

Control and *Te*-Clauses in Japanese*

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1. Introduction

In the past literature in the principles-and-parameters framework, such English sentences as in (1) and (2) have been identified as an "object control" and a "subject control" construction, respectively:

(1) John₁ persuaded Mary₂ [PRO₂ to leave]

(2) John₁ promised Mary₂ [PRO₁ to leave]

In (1), the embedded null subject *PRO* is taken as referring to the person denoted by *Mary*, while in (2) the covert subject is understood to refer to the matrix subject *John*. In other words, the embedded null subject is controlled by the object NP in (1), and by the subject NP in (2).

It seems rather difficult to identify what are the control constructions in Japanese, but the following sentences appear to be promising candidates.

(3) John-ga Mary-ni kodomo-o home-te moratta
-NOM -DAT child-ACC praise-TE received
'John had his child praised by Mary'

(4) John-ga Mary-ni kodomo-o home-te ageta
-NOM -DAT child-ACC praise-TE gave
'John praised her child for Mary'

Each sentence involves two verbs: *homer* 'praise' on the one hand, and *moraw* 'receive' and *ager* 'give' on the other. Despite the similarity in the surface order of constituents, there is a difference between (3) and (4) with respect to who is the semantic subject of the verb *homer*. In (3), the dative NP *Mary* is taken semantically as the subject of *homer*, while in (4) the matrix subject *John* is understood as the semantic subject of the internal verb.

In this paper we argue that the understood subject in (3) and (4) realizes syntactically as a null NP *PRO*, characterizing the examples in (3) and (4) as an object control and a subject control construction, respectively.¹ This is done by showing that the NP-*ni* in (3) and (4) is a matrix element, and that the string *kodomo-o home-te* constitutes a full clause, on a par with the English counterparts in (1) and (2). Then we explore the way in which we can optimally account for the choice of the controller of the null subject in (3) and (4) in terms of the Minimal Distance Principle (henceforth MDP), referring to the different syntactic properties of the matrix dative NP in each case.

2. The *Te-moraw* and the *Te-ager* Constructions

The idea that the *te-moraw/ager* constructions involve sentence complementation is not a new one. Nakau (1973), Shibatani (1978), and Tonoike (1979) attempted to derive the surface strings in (3) and (4) by the application of Equi-NP Deletion, which deletes the embedded subject that is coreferential with one of the matrix NPs:

- (5) DS: John-ga Mary₁-ni [Mary₁-ga kodomo-o home-te]
 moratta
 Equi-NP Deletion
 SS: John-ga Mary₁-ni [kodomo-o home-te] moratta

- (6) DS: John₁-ga Mary-ni [John₁-ga kodomo-o home-te]
 ageta
 Equi-NP Deletion

SS: John₁-ga Mary-ni [kodomo-o home-te] ageta

In terms of the principles-and-parameters approach, the resulting SS in (5) and (6) are arguably given as follows:

(7) John-ga Hanako₁-ni [PRO₁ kodomo-o home-te] moratta

(8) Taroo₁-ga Hanako-ni [PRO₁ kodomo-o home-te] ageta

In the following subsections, we give pieces of evidence for the biclausality of the *te-moraw/ager* constructions, arguing that NP-*ni* in each construction is a matrix element.

2.1 Biclausality

2.1.1 Local Anaphors

The first piece of evidence is provided by the fact that the sequence VP-*te* constitutes an opaque domain for a local anaphor *zibunzisin* ('oneself'). The behavior of the local anaphor has been analyzed by several linguists (Ueda (1984), Katada (1991), etc.). One notable characteristic of *zibunzisin* is that it conforms to the Condition A of the Binding Theory (Chomsky (1981)), so that its antecedent cannot be outside the immediate clause which it is contained in:

(9) The Condition A: An anaphor must be bound in its governing category.

(10) Taroo₁-ga [Ziroo₂-ga zibunzisin_{1/2}-no-heya-de
Taro -NOM Ziro -NOM oneself-GEN-room-LOC
piano-o hiita-to] itta
piano-ACC played-COMP said
'Taro said that Ziro played the piano in the room of
himself'

In (10), the local anaphor cannot take the matrix subject *Taroo* as its antecedent, while the embedded subject *Ziroo* is the antecedent of *zibunzisin*. With this in mind, consider:

- (11) *Taroo*₁-ga *Hanako*₂-ni *zibunzisin*_{*1/2}-no-heya-de
 Taro -NOM Hanako-DAT oneself-GEN-room-LOC
 piano-o hii-te moratta
 piano-ACC play-TE received
 'Taro asked Hanako to play the piano in her room'

As is observed, the local anaphor cannot take the matrix subject as its antecedent. This strongly suggests that sentence (11) involves an embedded clause which makes an opaque domain for the local anaphor.

The subject-oriented character of *zibunzisin* also confirms the point at hand. As is shown in (12), where there is no embedded clause, a nonsubject NP-*ni* cannot be the antecedent of *zibunzisin*:

- (12) *Taroo*₁-ga *Hanako*₂-ni *zibunzisin*_{1/*2}-no-heya-de
 Taro -NOM Hanako-DAT oneself-GEN-room-LOC
 kokuhakusita
 confessed
 'Taro confessed to Hanako in the room of himself'

If there were no syntactic embedded null subject in (11), the dative NP *Hanako-ni* would have to be 'skipped over' in the choice of the antecedent of *zibunzisin* so that the subject *Taroo* would be wrongly chosen as the antecedent, just as in (12). Therefore, the structure of (11) can be considered as follows:

- (13) *Taroo*₁-ga *Hanako*₂-ni [*PRO*₂ *zibunzisin*_{*1/2}-no-heya-de
 piano-o hii-te] moratt

In the case of the *te-ager* construction, however, the use of *zibunzisin* would not help us to prove our point. We cannot tell from

the following example whether the embedded null subject *PRO* or the matrix overt subject serves as the antecedent of the local anaphor.

- (14) Taroo₁-ga Hanako₂-ni zibunzisin_{1/*2}-no-heya-de
 Taro -NOM Hanako-DAT oneself-GEN-room-LOC
 piano-o hii-te ageta
 piano-ACC play-TE gave
 'Taro played the piano for Hanako in his (*her) room'

However, Japanese has another kind of local anaphor, *karezisin* (he-self) and *kanozyozisin* (she-self), which will serve to prove the point.² As shown in (15), *kanozyozisin* does not have the subject-oriented nature that *zibunzisin* has:³

- (15) Taroo₁-ga Hanako₂-ni kanozyozisin₂-no-syasin-o miseta
 Taro -NOM Hanako-DAT she-self-GEN-photo-ACC showed
 'Taro showed Hanako a picture of herself'

Kanozyozisin (*karezisin*) is subject to the same locality constraint as *zibunzisin*.

- (16) *Taroo₁-ga Hanako₂-ni [Ziroo-ga kanozyozisin₂-no-
 -NOM -DAT -NOM she-self-GEN-
 hahaoya-o mita to] itta
 mother-ACC saw COMP said
 '*Taro told Hanako₂ that Ziro saw the mother of herself₂'

The possible antecedent *Hanako* lies outside the clause that contains the local anaphor so that it cannot be the antecedent.

With this in mind, consider:

- (17) Taroo₁-ga Hanako₂-ni *kanozyozisin₂-no/kanozyo₂-no-
 -NOM -DAT she-self-GEN/she-GEN
 syasin-o tot-te ageta
 photo-ACC take-TE gave

'Lit. Taro took a photo of herself for Hanako'

The local anaphor is not able to take *Hanako* as its antecedent while the pronominal *kanozyo* can. This strongly suggests that the structure of (17) is as follows:

- (18) *Taroo₁-ga Hanako₂-ni [_{CP} PRO₁ kanozyozisin₂-no-syasin-o
tot-te] ageta

The local anaphor cannot take *Hanako* as its antecedent since *Hanako* is outside the governing category of *kanozyozisin*.⁴

2.1.2 Relative Scope

The second piece of evidence is based on the observation of relative scope of quantified NPs (henceforth, QPs). It is generally observed in the literature (Kuno (1973), Hoji (1985), etc.) that in a simplex sentence, the object QP cannot take wide scope over the subject QP with the order QP-ga QP-o, but that scope ambiguity arises if the surface order is reversed:⁵

- (19) a. dareka-ga daremo-o hihansita (QP-ga>QP-o)
someone-NOM everyone-ACC criticized
'Someone criticized everyone'
b. daremo-o_i dareka-ga t_i hihansita (ambiguous)
everyone-ACC someone-NOM criticized
'Lit. Everyone, someone criticized'

