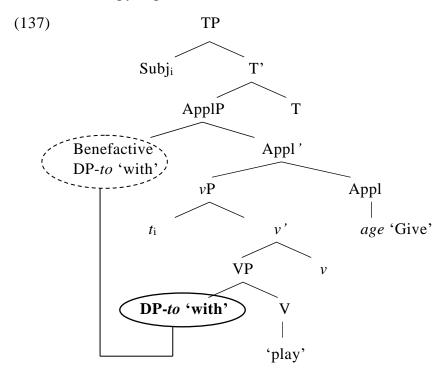
5.5 The mechanism of Benefactive raising

We have argued that non *ni*-marked phrases in Pattern 4 are raised to ApplP. Here arises a question: why is this movement not visible? If we assume the copy theory in the Minimalist framework (Chomsky 1995), the question is not whether the movement is in "overt syntax" or "covert syntax," but which copy in a Chain is pronounced.²⁶

Since the operation "Agree" is advocated (Chomsky 2000, 2001), the operation "Move" has been minimized; staying in the base position seems to be deemed as economical and optimal, to the extent possible. Assuming this, consider agreement for structural Case. This is an operation to value the formal features of the functional head and gain a morphological reflex on the DP, so there is no need to move any features, so far as EPP is not involved; hence Agree at a distance is enough. Next, consider movement for thematic interpretation, such as Benefactive raising. As we have argued, θ -role assignment sticks to a local relationship with the head, so semantic features have to move to the relevant head, Appl. On the other hand, phonological features do not have to move, so far as the DP bears inherent Case or Genitive Case, which both have morphological reflex. Consequently, the lower copy is pronounced, as illustrated in (137).

²⁶ Technically, there is another possibility that phonological features are not copied in the new occurrence of the argument.

• The lower copy is pronounced (in the case of Comitative-marked DP)



Our argument amounts to "pronouncing the lower copy in a Chain to the extent possible." This also seems to be compatible with Quantifier Raising (QR). On the other hand, there is a different concept such as "Minimize Mismatch," proposed by Bobaljik (2002), which regards "privilege the same copy at PF and LF" as desirable. We have to wait for further research to decide which direction is optimal.²⁷

5.6 Comparison with construction grammar

We argued that ditransitives involve Appl heads, to which the Benefactive and the Possessor (high Goal) interpretations are attributed (for the Possessor case, see the review of Miyagawa and Tsujioka 2004 in Section 3.2). The question of how these peculiar interpretations of the indirect object of ditransitives are obtained has been extensively discussed not only in generative grammar but also within other frameworks. These include construction grammar, developed by Fillmore (1985) and Goldberg (1995), among many others. We will briefly compare the present account

²⁷ See also Nunes (2004), who argues that a pronounced copy is not necessarily the topmost copy.

with construction grammar as advocated by Goldberg (1995).

The basic idea of construction grammar is stated by Goldberg as follows:

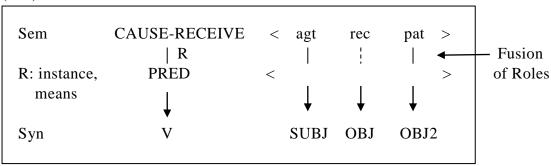
"...basic sentences of English are instances of *constructions* — form-meaning correspondences that exist independently of particular verbs. That is, it is argued that constructions themselves carry meaning, independently of the words in the sentence."

(Goldberg 1995: 1)

According to Goldberg, the double object construction (DOC) is represented as in (138):

• DOC by Goldberg (1995: 50)

(138)

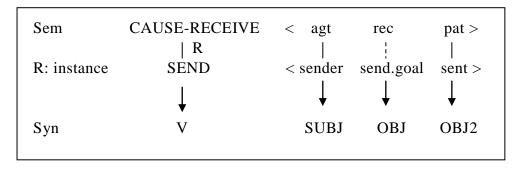


As shown in diagram (138), the semantics (Sem) associated with the construction are represented as 'CAUSE-RECEIVE' and argument roles <agt rec pat >' (agt: Agent; rec: Recipient; pat: Patient). On the other hand, the verb is independently profiled with respect to "participant role array." PRED is a variable filled by a specific verb. The construction designates which roles of the construction are fused with independently existing "participant roles" of the verb, which are now left blank (Compare with (139) below). The recipient role is not obligatorily fused with a verb role, indicated by the dashed line. The type of relation R, namely, the way that the verb is integrated into the construction (e.g., instance or means), is also specified by the construction. At the bottom, how the construction is realized at the syntactic level (Syn) is shown.