However, if the two QPs belong to different clauses, the scope ambiguity does not arise even with the reversed order of the QPs.⁶

- (20) a. dareka-ga [Taroo-ga daremo-ni atta-to]
someone-NOM Taro-NOM everyone-DAT met-COMP
omotteiru
think (QP-ga>QP-ni)

- 'Someone thinks that Taro met everyone'
- b. daremo-ni₁ dareka-ga [Taroo-ga t₁ atta-to] omotteiru
(QP-ga>QP-ni)

Just the same is true of the *te-moraw* and the *te-ager* constructions, as shown in the following examples:

- (21) a. dareka-ga Taroo-ni [daremo-o sasotte] moratta
someone-NOM Taro -DAT everyone-ACC invite received
'Someone had Taro invite everyone' (QP-ga>QP-o)
b. daremo-o₁ dareka-ga Taroo-ni [t₁ sasotte] moratta
(QP-ga>QP-o)
- (22) a. dareka-ga Taroo-ni [subete-no-kodomo-o homete]
someone-NOM Taro-DAT all-GEN-child-ACC praise-TE
ageta
gave (QP-ga>QP-o)
'Someone praised all his children for Taro'
b. subete-no-kodomo-o₁ dareka-ga Taroo-ni [t₁ homete]
ageta (QP-ga>QP-o)

Whatever restrictions may hold on the scope order of two QPs in different clauses, the limited interpretive possibility conforms to the same generalization drawn from the observation in (20). Thus, the scope facts also suggest that the *te-moraw/ager* constructions involve complement clauses.

2.2 NP-ni as a Matrix Element

Here we argue that NP-*ni*, such as *musuko-ni* in (23a) and *hahaoya-ni* in (23b), is in the matrix clause in the *te-moraw* and the *te-ager* constructions:

- (23) a. Taroo-ga musuko-ni [PRO kata-o mom-de]
Taro -NOM son-DAT shoulder-ACC massage-TE

moratta

received

'Taro had his shoulders massaged by his son.'

- b. Taroo-ga hahaoya-ni [PRO kata-o mom-de]
 Taro -NOM mother-DAT shoulder-ACC massage-TE
 ageta
 gave
 'Taro massaged the shoulders for his mother.'

2.2.1 Comparative *Yori*

McCawley and Momoi (1986) observe that what is accompanied by comparative *yori* 'than' must be a constituent. As is shown in (24), both *Ziroo* and *kaeru* 'frog' are constituents and both sentences are acceptable. On the other hand, (25) is ill-formed since the sequence *Ziroo-ga hebi* does not form a constituent:

- (24) a. Taroo-wa Ziroo yori hebi-ga kowai
 Taro -TOP Ziroo-than snake-NOM afraid
 'Taro is more afraid than Ziroo of snakes'
 b. Taroo-wa kaeru yori hebi-ga kowai
 Taro -TOP frog-than snake-NOM afraid
 'Taro is more afraid of snakes than frogs'
 (McCawley and Momoi (1986))

- (25) *Taroo-wa kaeru-ga Ziroo-ga hebi yori kowai
 Taro -TOP frog-NOM Ziroo -NOM snake-than afraid
 'Taro is more afraid of frogs than Ziroo is of snakes'
 (ibid.)

With this in mind, consider:⁷

- (26) a. Taroo-ga Hanako-ni [otooto-o motenasu] yori
 -NOM -DAT brother-ACC entertain than
 oyaji-no sake-no aite-o si-te moratta

father-GEN drinking-GEN company-ACC do-TE received
 'Taro received the favor of Hanako drinking with his
 father rather than entertaining his brother'

- b. Taroo-ga Hanako-ni [e-o kaku] yori
 Taro -NOM Hanako-DAT picture-ACC draw than
 shasin-o tot-te moratta
 photo-ACC take-TE received
 'Taro received the favor of Hanako taking photos rather
 than drawing pictures'

- (27) a. *Taroo-ga [Hanako-ni] [otooto-o motenasu]
 Taro -NOM Hanako-DAT brother-ACC entertain
 yori Mary-ni oyaji-no sake-no aite-o
 than Mary-DAT father-GEN drinking-GEN company-ACC
 si-te moratta
 do-TE received

'Taro received the favor of Mary drinking with his father
 rather than Hanako entertaining his brother'

- b. *Taroo-ga [Hanako-ni] [e-o kaku] yori
 Taro -NOM Hanako-DAT picture-ACC draw than
 Mary-ni syasin-o tot-te moratta
 Mary-DAT photo-ACC take-TE received
 'Taro received the favor of Mary taking pictures rather
 than Hanako drawing pictures'

If the comparative *yori* combines with *otooto-o motenas* or *e-o kaku* in the *te-moraw* constructions such as (26), the sentence is acceptable. However, NP-*ni* cannot be attached to *yori*, as shown in (27). Just the same is true of the *te-ager* construction:

- (28) a. Taroo-ga Hanako-ni [kata-o momu] yori
 Taro -NOM Hanako-DAT shoulder-ACC massage than
 asi-o massaazisi-te ageta
 leg-ACC massage-TE gave
 'Taro massaged Hanako's legs rather than massage her'

- shoulder'
- b. *Taroo-ga [Hanako-ni] [kata-o momu] yori
 Taro -NOM Hanako-DAT shoulder-ACC massage than
 Mary-ni asi-o massaazisi-te ageta
 Mary-DAT leg-ACC massage-TE gave
 'Taro massaged Mary's legs rather than
 massage the shoulder for Hanako'

These facts suggest that NP-*ni* lies in the matrix clause.⁸

The following sentence might be a counterexample to our claim that the relevant NP-*ni* is a matrix element. Consider:

- (29) Hahaoya-wa kodomo-ni nigirizusi-o tukuru
 mother-TOP child-DAT hand-rolled sushi-ACC make
 yori, otto-ni osizusi-o tukut-te
 than, husband-DAT hand-pushed sushi-ACC make-TE
 ageta
 gave
 'Lit. The mother made hand-rolled sushi for her son rather
 than made hand-pushed sushi for her husband.'

If the NP *kodomo-ni* lies in the matrix clause, as we have claimed, the sentence (29) should be ungrammatical since the string *kodomo-ni nigirizusi-o tukuru* would not be a constituent. However, as Shibatani (1978) shows, *kodomo-ni* in (29) can be taken as being embedded in the complement clause since the verb *tukur* can take a dative NP as well as an accusative NP, as follows:

- (30) Hahaoya-wa kodomo-ni nigirizusi-o tukutta
 mother-TOP child-DAT hand-rolled-sushi-ACC made
 'The mother made hand-rolled sushi for her children.'

If this is so, the sentence (31) may be analyzed to have either the structure in (32a) or the structure in (32b):

- (31) Hahaoya-wa kodomo-ni nigirizusi-o tukut-te
 mother-TOP child-DAT hand-rolled sushi-ACC make-TE
 ageta
 gave
 'The mother made hand-rolled sushi for her child'
 (Shibatani (1978))

- (32) a. Hahaoya-wa [_S kodomo-ni nigirizusi-o tukut-te] ageta
 b. Hahaoya-wa kodomo-ni [_S nigirizusi-o tukut-te] ageta

If (32a) is one of the structures that are assigned to sentence (31), then we can say that the relevant string [*kodomo-ni nigirizusi-o tukuru*] in (29) is actually a constituent.

This option is not available for (28b), since the NP *Mary-ni* cannot be analyzed as being taken by the embedded verb *massaazi-sur* 'massage':

- (33) a. *Taroo-wa Hanako-ni asi-o massaazi-sita
 -TOP -DAT leg-ACC massaged
 'Taro massaged the legs for Hanako.'
 b. *Taroo-wa Hanako-ni kata-o mom-da
 -TOP -DAT shoulder-ACC massaged
 'Taro massaged the shoulders for Hanako.'

2.2.2 Scope Interaction with Neg

Another piece of evidence for our claim that NP-*ni* is a matrix element in the *te-moraw /ager* constructions is provided by the observation of scope interaction of a quantified NP-*ni* and the matrix negative.⁹

Homma (1989, 1991) observes scope interaction in a simplex sentence such as (34) where a QP and the negative appear:

- (34) Taroo-ga daremo-ni tegami-o kaka-na-katta (koto)
 -NOM everyone-DAT letter-ACC write-NOT-PAST (fact)

'(The fact that) Taro did not write a letter to anyone'
(QP-ni>NEG, NEG>QP-ni)

On the other hand, the relevant ambiguity does not arise if the QP is in an embedded clause. Consider:

- (35) a. Taroo-ga [PRO daremo-ni tegami-o okuroo to] (wa)
Taro-NOM everyone-DAT letter-ACC send COMP
omottei-nai- koto
intend NOT fact
'The fact that Taro does not intend to send a letter to
everyone' (NEG>QP-ni)
- b. Taroo-ga [daremo-ga kuru-to] (wa) omottei -nai-
Taro-NOM everyone-NOM come COMP think NOT
koto
fact
'The fact that Taro does not think that everyone come'
(NEG>QP-ga)
(cf. Homma (1989, 1991))

Let us now consider the *te-moraw* sentences in (36):

- (36) a. Taroo-wa Hanako-ni [subeteno kuruma-o arat-te]
Taro -TOP Hanako-DAT every car-ACC wash-TE
morawa -na- katta
receive NOT PAST
'Taro did not have every car washed by Hanako'
(NEG>QP-o)
- b. Taroo-wa daremo-ni [kata-o mom-de]
Taro -TOP everyone-DAT shoulder-ACC massage-TE
morawa -na- katta
receive NOT PAST
'Taro did not have everyone massage him on the
shoulders' (QP-ni>NEG, NEG>QP-ni)

In (36b), both QP-*ni* and the negative are allowed to take wide scope in interpretation. Thus, *daremo-ni* should not be a complement element, but a matrix one. The same result is obtained in the case of the *te-ager* construction:

- (37) Boku-wa daremo-ni [kata-o mom-de]
 I -TOP everyone-DAT shoulder-ACC massage-TE
 age-na-katta
 give-NOT-PAST
 'I did not massage everyone on the shoulders'
 (QP-*ni* > NEG, NEG > QP-*ni*)

Both the QP *daremo-ni* and the negative have a wide scope interpretation. This strongly suggests that NP-*ni* is a matrix element in both the *te-moraw* and the *te-ager* constructions.

As we mentioned above, NP-*ni* can be in an embedded clause when the embedded verb itself takes NP-*ni* as one of its arguments. While this is so, it must also be the case that the NP-*ni* in such cases as (31) optionally lies in the matrix clause. To see this, let us consider (31) again, repeated here as (38):

- (38) Hahaoya-wa kodomo-ni [nigirizusi-o tukut-te] ageta

If the NP-*ni* is in the matrix clause, we expect there to be an interpretation in which the NP-*ni* take wide scope over the negative. This expectation is borne out:

- (39) Hahaoya-wa subeteno-kodomo-ni [nigirizusi-o
 mother-TOP every child-DAT hand-rolled sushi-ACC
 tukut-te] age-na-katta
 make-TE give-NOT-PAST
 'The mother did not make hand-rolled sushi for every child'
 (NEG > QP-*ni*, QP-*ni* > NEG)

As shown in (39), the QP *subeteno-kodomo-ni* can have wide scope over the negative. Given that only a clause-mate QP can have both wide and narrow scope with respect to the negative, the interpretive fact in (39) tells us that the NP-*ni* in (39) can be a matrix element as well.

2.3 Object Control vs ECM

In this section, we argue that the *te-moraw* construction cannot be assimilated to the Exceptional Case Marking (ECM) construction as exemplified in (40a); rather, it must be regarded as a case of object control construction like (40b):

- (40) a. John believes the doctor to have examined Mary.
b. John persuaded the doctor to examine Mary.

- (41) a. John believes [_{IP} the doctor to have examined Mary]
b. John persuaded [_{NP} the doctor] [_{CP} PRO to examine Mary]

When the verb *believe* is followed by an infinitival clause as in (40a), it is considered to take an IP complement as in (41a). On the other hand, *persuade* type verbs can be regarded as taking both NP and CP as its arguments, as in (41b).

The above analysis is based on the observation concerning thematic meanings. That is, passivization of its complement clause significantly affects the thematic meaning of the whole sentence in cases with *persuade*-type verbs, but not in those with ECM type verbs like *believe*:

- (42) a. John believes Mary to have been examined by the doctor.
b. John persuaded Mary to be examined by the doctor.

The sentences in (42) are obtained by passivizing the part of complement in each sentence in (40). On the one hand, we do not find any significant difference in their thematic meanings between (40a)

and (42a). Specifically, what John believes in both cases is the proposition that the doctor has examined Mary. On the other hand, an obvious difference can be found between (40b) and (42b). In (40b), it is the doctor that John persuaded, while it is Mary in (42b).

With the above observation in mind, let us examine cases of the *te-moraw* construction:

- (43) a. Taroo-ga Hanako-ni ototoo-o sikat-te moratta
 -NOM -DAT brother-ACC scold-TE received
 'Taro asked Hanako to scold his brother'
 b. Taroo-ga ototoo-ni [Hanako-ni (yotte) sikarare
 -NOM brother-DAT Hanako-DAT (by) be scolded-
 -te] moratta
 -TE received
 'Taro asked his brother to be scolded by Hanako'

Sentence (43b) is a passive counterpart of (43a). Now we realize a noticeable change in their thematic meanings; that is, the person who is asked by Taro is Hanako in (43a), contrary to (43b) where the person who is asked is Taro's brother. Thus, we can conclude that the *te-moraw* construction cannot be assimilated to the ECM construction.

2.4 Subject Control vs Raising

One might conceive of an alternative derivation of the *te-ager* construction where the surface matrix subject has been raised from the embedded subject position, so that the SS of (44) might be represented as (45):

- (44) Taroo-ga hahaoya-ni kata-o monde ageta
 -NOM -DAT shoulder-ACC massage gave
 'Taro massaged the shoulder for his mother'

 (45) Taroo₁-ga hahaoya-ni [t₁ kata-o mom-de] ageta

In (45), the subject NP *Taroo-ga* has been raised over the matrix dative NP *hahaoya-ni*. The structural relation of the subject and the dative NP is reminiscent of that of the subject and the Goal dative NP in a passive sentence such as the following :

- (46) Taroo-ga₁ onnanoko-ni t₁ syookaisareta
Taro -NOM girl-DAT be introduced
'Taro was introduced to the girl'

Here the hierarchical order of *Taroo-ga* and *onnanoko-ni* has been reversed in the course of the derivation. As Oka (1988) and Hoji, Miyagawa, and Tada (1989) point out, two QPs in this structural relation enter into scope interaction, so that sentence (47), for example, has two interpretations with respect to the scope of the two QPs:

- (47) dareka-ga daremo-ni syookaisareta
 someone-NOM everyone-DAT be introduced
 'Someone was introduced to everyone'
 (OP-ga>OP-ni, OP-ni>OP-ga)

If the alternative derivation in (45) were correct, we would predict that sentence (48) is ambiguous with respect to the scope of the QPs *daremo-ga* and *Hanako-dake-ni*:

- (48) daremo-ga Hanako-dake-ni kata-o
 everyone-NOM Hanako-only-DAT shoulder-ACC
 mom-de ageta
 massage-TE gave
 'Everyone massaged the shoulder only for Hanako'
 (OP-ga:OP-ni)

However, (48) only has the interpretation where *daremo-ga* has wide scope. This tells us that the surface subject of the *te-ager* construction is not derived via raising. Our analysis, on the other hand, correctly captures the scope fact in (48). The QP *daremo-ga* is generated in its

surface position at DS so that the hierarchical order of *daremo-ga* and *Hanako-dake-ni* has not been reversed in the derivation. Thus the subject QP solely takes wide scope over the dative QP.

3. On the Determination of the Controller of *PRO*

In the previous sections we demonstrated that the *te-moraw* and the *te-ager* constructions involve object and subject control relation, respectively, as represented in (49):

- (49) a. Taroo₁-ga Hanako₂-ni [PRO₂ kata-o mom-de]
 Taro -NOM Hanako-DAT shoulders-ACC message-TE
 moratta
 received
 'Taro had his shoulders massaged by Hanako.'
- b. Taroo₁-ga Hanako₂-ni [PRO₁ kata-o mom-de]
 Taro-NOM Hanako-DAT shoulders-ACC message-TE
 ageta
 gave
 'Taro massaged her shoulders for Hanako.'

Each control relation shown in (49) cannot be reversed:

- (50) a. *Taroo₁-ga Hanako₂-ni [PRO₁ kata-o monde] moratta.
 b. *Taroo₁-ga Hanako₂-ni [PRO₂ kata-o monde] ageta.

In (50a), the null subject cannot be taken as controlled by the matrix subject NP *Taroo-ga*. Likewise in (50b), the subject of the embedded clause cannot be controlled by the matrix dative NP *Hanako-ni*. Thus, we can say that the *te-moraw* and the *te-ager* constructions in (49) are obligatory control constructions.