Next, let us explore the case in which the verb *send* is integrated into this construction:

• Fused structure: send

(139)



(Goldberg ibid. 55)

We have also discussed two constructions, where two internal arguments appear:

(140) a. John sent a package to Mary. / John sent a package to the border.

b. John sent Mary a package. / *John sent the border a package.

Sentence (140a) is the Dative Construction (DC), whereas (140b) is the Double Object Construction (DOC). It has been observed that the *to*-Dative phrase in the DC and the first object in the DOC are semantically different (Bresnan 1978, 1982, Larson 1988, Pinker 1989, among many others; Miyagawa and Tsujioka (M&T) 2004 for Japanese): only the latter is interpreted as Recipient/Possessor, and is subject to the animacy restriction. From the view point of construction grammar, this Recipient property of the first object in the DOC is attributed to the construction itself; the construction depicted in (139) imposes such semantics that "send.goal" role must be a "recipient," hence animate.

Construction grammar elegantly accounts for the fact that the same verb may be paired with different semantics depending on the construction (e.g. the DC and the DOC). However, how would it explain the fact that the same construction in form

may lead to distinct semantics? We have reviewed M&T's (2004) argument that the ditransitive construction in Japanese corresponds to either the DOC (involving Possessor) or the DC (involving locative Goal) in English. Further, we have argued that the DOC in English covers the simple ditransitive construction (involving Goal/Possessor) and the GBC (involving Benefactive) in Japanese. Moreover, in Chapter 2, it was discussed that transitive constructions which are identical in form may involve either Agent (i.e. regular transitive) or Affectee (i.e. the PRC). These facts seem to be difficult for construction grammar to deal with, for the theory relies on constructions. On the other hand, we have hypothesized that a functional head, Appl, is involved in syntactic structure, which is responsible for introducing an applied argument. Consequently, the fact that seemingly identical forms are paired with distinct meanings is reducible to the difference in functional heads involved. Goldberg maintains that Possessor or Benefactive readings are pragmatically inferred, or achieved by "metaphorical extension" of the "central sense" of the ditransitive construction as "successful transfer of an object to a recipient." However, as is discussed, the constructions which involve Goal, Recipient/Possessor, and the Benefactive are not arbitrarily but systematically correlated with each other in cross-linguistic perspective. This is explained by assuming that the same Appl head is involved in the relevant constructions, though it may not be phonetically realized in some languages. More importantly, Appl occupies a certain position in hierarchical syntactic structure and introduces an argument, which influences binding and scope interpretation. Thus, Appl substantially exists in syntax; it is not just a result of "inference" or "metaphorical extension."

5.7 Properties of the 'give' verb

The Appl head has both lexical and functional (i.e. thematic and Case-related) properties, and is considered to be a kind of little verb (or, a little verb is a kind of Appl head, as Pylkkänen (2002) advocates, in that it introduces Agent as an applied argument). Case-assigning properties differ depending on the head, as shown in

(141).