Notice that the above sentences are parallel to the following English sentences with obligatory control verbs: *persuade* and *promise*:

- (51) a. John₁ persuaded Mary₂ [PRO*_{1/2} to dance on the stage].

- b. John₁ promised Mary₂ [PRO_{1/*2} to dance on the stage].

In this section and in section 4, we attempt to account for how the controller of *PRO* is determined in the *te-moraw /ager* constructions. We assume, following Larson (1991), that the controller selection is sensitive to the syntactic alignment of arguments at DS. However, we do not agree with Larson on how VP-internal arguments are syntactically projected at DS. This will put us into apparent difficulty in explaining the determination of the controller, which, however, will disappear on further examination of the syntax of the relevant VP-internal items.

3.1 Larson (1991)

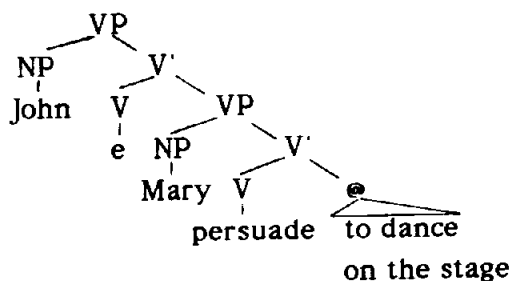
Larson (1991) adopts Rosenbaum's (1970) MDP in order to account for the controller choice in English obligatory control constructions, assuming that it applies at DS:

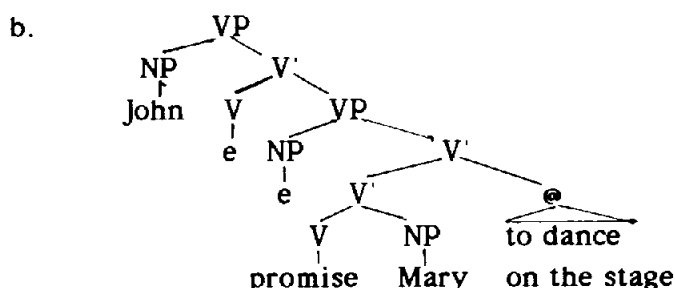
- (52) Minimal Distance Principle (MDP):

An infinitival complement of a predicate P selects as its controller the minimal c-commanding noun phrase in the functional complex of P.¹⁰

In Larson's system, the DS representations of (51a) and (51b) are (53a) and (53b), respectively:

- (53) a.



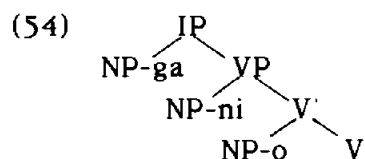


In the case of (53a), which involves the verb *persuade*, *Mary* is the closest NP that c-commands the infinitival clause [₀ *to dance on the stage*] at DS. Thus, the MDP correctly chooses *Mary* as the controller of the infinitive. On the other hand, in the DS representation (53b), *John* is the closest NP that c-commands the infinitival clause selected by *promise*, which is analogous to double object constructions discussed in Larson (1988).¹¹ Therefore, the MDP correctly predicts that the controller of the infinitive in (53b) is *John*.

At this point, there arises a question whether the controller choices in the *te-ager* and the *te-moraw* constructions also can be accounted for by the MDP, because we have characterized these constructions as obligatory control constructions on a par with English control constructions. We will discuss the matter in the next subsection.

3.2 VP-Internal Structure in Japanese

In this subsection we discuss the VP-internal structure in Japanese. Hoji (1985) argues, on the basis of the interpretation of quantifier scope, that the VP-internal structure at DS in Japanese is as follows:



Hoji makes a generalization that when a quantified NP is preposed over another quantified NP, the scope interpretation is ambiguous.¹²
Consider the following sentences:

- (55) a. Taroo-ga dareka-ni daremo-o syookaisi-ta
Taro-NOM someone-DAT everyone-ACC introduce-PAST
'Taro introduced everyone to someone.' (QP-*ni* > QP-*o*)
b. Taroo-ga daremo-o dareka-ni syookaisi-ta
Taro-NOM everyone-ACC someone-DAT introduce-PAST
'Taro introduced everyone to someone.' (ambiguous)

In (55a), *dareka-ni* 'someone-DAT' unambiguously takes wide scope, while in (55b), either *dareka-ni* 'someone-DAT' or *daremo-o* 'everyone-ACC' can take wide scope with respect to the other. Thus, if Hoji's generalization is on the right track, we can conclude that QP-*ni* QP-*o* is the basic word order in Japanese. That is, when the basic word order QP-*ni* QP-*o* is preserved at SS, the scope interpretation is unambiguous, namely, QP-*ni* takes wide scope. On the other hand, when QP-*o* is preposed over QP-*ni* so that the order QP-*o* QP-*ni* is derived, the scope interpretation is ambiguous: either QP-*ni* or QP-*o* can take wide scope. Therefore, these scope phenomena provide evidence for the VP-internal structure in (54).¹³

Note that if the VP-internal structure in (54) is correct, and if we assume that the DS configurational hierarchy reflects the thematic hierarchy, the thematic hierarchy must be the one proposed in Jackendoff (1972), but not the one assumed in Larson (1988, 1991):¹⁴

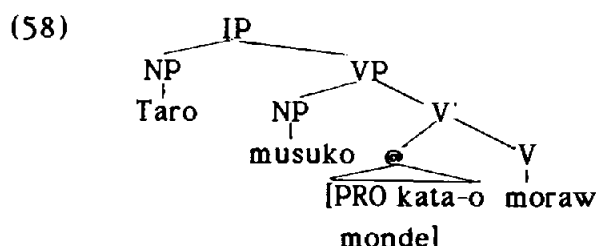
- (56) a. The Thematic Hierarchy:
1. Agent
2. Location, Source, Goal
3. Theme (Jackendoff (1972: 43))
b. The Thematic Hierarchy:
1. Agent
2. Theme
3. Location, Source, Goal (Larson (1988))

In Jackendoff's version of the Thematic Hierarchy in (56a), the Theme argument is lower than the Goal argument. This nicely corresponds to the attested DS configurational relation between the Goal argument NP-*ni* and the Theme argument NP-*o* in Japanese.

Now that the VP-internal structure at DS in Japanese (54) is attested, let us turn to the question of how we can account for the control facts in the *te-moraw* and the *te-ager* constructions in Japanese with the MDP in (52). Consider the following sentence involving the object control predicate *moraw*:

- (57) Taroo₁-ga musuko₂ -ni [PRO₂ kata-o mom-de]
 Taro -NOM (his) son-DAT shoulders-ACC message-TE
 moratta.
 received
 'Taro had his shoulders massaged by his son.'

In (57) *musuko-ni* '(his) son-DAT' is understood as the Source argument, while [*PRO kata-o mom-de*] 'shoulders-ACC message-TE' is the Theme argument. Thus, the DS of (57) can be represented as in (58).



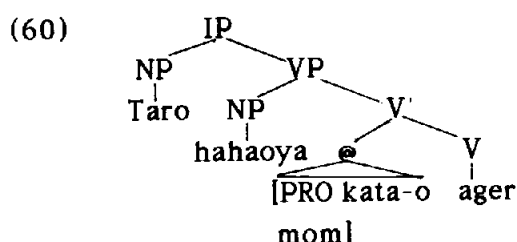
In (58), the closest NP that minimally c-commands the infinitival clause is *musuko* '(his) son'. Thus the controller choice in the case of the *te-moraw* construction can be correctly explained with the MDP.

A problem, however, seems to arise with respect to the controller choice in the case of the *te-ager* construction. Consider:

- (59) Taroo₁-ga hahaoya₂-ni [PRO₁ kata-o mom-de]

Taro-NOM (his) mother-DAT shoulders-ACC message-TE
 ageta
 gave
 'Taro massaged her shoulders for his mother.'

In (59), *hahaoya-ni* '(his) mother-DAT' may be taken thematically as the Goal NP, while [PRO *kata-o monde*] 'shoulders-ACC message-TE' is the Theme argument. If so, the DS of (59) is considered to be (60):



If the MDP applied in this case, it would incorrectly choose the NP *hahaoya* as the controller of the infinitive. This appears to be a serious problem to our proposal. In the subsequent sections we will tackle this difficulty.

4. Syntactic Status of NP-*ni* in the *Te-ager* and the *Te-moraw* Constructions

As mentioned in the last section, our analysis drawing on the VP-internal structure and the MDP appears to get into trouble with respect to the controller selection in the case of the *te-ager* construction. However, we can solve this apparent problem, by i) assuming that adjuncts are not projected at DS, and ii) pointing out that the matrix NP-*ni* in the *te-ager* construction is in fact an adjunct.

It is generally assumed (cf. Chomsky (1981, 1986)) that DS is a pure representation of thematic relations. If, following Chomsky (1986), we assume (61) and take it strictly, it follows that DS is the representation where only thematically relevant items, namely,

predicates and arguments, are projected and others, if any, remain invisible:¹⁵

- (61) "... the D-structure serves as an abstract representation of semantically relevant grammatical relation such as subject-verb, verb-object and so on, one crucial element that enters into semantic interpretation of sentences."

(Chomsky (1986:67))

Thus, if NP-*ni* in the *te-ager* construction proves to be an adjunct, the MDP correctly predicts that the subject NP is chosen as a controller, and to prove this point, we will put forth the following working hypothesis as an outset:

- (62) The "Beneficiary" NP-*ni* of the *te-ager* construction is an adjunct.

In what follows, we will show that there is good reason to believe (62) to be true by examining the syntactic status of NP-*ni* in the *te-ager* and the *te-moraw* constructions in detail.

4.1 Syntactic Positions of NP-*ni*

We first investigate the syntactic positions of NP-*ni* phrase. Given (62), NP-*ni* in the *te-ager* construction can be expected to occupy the place where an adjunct usually occurs, while NP-*ni* in the *te-moraw* construction must be in an argument position. Therefore both constructions are expected to behave differently from one another with respect to various syntactic operations. This prediction is borne out as shown below. Let us first consider the instances of "VP-preposing", which are illustrated in (63) and (64):¹⁶

- (63) a. [_{VP} hahaoya-ni kata-o mom-de morai]-sae₁
 mother-DAT shoulders-ACC message-TE receive -even
 Taro-ga t₁ sita (koto)

Taro-NOM did (fact)

'Have his shoulders massaged by his mother, Taro did.'

- b. *[vp kata-o mom-de morai]-sae₁ Taroo-ga
 shoulders-ACC message-TE receive -even Taro-NOM
 hahaoya-ni t₁ sita (koto)
 mother-DAT did (fact)

- (64) a. [vp hahaoya-ni kata-o mom-de age]-sae₁
 mother -DAT shoulders-ACC message-TE give -even
 Taroo-ga t₁ sita (koto)
 Taro-NOM did (fact)

'Massage her shoulders for his mother, Taro did.'

- b. [vp kata-o mom-de age]-sae₁ Taroo-ga
 shoulders-ACC message-TE give -even Taro-NOM
 hahaoya-ni t₁ sita (koto)
 mother-DAT did (fact)

It is argued in Hoji, Miyagawa and Tada (1989) that VP-preposing is possible only when the entire VP is preposed. If this is correct, it follows from the grammaticality of (63a) and (64a) that the *ni*-phrases are in the VP-internal position in both constructions. On the other hand, the comparison of (63b) and (64b) suggests that the VP-internal position of NP-*ni* in (63b) is different from that in (64b); the ungrammaticality of (63b) can be considered due to the movement of a part of VP, not the whole VP, whereas the relative grammaticality of (64b) tells us that there is another VP node which is preposed. Therefore we can say that NP-*ni* in the *te-ager* construction occupies the VP-adjoined position, a typical adjunct position.

The *soo-s* replacement test also gives us another piece of evidence with regard to the VP-internal structure of the *te-moraw* and the *te-ager* constructions. It is a widely held view that the pro-form *soo-s* may substitute the VP node, and thus the *soo-s* replacement has been used to clarify the structure of VP.¹⁷ Let us now apply this test to the following the *te-moraw* construction. In (65a), *soo-s* substitutes

for the bracketed phrase, while in (65b) *soo-s* replacement fails without the *ni*-phrase:

- (65) a. Taroo-wa [hahaoya-ni kata-o mom -de
 Taro-TOP mother-DAT shoulders-ACC message-TE
 morat] ta shi, Ziroo-mo soo sita
 receive PAST and Ziro-ALSO so did
 'Taro had his shoulders massaged by his mother, and Ziro
 also did so.'
- b. *Taroo-wa hahaoya-ni [kata-o mom -de
 Taro-TOP mother-DAT shoulders-ACC message-TE
 morat] ta shi, Ziroo-mo titioya-ni soo sita
 receive PAST and Ziro-ALSO father-DAT so did
 'Lit. Taro had his shoulders massaged by his mother, and
 Ziro also did so by his father.'

By contrast, in the *te-ager* construction, in addition to the example parallel to (65a), an example exists which indicates that even the bracketed phrase without NP-*ni* can be replaced by *soo-s*, as in (66b):

- (66) a. Taroo-wa [hahaoya-ni kata-o mom -de age]
 Taro-TOP mother-DAT shoulders-ACC message-TE give
 ta shi, Ziroo-mo soo sita
 PAST and Ziro-ALSO so did
 'Taro massaged her shoulders for his mother, and Ziro
 also did so.'
- b. Taroo-wa hahaoya-ni [kata-o mom -de age]
 Taro-TOP mother-DAT shoulders-ACC message-TE give
 ta shi, Ziroo-mo titioya-ni soo sita
 PAST and Ziro-ALSO father-DAT so did
 'Lit. Taro massaged her shoulders for his mother, and Ziro
 did so for his father.'

If the phrases replaced by *soo-s* belong to the same category, presumably VP, we can strongly claim that the bracketed phrase in

(66b) corresponds to VP, which constitutes a further support for our contention that NP-*ni* in the *te-ager* construction is in the VP-adjoined position. Therefore, on the basis of the above discussion, we conclude that the *te-ager* and the *te-moraw* constructions have the following configurations at SS, respectively:

- (67) a. [_{IP} NP-ga [_{VP} NP-ni [_{VP}[_{CP} PRO V-te] *ager*]]]
 b. [_{IP} NP-ga [_{VP} NP-ni [_{CP} PRO V-te] *moraw*]]

The *ni*-phrase in (67a) occupies the VP-adjoined position, contrary to (67b) where NP-*ni* is in the (VP-internal) argument position.

Let us turn to other obligatory object control constructions in Japanese. As is illustrated by the examples in (68) and (69), such verbs as *settokus* 'persuade' and *iw* 'say' may be identified as object control predicates:

- (68) Taro₁-ga Hanako₁-o [_{PRO}₁ otto-to wakareru yooni]
 Taro -NOM Hanako-ACC husband-from divorce
 settokusita
 persuaded
 'Taro persuaded Hanako to be divorced from her husband.'

- (69) Taro₁-ga Hanako₁-ni [_{PRO}₁ otto-to wakareru
 Taro-NOM Hanako-DAT husband-from divorce
 yooni] itta
 said
 'Taro told Hanako to divorce her husband.'

(cf. Sakaguchi (1990))

As we saw in the case of the *te-moraw* construction, the operation of VP-preposing in (68) and (69) yields ungrammatical sentences, if NP-*ni* or NP-*o* is stranded:

- (70) a. *[otto-to wakareru yooni settokusi]-sae

- husband-from divorce persuade-even
 Taroo-ga Hanako-o sita
 Taro -NOM Hanako-ACC did
- b. [Hanako-o otto-to wakareru yooni settokushi]
 Hanako-ACC husband-from divorce persuade-
 -sae Taroo-ga sita
 -even Taro -NOM did

- (71) a. *[otto-to wakareru yooni ii]-sae Taroo-ga
 husband-from divorce say-even Taro-NOM
 Hanako-ni sita
 Hanako-DAT did
- b. [Hanako-ni otto-to wakareru yooni ii]-sae
 Hanako-DAT husband-from divorce say-even
 Taroo-ga sita
 Taro -NOM did

The results in (70) and (71) tell us that the object control constructions with such verbs as *iw* and *settokus* pattern with the *te-moraw* construction with regard to VP-preposing; that is, the controller NP in object control constructions in (68) and (69) is an argument that is projected and minimally c-commands *PRO* at DS, on a par with the dative NP in the *te-moraw* construction.

4.2 Binding Facts

One more piece of evidence for our claim that NP-*ni* in the *te-ager* construction is an adjunct is provided by a consideration of anaphora. Consider (72):

- (72) a. Hanako-wa [PRO Taroo-o home-te] ageta
 Hanako-TOP Taro-ACC praise-TE gave
 'Hanako praised Taro.'
- b. Taroo-wa [PRO Hanako-no kami-o home-te] ageta
 Taro-TOP Hanako-GEN hair-ACC praise-TE gave

This is how we can take Taro as the person who receives benefit in (75a). By the same token, we can take Hanako as the "beneficiary" in (75b), since it is Hanako that is most likely to receive benefit from Taro's praising Hanako's hairstyle.