• Lexical and functional properties of heads

T
$$-\theta$$
 +Case (Nom)

 v^* $+\theta$ +Case (Acc)

 v $-\theta$ -Case

 v (Appl) $+\theta$ $\begin{cases} +Case (Dat) \\ -Case \end{cases}$

D $-\theta$ +Case (Gen)

We have examined an Appl head which is realized as 'give.' It seems that Japanese has many varieties of little verb, which is also argued in a series of works by Hasegawa (2001, 2004a, 2004b). Aoyagi (2006) points out that the verb (rar)e 'can' takes a complement clause, assigns Experiencer θ -role, and is associated with Dative Case ni, hence it is a kind of little verb, bearing both lexical and functional properties. Saito (2001) and Murasugi and Hashimoto (2005) argue that the causative verb (s)ase 'make' also takes a clausal complement and assigns Causee θ -role, which is associated with Dative Case ni. Saito discusses how the embedded subject moves to the projection of the causative verb (s)ase to receive Causee θ -role. To clarify properties and the possible range of varieties of little verbs will lead to understanding of how functional and lexical categories are folded, in other words, how the interface between the syntax and the conceptual system should be. We will explore this issue by examining the derivation of the 'give' verb.

So far, various properties of the GBC have been investigated, where the 'give' verb age-ru/yar-u is involved. As was mentioned in Section 5.1.1, the 'give' verb is originally a donative verb, corresponding to the English verb give. In Section 5.4, it was discussed that the characteristic of the original donative verb or the verb of transfer to mark Goal DP with ni is carried over to the 'give' verb in the GBC, and causes semantic conflict if ni is assigned to a DP which is not at all related to Goal.

In this vein, we will consider the derivation of the 'give' verb.

The verb *age-ru* has another use as a verb of transfer/putting, 'raise,' which takes a *ni*-phrase as locative Goal.

- Age-ru as a Verb of transfer/putting
- (142) Taroo-ga tana-ni hon-o age-ta.

 Taroo-Nom shelf-ni book-Acc raise-Past

 (Lit.) 'Taroo raised a book to the shelf.'

The verb age-ru is used as a donative verb 'give.'

- Age-ru as a donative verb
- (143) Taroo-ga Hanako-ni hon-o age-ta.

 Taroo-Nom Hanako-ni book-Acc give-Past

 'Taroo gave Hanako a book.'

In (142), *tana* 'shelf' is a locative Goal; on the other hand, in (143), *Hanako* is not a mere Goal of the *book*, but it is interpreted as Recipient or the Benefactive. In terms of syntax, the status of the *ni*-phrase is also changed. As is discussed in Section 3, following Miyagawa (1987) and Miyagawa and Tsujioka (2004), the Goal in (142) is PP, but the Goal in (143) is DP, and only the latter allows floating NQ.

- The syntactic status: PP vs. DP
- (144) a. * Taroo-ga tana-ni 3-tu hon-o age-ta.

 Taroo-Nom shelf-ni 3-Cl book-Acc raise-Past

 (Lit.) 'Taroo raised books to three shelves.'
 - b. Taroo-ga gakusei-ni 3-nin hon-o age-ta.
 Taroo-Nom student-ni 3-Cl book-Acc give-Past
 'Taroo gave books to three students.'

Moreover, the verb of transfer *age-ru* can be passivised, as shown in (145a), but the donative verb *age-ru* cannot, as in (145b).

• Passivization

- (145) a. Hon-ga Tana-ni age -<u>rare</u> -ta.

 book-Nom shelf-ni raise-Pass-Past

 (Lit.) 'The book was raised on the shelf.'
 - b. * Hon-ga Hanako-ni age -<u>rare</u> -ta.
 book-Nom Hanako-ni give-Pass-Past
 'A book was given to Hanako.'

The ill-formedness of (145b) does not arise from semantics. The verb <u>atae-ru</u>, which has logically the same meaning 'give' as the verb <u>age-ru</u>, can be passivised.

• Another donative verb *atae-ru*

- (146) a. Taroo-ga Hanako-ni hon-o <u>atae</u>-ta.

 Taroo-Nom Hanako-ni book-Acc give-Past

 'Taroo gave Hanako a book.'
 - b. Hon-ga Hanako-ni <u>atae</u> -<u>rare</u>- ta.
 book-Nom Hanako-ni give-Pass-Past
 'A book was given to Hanako.'

Other Verbs of transfer such as *okur-u* 'send' or *watas-u* 'pass,' which involve a *ni*-marked Goal, may be passivised as well:

- (147) a. Taroo-ga Hanako-ni hon-o okut-ta.