Having looked at some empirical arguments for the claim that the matrix NP-*ni* is an adjunct, and having assumed that adjuncts do not participate in the DS representation, we propose that the DS's of the *te-ager* and the *te-moraw* constructions are given as follows:

- (76) a. [_{IP} NP₁-ga [_{VP}[_{CP} PRO₁ V-te] ager]]
 b. [_{IP} NP₁-ga [_{VP} NP₂-ni [_{CP} PRO₂ V-te] moraw]]

In (76a), the MDP correctly selects the matrix subject as the controller of the null subject of the embedded clause, since NP-*ni* in the *te-ager* construction is invisible at DS. Thus the controller selection in (76a) is done in just the same manner as in "pure" subject control constructions:

- (77) a. Taroo₁-ga [PRO₁ hasir-te] mita
 Taro -NOM run-TE tried
 'Taro tried running.'
 b. Ziroo₁-ga [PRO₁ sake-o hiya-de nom-de] mita
 Ziro-NOM sake-ACC not warmed drink-TE tried
 'Ziro tried drinking sake not warmed'

In these examples, too, the matrix subject controls *PRO* in the embedded clause, as the MDP predicts. In (76b), on the other hand, the NP-*ni* is chosen as the controller since it is the minimally c-commanding NP at DS.

4.3 Case-marker *Ni* or Postposition *Ni* ?

In the preceding section we argued convincingly that the "beneficiary" NP-*ni* in the *te-ager* construction is an adjunct. If the relevant NP-*ni* is an adjunct, which does not receive any θ -role from the verb *ager*, it must be the case that -*ni* in this case is a postposition

- (78)
- PP
NP P
 |
 ni
 Beneficiary

Miyagawa (1989) shows that a floating quantifier and its host NP must c-command each other. Sentence (79), for example, is ill-formed since the PP headed by the postposition *kara* 'from' prevents the NP *onnano* from c-commanding the floating quantifier *hutari*:

- (79) *Taroo-wa onnanoko-kara huta-ri tegami-o uketotta
 -TOP -from two-CL letter-ACC received
 'Taro received letters from two girls'
 (cf. Miyagawa (1989))

On the other hand, compare (80) with (79). Since Case-marker *o* is widely assumed to be a realization of accusative Case, an *o*-phrase can be thought of as a category of NP. Thus, the mutual c-command relationship holds between the accusative NP and the floating quantifier in (80), giving rise to its grammaticality:

- (80) Taroo-wa natuyasumi tyuni hon-o 5 satu yonda.
 -TOP summer vacation during book-ACC five-CL read
 'Taro read five books during the summer vacation.'

With this in mind, consider the following sentences:

- (81) a. *Taroo-wa roojin-ni san-nin kata-o
Taro -TOP old-men-DAT three-CL shoulders-ACC
mom-de ageta

massage-TE gave

'Lit. Taro massaged the shoulders for three elderly people'

- b. *Hanako-wa otoko-ni huta-ri nekutai-o home-te
 Hanako-TOP men-DAT two-CLS necktie-ACC praise-TE
 ageta
 gave
 'Lit. Hanako praised the tie for two men'

In (81) the NPs *roojin* and *otoko* cannot c-command the QPs, since PPs headed by the postposition *ni* intervenes.

On the other hand, a floating quantifier can modify the matrix NP-*ni* of the *te-moraw* construction, as shown below:

- (82) a. ?Taroo-wa sensei-ni futa-ri
 -TOP teachers-DAT two-CL
 suisenzuyoo-o kaite moratta
 recommendation letters-ACC write-TE received
 'Taro had his recommendation letters written by two teachers'
 (Miyagawa(1989: 25))
 b. ?Taroo-wa onna-ni futa-ri kata-o
 -TOP women-DAT two-CL shoulders-ACC
 mom-de moratta
 massage-TE received
 'Taro had his shoulders massaged by two women'

Despite the marginality, there is a real contrast between (82) and (81). This contrast can be captured by our analysis that the NP-*ni* (81) is a PP whereas the one in (82) is an NP, the formative *ni* being a Case-marker.

We have argued in this section that the *te-ager* and the *te-moraw* constructions are different from one another syntactically, and pursued the possibility of NP-*ni* in the *te-ager* construction being an adjunct, to which we have provided empirical evidence. Furthermore we have

shown that the adjunct *ni*-phrase is PP whose head, the postposition *ni*, assigns the "beneficiary" θ -role to its NP complement.

5. Conclusion

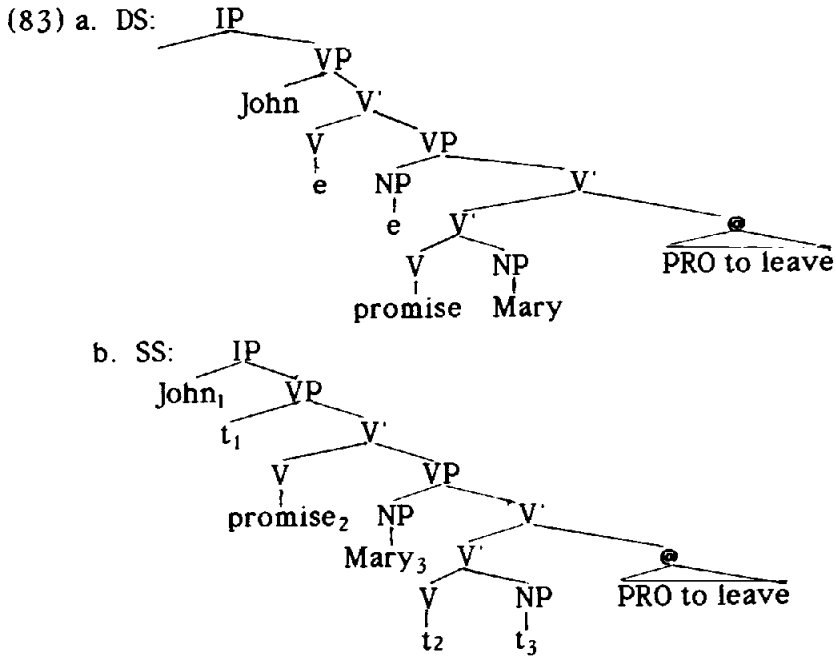
In this paper, we provided empirical arguments for the claim that the *te-moraw* and the *te-ager* constructions in Japanese involve sentence complementation, the VP-*te* sequence constituting the complement clause of the matrix verbs *moraw* and *ager*. We also pointed out that the NP-*ni* that appears in each construction constitutes a matrix element. Lastly, we accounted for the different choice of the controller of the embedded null subject *PRO* by pointing out the syntactic difference between the NP-*ni*'s in the *te-moraw* and the *te-ager* constructions.

Appendix A: Larson's (1991) Analysis of Control Constructions

Here we demonstrate that Larson's (1991) analysis of subject control constructions in English, which is very attractive though, cannot adequately capture the behaviors of corresponding constructions in Japanese.

1. Scope Interaction

Assuming that the arguments of the verb *promise* are aligned in a way similar to that of double object constructions, Larson proposes the following DS and SS.

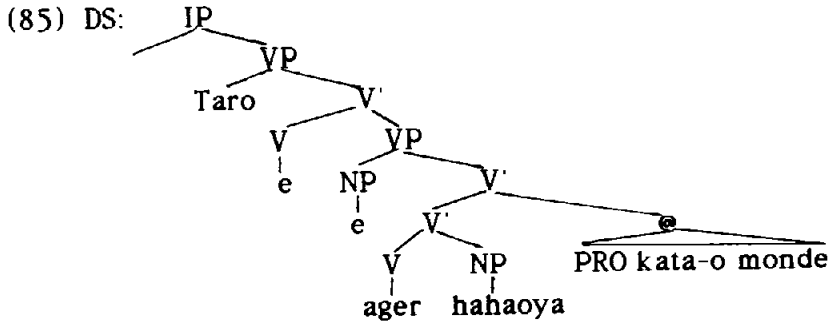


In (83a) the dative NP *Mary* is sister to the lower V and the infinitival clause is adjoined to V' as a V'-adjunct. At SS V raises to the upper empty V position and the NP *Mary* also raises to the Spec position of the lower VP to be Case-marked. Notice here that in the DS representation in (83a) the subject *John* is the only NP c-commanding *PRO*, so that the MDP, repeated below, correctly predicts that the NP *John* controls *PRO*:

(84) Minimal Distance Principle (MDP):

An infinitive complement of a predicate P selects as its controller the minimal c-commanding noun phrase in the functional complex of P.

Let us turn to the *te-ager* construction. Adopting Larson's system, we would obtain the representation in (85) corresponding to the English *promise* sentences.



There seems to be nothing wrong with assuming this structure as far as the controller selection is concerned: *Taro* is the only NP c-commanding *PRO*. However, this structure makes a wrong prediction with respect to the scopal interpretation of quantifiers. Consider:

- (86) a. Taroo-wa daremo-ni [kata-o tatai-te-dake]
 Taroo-TOP everyone-DAT shoulder-ACC pat-TE only
 ageta (QP-ni>TE-dake)
 gave
 'Taro only massaged the shoulder for everyone'
- b. Hanako-wa subeteno gakusei-ni [hon-o yon-de-sae]
 Hanako-TOP every students-DAT book-ACC read-TE even
 ageta (QP-ni>TE-sae)
 gave
 'Hanako even read the book for everyone'

In the DS in (85), the dative phrases in (86) are sisters to V at DS and raised over the infinitival clauses at SS. If we assumed this derivation, we would have to predict that the sentence is ambiguous with respect to the scopal interpretation of the quantified dative NP and the quantified *te*-clause in (86), since their hierarchical order would have been reversed. But the sentences in (86) only have the reading where the quantified dative NP has wide scope. Thus, we must take another way of explanation to capture both the determination of controller and the scope interaction fact.

- 'Taro appointed every student to be chairman or
chiefsecretary' (QP-o>NP-ni)
- b. Taroo-ga gityoo-ka syokityoo-ni subeteno gakusei-o
ninmeisita (ambiguous)
- c. Taroo-ga gityoo-ka shokityoo-ni subeteno gakusei
ninmeisita (ambiguous)
- d. subeteno gakusei-*(o) Taroo-ga gityoo-ka shokityoo-ni
ninmeisita

(89a) is unambiguous, the *o*-phrase taking wide scope over the *ni*-phrase.¹⁹ When the *ni*-phrase is scrambled over the *o*-phrase, the sentence is ambiguous as in (89b). In (89c) the case-marker *o* is dropped. What is important here is that (89c) still has the interpretation where the QP *subeteno gakusei* takes wide scope, even though the QP, without the Case-marker *o*, cannot be scrambled, as in (89d). This indicates that nonscramblability at SS has nothing to do with the possibility of undergoing QR at LF.

In summary, our analysis of the *te-ager* construction can account for both the scope fact in (86) and the controller selection, having a broader empirical coverage than any analysis along the lines of Larson (1991).

2. *Yakusokus* 'Promise' in Japanese

Now let us examine the control construction with the verb *yakusokus*, which is the Japanese counterpart of *promise*, and see whether Larson's analysis explains sentences with *yakusokus* appropriately. *Yakusokus* differs from *promise* in that it can take a tensed complement clause involving an overt subject referentially distinct from the matrix subject, as long as the matrix subject controls the realization of an event described by the complement clause. If we applied Larson's analysis of *promise* to *yakusokus*, it would be predicted that the sentences in (90) would be all ambiguous with both *ni*-phrases and *o*-phrases taking scope over the other, since the dative NP would be assumed to have been raised over the NP-*o*:

- (90) a. Fujita kantoku-wa subeteno fan-ni [NP kyojin-ga
 Fujita manager-TOP every fan-DAT Giants-NOM
 yuusyoo-suru koto-dake]-o yakusokushita
 win thing-only-ACC promised
 b. Fujita kantoku-wa subeteno fan-ni [NP kyojin-no
 -GEN
 yuusyoo-dake] -o yakusokushita
 c. Fujita kantoku-wa subeteno fan-ni [CP kyojin-ga
 yuushou-suru to-dake] yakusokushita
 COMP
 (EVERY>ONLY, *ONLY>EVERY)

These sentences are all unambiguous contrary to the prediction, while they become ambiguous if the bracketed constituents in (90) are scrambled over the *ni*-phrases, as in (91):

- (91) a. Fujita kantoku-wa [kyojin-ga yuusyoo-suru koto-dake]-o
 subeteno fan-ni yakusokusita
 b. Fujita kantoku-wa [kyojin-no yuusyoo-dake]-o
 subeteno fan-ni yakusokusita
 c. Fujita kantoku-wa [kyojin-ga yuusyoo-suru to-dake]
 subeteno fan-ni yakusokusita
 (EVERY>ONLY, ONLY>EVERY)

This leads us to conclude that the position of the *ni*-phrase is higher than that of the *o*-phrase at DS in sentences with *yakusokus* and that Larson's analysis cannot be extended to *yakusokus* in Japanese.

Appendix B: A Semantic Constraint on the *Te-ager* Construction

In *te-ager* sentences, *o*-marked phrases tend to denote something attributable to *ni*-phrases. For example, without further context, (92a) means that Taro praised Hanako's hair style for her, not others', and

(92b) implies that Taro persuaded Machiko's husband for her, not others':

- (92) a. Taroo-ga Hanako-ni kamigata-o home-te ageta
 Taro -NOM Hanako-DAT hairstyle-ACC praise-TE gave
 'Taro praised Hanako's hair style for her'
 b. Taroo-ga Machiko-ni otto-o settokushi-t
 Taro -NOM Machiko-DAT husband-ACC persuade-TE
 ageta
 gave
 'Taro persuaded Machiko's husband for her'.

If the *o*-phrases are not phonetically realized, the acceptability of the sentences decreases as in (93). This sharply contrasts with the total acceptability of the sentences where *ni*-phrases are deleted as in (94).

- (93) a. ??Taroo-ga Hanako-ni homete ageta
 'Lit. Taro praised for Hanako'
 b. ??Taroo-ga Machiko-ni sasotte ageta
 invite
 'Lit. Taro invited for Machiko'

- (94) a. Taroo-ga Hanako-o homete ageta
 b. Taroo-ga Machiko-o sasotte ageta

Let us examine the SS representation of (93):

- (95) a. Taroo₁-ga Hanako₂-ni [PRO₁ pro₂ homete] ageta
 b. Taroo₁-ga Machiko₂-ni [PRO₁ pro₂ sasotte] ageta

In each SS in (95), the antecedent of the null pronominal *pro* lies outside the minimal clause containing the null pronominal, so that there is nothing wrong with respect to the Condition B of the Binding Theory. Then why aren't sentences in (93) fully acceptable?

We suggest that the relative unacceptability of (93a, b) should be ascribed to a semantic reason. If we substitute the emphatic pronominal form **kanozyo-zisin** for *pro*, the sentences become fully acceptable as in (96):²⁰

- (96) a. Taroo₁-ga Hanako₂-ni [PRO₁ **kanozyo-zisin**₂-o homete]
 ageta
 b. Taroo₁-ga Machiko₂-ni [PRO₁ **kanozyo-zisin**₂-o sasotte]
 ageta

Note here that replacing pronouns *kanozyo* for the emphatic pronominal form deteriorates the sentences as in (97):

- (97) a.??Taroo₁-ga Hanako₂-ni [PRO₁ kanozyo₂-o homete] ageta
 b.??Taroo₁-ga Machiko₂-ni [PRO₁ kanozyo₂-o sasotte] ageta

Considering that both *kanozyo* and **kanozyo-zisin** are equally subject to the Condition B of the Binding Theory (See footnote 2.), and that the pronouns in (97) is free in their governing categories, we may conclude that there is a semantic requirement on the *te-ager* construction to the effect that emphasis be put on the *o*-phrases to imply that the very person expressed by the NP-*o* is relevant when *o*-phrases of *te-ager* sentences should be construed as coreferential with *ni*-phrases. Only the emphatic pronominal **kanozyo-zisin** can serve this purpose since *x-zisin* means "the very x and not any others," while *kanozyo* and *pro* do not have this particular meaning, hence the relative unacceptability of (93a, b).

NOTES

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on November 2nd, 1991. We are grateful to the audience for helpful discussion and comments. We would like to express our deepest gratitude to Yoshio Endo and Masaharu Shimada for their valuable comments and suggestions on an earlier version of this paper. Any remaining inadequacy is our own.

¹ It should be noted that the *te-moraw* construction does not always involve object control. Terada (1990) and Homma (1992) argue that what they classify as the 'passive-type' *te-moraw* construction is in fact a subject control construction, where the embedded null subject *PRO* undergoes NP-movement. In the present paper, we focus on what the above authors call the 'indirect-type' *te-moraw* construction.