 Taroo-Nom Hanako-ni book-Acc send-Past

 'Taroo sent Hanako a book.'
 - b. Hon-ga Hanako-ni oku -<u>rare</u> -ta.
 book-Nom Hanako-ni send-Pass-Past
 'A book was sent to Hanako.'
- (148) a. Taroo-ga Hanako-ni hon-o watasi-ta.

 Taroo-Nom Hanako-ni book-Acc pass-Past

 'Taroo passed Hanako a book.'
 - b. Hon-ga Hanako-ni watas -are -ta.
 book-Nom Hanako-ni pass-Pass-Past
 'A book was passed to Hanako.'

Thus, the donative verb *age-ru* 'give' has a different status that it cannot be passivised. We conjecture that the verb has already Merged to the Appl head, which might be referred to as Appl_{Ben(efactive)}, as depicted in (150). The derived head Appl_{Ben} is involved in donative sentences such as (143), the derivation for which is demonstrated in (151).

• Verbs of transfer

(149)

VP

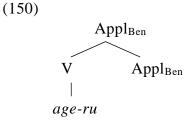
Goal (Locative) V'

-ni

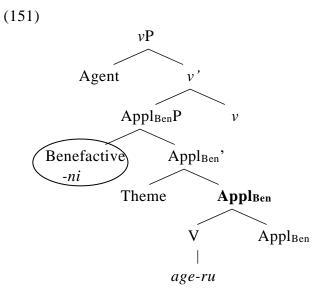
Theme V

|
age-ru 'raise'
okur-u 'send' etc.

• The derivation of the head of the donative verb 'give'

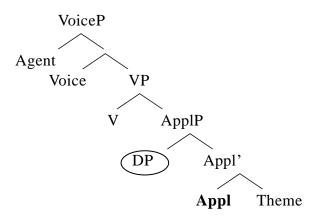


• The derivation for the 'give' donative sentence



Note that the derivation in (151) is basically the same as Pylkkänen's (2002) derivation proposed for English-type ditransitives, which is reviewed in Section 2.2, and reproduced below:

• Pylkkänen's proposal: Low Applicative (e.g. English) (152)



Pylkkänen (2002: 19 with relevant notation)

The circled DP is Benefactive, corresponding to a Japanese *ni*-phrase in (151). The derivation (152) correctly excludes English sentences such as *John ran Mary*, which is also ungrammatical in Japanese.

Next, consider the GBC in Japanese. Like the donative sentence in (145b), the GBC sentence in (153) also fails to undergo passivization.

- (153) a. Taroo-ga Hanako-ni hon-o okut-te-age -ta.

 Taroo-Nom Hanako-ni book-Acc send -Give -Past

 'Taroo sent Hanako a book (for the good of her).'
 - b. * Hanako-ga hon-o okut-te-age -<u>rare</u> -ta.
 Hanako-Nom book-Acc send -Give -Pass -Past
 'Hanako was sent a book (for the good of her).'

Similarly, the *ni*-phrase in the GBC cannot be passivised, whereas the *ni*-phrase in the simple ditransitive can, which is taken as support for differentiating the *ni*-phrase in the GBC from the *ni*-phrase in simple ditransitives.

• Simple ditransitive

- (154) a. Taroo-ga <u>Hanako-ni</u> hon-o okut -ta.

 Taroo-Nom Hanako-ni book-Acc send-Past

 'Taroo sent Hanako a book.'
 - b. <u>Hanako-ga</u> hon-o oku -rare -ta.
 Hanako-Nom book-Acc send- Pass -Past
 'Hanako was sent a book.'

• GBC

- (155) a. Taroo-ga <u>Hanako-ni</u> hon-o okut-te -age -ta.

 Taroo-Nom Hanako-ni book-Acc send -Give -Past

 'Taroo sent Hanako a book (for the good of her).'
 - b. * <u>Hanako-ga</u> hon-o okut-te -age -rare -ta.
 Hanako-Nom book-Acc send -Give -Pass -Past
 'Hanako was sent a book (for the good of herself).'

Based on these data, the following parallelism is found between the donative sentence in (143) and the GBC.

- The parallel behaviors of the donative sentence and the GBC
- (156) a. The 'give' verb age-ru is involved.
 - b. The status of the *ni*-phrase is DP.
 - c. The θ -role of the *ni*-phrase is the Benefactive.
 - d. The sentence cannot be passivised (though simple ditransitive sentences can).

Based on (156), we conjecture that the head Appl_{Ben} is included in both the donative sentence and the GBC. The Benefactive verb age-ru is derived by Merging age-ru 'raise,' a verb of transfer, to an Appl head Appl_{Ben}. The carried-over property of the ni-phrase, that it should be assigned to a Goal-related phrase, arises from this derivation. Although age-ru is used as a donative verb such as English give, forming a simple ditransitive sentence on the surface, it is not a pure "lexical" verb such as okur-u 'send' or watas-u 'pass,' which denote change of location/possession and take a Goal phrase. The verb age-ru has already Merged to Appl and takes a Benefactive phrase, and is not passivised. In contrast, the verb atae-ru 'give' is a pure "lexical" verb denoting change of possession and takes a (high) Goal, which can be passivized.

5.8 Benefactive constructions in Alamblak: Iwamoto (1999)

In this subsection, we will review Iwamoto's (1999a, 1999b) observations of Benefactive constructions in Alamblak (Papuan, Papua New Guinea). Like Japanese, Alamblak exploits the 'give' verb in both Benefactive and Malefactive constructions. In Alamblak, this verb is realized as *he*, as shown in the following examples:

- (157) a. Niak-r Mnginda-t bupa-m tasak-<u>he</u>-më-r-(t).

 Niak-3SM Mnginda-3SF water-3Pl fetch-<u>Give</u>-RPST-3SM-3SF

 'Niak fetched water and gave it to Mnginda.'

 'Niak fetched water for (the good of) Mnginda.'
 - b. * Niak-rMnginda-tbupa-mtasak-më-r-(t).Niak-3SMMnginda-3SFwater-3Plfetch-RPST-3SM-3SF
- (158) a. Kmbroming-r met-t-hu fëh-r tufnah-<u>he</u>- më-r-*(t).

 Kmbroming-3SM woman-3SF-Gen pig-3SM shoot-<u>Give</u>-PRST-3SM-3SF

 'Kmbroming shot the woman's pig affecting her.'
 - b. * Kmbroming-r met-t-hu fëh-r tufnah-më-r- (*t).

 Kmbroming-3SM woman-3SF-Gen pig-3SM shoot-PRST-3SM-3SF

 'Kmbroming shot the woman's pig.'

(Iwamoto 1999b: 249)

In Alamblak, the first inflectional element on a verb (i.e. the pronominal suffix) shows agreement with the surface subject. We will focus on the second suffix on a verb.

First, Iwamoto (1999b) describes that the absence of the morpheme *he* 'give' in (157b) leads the sentence to become ungrammatical in comparison with (157a). This fact shows that Benefactive argument *Mnginda* is licensed by the morpheme *he* 'give,' but not by the verb stem *tasak* 'fetch.' In Japanese, we also observed that a

ni-marked Benefactive phrase is not licensed by the lexical verb stem, but it is readily introduced by the 'give' verb. Consider the case of a corresponding Japanese verb, *kum-u* 'fetch.'

- (159) a. Taroo-ga Hanako-ni mizu-o kun-de-<u>yat</u>-ta.

 Taroo-Nom Hanako-ni water-Acc fetch -<u>Give</u>-Past

 (Lit.) 'Taroo fetched water for (the good of) Hanako."
 - b. ?* Taroo-ga Hanako-ni mizu-o kun-da.
 Taroo-Nom Hanako-ni water-Acc fetch-Past
 (Lit.) 'Taroo fetched water to Hanako."