² It is important to keep in mind that the relevant two expressions must be read with the LHH(H)LL accent, as in (i):

- | | |
|-------------------|-----------------|
| (i) a. karezisin | b. kanozyozisin |
| L H H LL | L H H H LL |
| (ii) a. karezisin | b. kanozyozisin |
| H L H LL | H L L H LL |

For convenience, we will henceforth represent the emphatic pronouns in (iia) as **karezisin** and that in (iib) as **kanozyozisin**. If we read with the HLL accent as in (ii), the two items no longer behave as an anaphor, but as a pronominal, which conforms to the Condition B of the Binding Theory. Thus an example such as (16) in the text becomes grammatical with the HLL accent on *kanozyozisin*.

³ If we replace *kanozyozisin* with *karezisin* in (15), the anaphor refer to the subject NP, as shown in the following:

- (i) Taroo₁-ga Hanako₂-ni karezisin₁-no-syasin-o miseta

⁴ If the *te-moraw* and the *te-ager* constructions have the representations like (13) and (18), respectively, the antecedent

selection of anaphor can be reduced to that of *PRO*. We will return to this point in the later sections.

⁵ See Huang (1982) and Hoji (1985) for the relevant LF condition on the scope order of QPs.

⁶ For some other differences between clause-internal scrambling and long-distance scrambling, see Mahajan (1989), Webelhuth (1989), and Saito (1992), among others.

⁷ In the following examples, *yori* is used in the sense of "rather than", not a true comparative as in (24) and (25). Even so, *yori* cannot be accompanied by a nonconstituent string, as is shown below:

- (i) a. Taroo-wa Hanako-ni Tsukuba-de au yori
 -TOP -DAT -LOC meet rather than
 Mary-ni Tokyo-de atta
 -DAT -LOC met
 'Lit. Taro met Mary in Tokyo, rather than met Hanako
 in Tsukuba.'
- b. *Taroo-wa Hanako-ni Tsukuba-de yori
 -TOP -DAT -LOC rather than
 Mary-ni Tokyo-de atta
 -DAT -LOC met
 'Lit. Taro met Mary in Tokyo, rather than Hanako
 in Tsukuba.'

In the above sentences, *yori* means "rather than". (ia) is well-formed since *yori* is accompanied by a VP constituent. On the other hand, in (ib), *yori* is accompanied by *Hanako-ni Tsukuba-de*, which does not form a constituent, and the sentence is not grammatical. These facts are consistent with the case of the true comparative *yori*, which must be accompanied by a constituent.

⁸ The present 'matrix NP-*ni*' analysis of the *te-moraw /ager* constructions is also true of the *te-hosi* construction discussed in Takezawa (1987). Although he argues that the relevant NP-*ni* lies

in the complement clause of *hosii* and is Case-marked in an ECM fashion, as in (i), we analyze the *hosii* sentences as an object control construction with the structure (ii):

- (i) boku-wa [CP Hanako-ni [IP e uta-o utat-te]] hosii
 I-TOP -DAT song-ACC sing-TE want
 'I want Hanako to sing a song'

- (ii) boku-wa Hanako₁-ni [CP PRO₁ uta-o utat-te] hosii
 I-TOP -DAT song-ACC sing-TE want
 'I want Hanako to sing a song'

Applications of the *yori* test and the scope test in the text would reveal that (ii) is a reasonable assumption, although we do not provide any arguments to support it for the lack of space.

⁹ Note that it is relatively difficult to obtain the partial negation reading (NEG>QP-*ni*) unless the particle *wa* is attached to the QP, as in (i):

- (i) Taroo-ga daremo-ni-wa tegami-o kak-ana-katta

¹⁰ Larson (1991) notes that the notion of a "functional complex for predicate P" derives from Chomsky's (1986) "complete functional complex".

¹¹ Larson (1991: 104-105) argues that the verb *promise* is a verb taking two objects like *give*, which exhibits dative alternation. Consider the following parallelism:

- (i) a. John gave a book to Mary.
 b. John gave Mary a book.

 (ii) a. John promised a car to Mary.
 b. John promised Mary a book.

On the other hand, the object control verb *persuade* does not show the above parallelism:

- (ii) a. *John persuaded a conclusion to Mary.
- b. *John persuaded Mary a conclusion.

For a detailed analysis of double object constructions, see Larson (1988, 1991).

12 See subsection 2.1.2 for Kuno's and Hoji's generalization concerning the scope order of two QPs.

13 For another scope ambiguity phenomenon, see Hoji, Miyagawa, and Tada (1989).

14 See Baker (1988) for the hypothesis that the DS configurational hierarchy reflects the thematic hierarchy:

- (i) Uniformity of Theta Assignment Hypothesis
Identical thematic relationships are represented by identical structural relations between the items at the level of D-Structure.

15 Lebeaux (1991) also assumes that only arguments required by the Projection Principle are present at DS. He further proposes that adjuncts are added later in the course of derivation by the rule "Adjoin α ."

16 In our analysis, the preposed constituents in (63) and (64) contains *PRO*. In Japanese, nothing seems to prevent a constituent containing *PRO* from being preposed. This is confirmed by the following example:

- (i) [zibunzisin*_{1/2}-no-heya-de syukudai-o suru yoo]
 oneself-GEN-room-LOC homework-ACC do COMP
 Taro₀₁-ga Hanako₀₂-o settokusita
 Taro- NOM Hanako-ACC persuaded

'Taro persuaded Hanako to do the homework in her room.'

In (i), the reflexive *zibunzisin* is understood as taking *Hanako* as its antecedent, which itself is not in the governing category of *zibunzisin*. This means that the preposed infinitive must contain *PRO* which is controlled by *Hanako*.

However, Yoshio Endo (p. c.) points out that English infinitives containing *PRO* cannot always be preposed:

(ii) a. *[*PRO*₂ to leave early], John₁ promised/persuaded Mary₂.

b. [*PRO*₁ to leave], John₁ tried/attempted.

At this point we do not know why there is such difference between English and Japanese. We leave this matter for future research.

¹⁷ *Soo-s* is analyzed as corresponding to VP in Nakau (1973) and Kitagawa (1986). It is not uncontroversial, however, whether *soo-s* can only substitute the VP node. For a detailed discussion, see Hoji (1990).

¹⁸ One might argue that the sentences in (72) can also have the structures in (i) so that the relevant readings are obtained.

(i) a. Hanako-wa [*PRO* Taroo₁-o home-te] pro₁ ageta

b. Taroo-wa [*PRO* Hanako₁-no kami-o home-te] pro₁ ageta

In (i), the null pronominal does not c-command its antecedent so that (74) is not violated. However, it is impossible to assign the structures in (i) to the sentences in (72), since the infinitival *te*-clause must be strictly adjacent to the verb *ager*:

(ii) *Taroo-wa [PRO kata-o mom-de] Hanako-ni
 Taro -TOP shoulder-ACC massage-TE Hanako-DAT
 ageta

gave

'Taro massaged the shoulders for Hanako.'

Alternatively, one might imagine assigning the following structures to the sentences in (72):

- (iii) a. Hanako-wa [pp pro₁ P] [Taroo₁-o home-te] ageta
 b. Taroo-wa [pp pro₁ P] [Hanako₁-no kami-o home-te] ageta

In (iii) the empty pronominal is embedded under PP headed by a null postposition. Thus, due to this intervening PP node, the c-command relationship does not hold between the empty pronominal and the NP in the complement clause in this structure, which would correctly account for the relevant interpretations in (72). There are, however, examples which suggest that the intervening PP node is invisible to the binding relation between the pronominal and its antecedent:

- (iv) a. boku-wa [pp Taroo₁-to] kare₁-no ie-e itta
 -TOP -with -GEN home-LOC went
 'Lit. I went to his home with Taro'
 b. *boku-wa [pp kare₁-to] Taroo₁-no ie-e itta
 -TOP -with -GEN home-LOC went

Therefore we maintain that the possibility of the relevant readings in (72) is due to the invisibility of an adjunct at D-structure.

¹⁹ Takezawa (1991) claims that, in the case of the verb *ninmeis*, NP-*o* is structurally higher than NP-*ni* at DS. Thus, it follows that the QP-*o* unambiguously takes wide scope over the NP-*ni* in (89a).

²⁰ If we substitute the plain reflexive form *kanozyo-zisin* for *pros* as in (i), the sentences become ungrammatical since the reflexives are unbound in the governing category:

- (i) a. *Taroo₁-ga Hanako₂-ni [PRO₁ kanozyo-zisin₂-o homete]
 ageta
 b. *Taroo₁-ga Hanako₂-ni [PRO₁ kanozyo-zisin₂-o sasotte]
 ageta

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