The *ni*-phrase in (159b) is not acceptable. It might not sound completely ill-formed, probably because the entity which is transferred, in this case, water, is involved, allowing the *ni*-phrase to be interpreted as a Goal PP. This is an example of what we classified as Pattern 2 in Section 5.2.2: Verbs of creation, transformation, and preparation take this pattern. The verb *tasak* 'fetch' in Alamblak seems semantically similar to this class of verbs.

What is interesting is the pair in (158), repeated as (160) below for the reader's convenience:

- (160) a. Kmbroming-r met-t-hu fëh-r tufnah-<u>he</u>- më-r-*(t).

 Kmbroming-3SM woman-3SF-Gen pig-3SM shoot-<u>Give</u>-PRST-3SM-3SF

 'Kmbroming shot the woman's pig affecting her.'
 - b. * Kmbroming-r met-t-hu fëh-r tufnah-më-r- (*t).
 Kmbroming-3SM woman-3SF-Gen pig-3SM shoot-PRST-3SM-3SF
 'Kmbroming shot the woman's pig.'

(Iwamoto 1999b: 249)

In the sentences in (160), a Benefactive DP is embedded in a larger DP and marked with Genitive Case, as shown in *met-t-hu fëh-r* 'the woman's pig.' Iwamoto's data demonstrate that the Genitive DP agrees with the 'give' morpheme, as shown in (160a), but it cannot agree with the lexical verb stem, 'shoot,' as illustrated in (160b). Further, this agreement must be phonologically marked, as indicated in (160a), though it is optional in (157a). These data strongly suggest that the DP *met* 'the woman,' though embedded in a larger nominal, is licensed as an independent argument, namely, the Benefactive, by the 'give' verb *he*. Iwamoto insightfully suggests LF-movement as a possible analysis:

(161) Kmbroming-3SM woman-3SF_i [
$$t_i$$
 pig-3SM] shoot-Give-T

(Iwamoto ibid.: 258 with slight modification)

This is compatible with our invisible raising analysis of the Benefactive argument, which was presented in Section 5.3.

(162) Hanako-wa <u>Taroo-no</u> hikkosi-o tetudat-te-<u>age</u>-ta.

Hanako-Top Taroo-Gen move-Acc help -Give-Past

'Hanako helped Taroo's move (for the good of him).'

We argued that the Genitive DP Taroo in (162) is raised to the projection of the 'give' verb and assigned a Benefactive θ -role by the 'give' verb. An important fact is witnessed here: two languages, Japanese and Alamblak, which belong to different language families, share a similar system which exploits a 'give' verb in both Benefactive and Malefactive constructions, and that the system seems to adopt a similar operation such as covert "Benefactive raising." This fact suggests that the functional head, Appl, realized as the 'give' verb, is a property of natural language.²⁸

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²⁸ One difference in the Benefactive argument between the Alamblak in (160a) and the Japanese in (162) is that both the Genitive marker and the agreement marker (i.e. pronominal

5.9 **Comparison with the PRC**

Before closing this chapter, we would like to mention a difference between the GBC and the PRC. In the PRC, Possessor, which moves to the projection of Appl and is assigned a Benefactive/Malefactive θ -role, finally moves to the Spec of TP and bears Nominative Case. This is attributed to a strong requirement imposed on T to pronounce a phrase in its Spec, which may be due to EPP (Miyagawa 2001, 2003, among others), or the restriction that at least one Nominative ga-marked phrase is required in Japanese (Takezawa 1987). Because of these requirements, the copy in Spec of TP must be pronounced in the PRC rather than a lower copy. On the other hand, in the GBC, the Spec of TP is occupied by Agent, and the Benefactive/ Malefactive argument does not have to be raised to the TP.

<u>6 Conclusion</u> and Remaining Issues

Based on previous studies on ditransitives such as Larson (1988), Pylkkänen (2002), and Miyagawa and Tsujioka (2004), we have argued that there is another Appl in Japanese, which is otherwise confused with the Appl to form simple ditransitives. What causes this confusion is homophonous ni-phrases in many uses. We have clarified the status of these ni-phrases and extended the classification to other languages. In doing so, certain significant results have come to light. First, in addition to Japanese simple ditransitives being ambiguous between the DC and the DOC in English (M&T 2004), the English DOC is ambiguous between simple ditransitives and the GBC in Japanese. Second, we have proposed that a Benefactive phrase undergoes raising, which seems to be also the case in Alamblak (Iwamoto This raising is not visible in Japanese, but detectable through diagnostic 1999a, b). tests such as indeterminate binding, pronoun binding, and scope interaction.

suffix) are pronounced in Alamblak, while only the Genitive marker is pronounced in Japanese. This is probably because the Case system in Japanese and the suffix system in Alamblak have different properties, allowing for more than one agreement marker in Alamblak.

Invisible movement is accounted for by assuming that a lower copy is pronounced in a Chain, which is considered to be an economical and optimal solution in this case.

We have also discussed how the "lexical" and "functional" properties are folded in one predicate. The former is related to thematic interpretation, and the latter is related to structure-building and Case-related properties. We proposed the "generalized little-verb hypothesis" in Chapter 1:

• The generalized little-verb hypothesis

Properties of little verbs restrict legitimate derivation in a language by interacting with each other, with a lower head V, or with a higher head T.

In Chapter 2, we investigated the PRC and other non-Agentive constructions, and argued how little verbs, including v^* , v, Cause, and Appl, function through interacting with each other. In this chapter, we have examined the GBC and other ditransitive constructions, focusing on the head-head relationship between Appl and a lower head, V. The properties of functional Appl and those of lexical V are closely connected and correlated to each other. For example, we have observed that the way that Appl introduces a Benefactive argument and marks it with the Dative -ni is closely related to the verb-type. Although ni-marking has been extensively investigated in Japanese linguistics, it seems that not many studies account for data from the perspective of a systematic relationship between V and a higher functional head, Appl.

We have further discussed that the 'give' verb *age-ru* has a "lexical" use and an "auxiliary" use, or in other words, the lexical verb has undergone "grammaticalization." We postulated that this phenomenon is brought on by Merge of the verb to Appl head. If this is correct, then different properties of verbs are reducible to the way that verbal heads Merge. This idea will be further developed in the next chapter by examining V-V compounds in Japanese. In Japanese, two (or more) verbs are easily combined and form a predicate as below:

- (163) a. naguri-taos-u
 hit fell
 'knock down'
 - b. Taroo-ga Ziroo-o <u>naguri -taosi</u> -ta.
 Taroo-Nom Ziroo-Acc hit -fell -Past
 'Taroo knocked down Ziroo.'
- (164) a. *kaki -oe -ru* write finish 'finish writing'
 - b. Hanako-ga ronbun-o kaki -oe -ta.
 Hanako-Nom paper-Acc write -finish -Past
 'Hanako finished writing a paper.'
- (165) a. oti -kake-ru
 fall almost/be going to
 'almost fall' 'be going to fall'
 - b. Ringo-ga oti -<u>kake</u> -ta.
 apple-Nom fall -almost -Past
 'The apple almost fell.'
- (166) a. kai-te-age-ru
 draw give
 'draw (a picture) for the good of someone'
 - b. Taroo-ga Hanako-ni e-o kai -te -age -ta
 Taroo-Nom Hanako-Dat picture-Acc draw -te -give -Past
 'Taroo drew a picture for (the good of) Hanako.'

Note that (166) is the GBC, which we have investigated in this chapter. We will treat (163)-(166) in a unified way and illuminate their inner structures, namely, how verbal

heads Merge, which designates properties of the V-V compounds. We will show that not only lexical verbs, but also functional heads such as little verbs v/v^* , Appl, and further, T build up one predicate. Thus, we will propose the generalized layered-*verb* hypothesis, and argue that argument structure is not static or fixed information encoded in a verb, but dynamically derived and built up, as has been discussed in the Minimalist framework since Hale and Keyser (1993).

Finally, we will be in a position to ask more an abstract and conceptual question: what counts as one SINGLE event in terms of syntax, when more than one verb head is involved? This is one of the main issues we will investigate in the next chapter.