

Split Control and the Principle of Minimal Distance*

Tomohiro Fujii

Yokohama National University

1 Introduction

This chapter studies two properties that are quite often considered as diagnosing obligatory control (OC) in the literature: (i) the ban on split control (discussed by Williams 1980, Koster and May 1982, Lebeaux 1984, Martin 1996, Hornstein 1999, 2001, 2003, Wurmbrand 2001, Landau 2000, Madigan 2008, among others) and (ii) the effect of the Principle of Minimal Distance (PMD) (proposed by Rosenbaum 1970 and discussed by Larson 1991, Martin 1996, Mazini and Roussou 2000, Hornstein 1999, 2001, 2003, Boeckx and Hornstein 2003, 2004, Landau 2000, 2003, Culicover and Jackendoff 2001, Davies and Dubinsky 2004, to list a few). Here are some illustrations of the two properties.¹

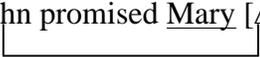
- (1) a. * John ordered Bill [Δ to wash each other]
b. John ordered Bill that they should wash each other
c. John told Bill that [Δ washing each other] would be fun
- (2) a. * John told Mary [Δ to wash himself]
b. John told Mary that he would wash himself
c. John told Mary that [Δ washing himself] would be fun

In (1)a, the null subject of the embedded infinitival clause cannot be bound by the matrix subject and the matrix indirect object at the same time, which is signaled by the exclusion of *each other* (which needs a plural antecedent). This restriction is not observed with the subject of finite clauses as in (1)b or with the null subject of non-obligatory control (NOC) clauses as in (1)c. Hence, the ban on split control has been considered by some researchers a diagnostic property of OC.

(2)a illustrates the effect of the PMD, which requires that the null controllee be bound by the closer potential antecedent. The presence of an intervener such as the indirect object *Mary* in (2)a, it is argued, leads the sentence to ungrammaticality. This minimality condition does not have to be respected for binding of the subject of finite clauses [(2)b] and binding of NOC PRO [(2)c].

The ban on split antecedence and the PMD effect seem to be highly controversial OC diagnostic properties. Consider the PMD effect first. A famous potential counterargument has to do with verbs like *promise*. Unlike (2)a, (3) is judged as acceptable even though the closer potential antecedent is skipped.

(3) John promised Mary [Δ to wash himself]



Some proponents of the PMD claim that *Mary* in (2)a and *Mary* in (3) have different structures. Hornstein (2001: 64, footnote 19) and Boeckx and Hornstein (2003) propose a ‘null P’ analysis, where it is claimed that the indirect object of the *promise* construction does not block the local control chain in the same way as the experiencer PP of the raising *seem*-construction does not; cf. *John seems to Mary t to be happy* (see Davies and Dubinsky 2004 for a critique).

The issue of split control is more complicated in that, as far as English data are concerned, there seems to be little consensus in the recent literature on what the correct generalization is. To see how this is so, we need to begin by looking at the distinction between partial control and split control, which is extensively discussed in Landau 2000. According to Landau, partial control is a process like the following: OC PRO takes a single, singular antecedent, but a certain kind of plurality is involved in the interpretation of the empty category. (This fact concerning partial control is first observed in Williams 1980: 218, who attributes the observation to Debbie Nanni.) As an illustration, consider (4) (from Landau 2000: 44).

(4) John₁ wanted PRO₁₊ to meet at 6

There are two facts that the example shows: First, the example is acceptable. Second, the sentence

means: John wants it to be true that he and someone else meet at 6, as indicated by “1+” in Landau’s notation. Monadic collective predicates like *meet* require that their subject denote plurality, and crucially, such predicates do not need a syntactically plural subject. In other words, semantically group-denoting NPs sufficiently meet the ‘plurality’ restriction on the subject of those predicates (cf. *The committee met at 6*). In (4), a singular antecedent controls PRO, which ends up denoting a group. Note that when the reciprocal *each other* is added, the sentence becomes unacceptable.

(5) * John wanted PRO to meet each other at 6

Predicates like *meet each other*, unlike collective predicates like *meet*, require their subject to be syntactically plural. Given this, the contrast between (4) and (5) tells us that the unacceptability of the latter sentence is attributable to the fact that syntactically plural OC PRO is bound by a singular antecedent. Landau’s (2000) claim that there is a genuine phenomenon of partial control has been accepted in the recent literature (see Hornstein 2003 and Culicover and Jackendoff 2005: 460, among others).²

Given Landau’s characterization of partial control, split control can be defined as follows: syntactically plural PRO is bound by two different, singular antecedents (in the simplest case) . Notice that the unacceptability of (5) does not necessarily mean that OC PRO cannot have split antecedents. In this example, simply no additional antecedent exists. There are two general views about the existence of the phenomenon. It is often claimed, based on the unacceptability of sentences like (1)a, that split control is prohibited in English (Williams 1980, Bouchard 1984, Koster 1984, Lebeaux 1984, Hornstein and Lightfoot 1987, Franks and Hornstein 1992, Hornstein 2003: 65, footnote 13, to list a few). This classical view is challenged by Landau (2000), who observes that examples such as (6)b ((6)=Landau’s (79), p.53), are possible. (The possibility of split control is also noted by Koster and May 1982.)

(6) a. * John told Mary that he preferred to meet each other at 6

b. John proposed to Mary to meet each other at 6

As noted above, the reciprocal anaphor makes the predicate require a plural subject. Landau's pair of sentences shows that the 'plurality' requirement in question is satisfied in (6)b, where two singular NPs are available in the clause immediately higher than the control clause. When one of those NPs is excluded from the 'control' domain, plural PRO is not licensed any more. In the a-example, *Mary* would have to control PRO long distance, as Landau observes.

While claiming that OC PRO *can* support split antecedents, Landau observes that examples like (7) are unacceptable. Since there are two potential controllers in the matrix clause, OC PRO should be able to be split-controlled, all other things being equal.

(7) * *Mary_i recommended to/ordered John_j [PRO_{i+j} to cooperate with each other]*

He notes that “[u]nlike *propose* and *ask*, *recommend* and *order* do not allow split control — for obvious reasons, given that in order to engage in some action, one does not recommend to/order other people to do it.” (p. 55). Landau seems to have concluded that the source of unacceptability found in cases like (7) is independent from the grammatical nature of OC PRO.

The goal of this chapter is as follows: First, I show that split control is possible in a certain environment based on Japanese data and that the (im)possibility of split control correlates with mood meaning: it is possible only when control clauses are interpreted or typed as the exhortative. Second, I point out that a certain sentence mood that appears to be semantically and pragmatically coherent does not exist. The PMD proves useful to explain the absence of the unattested mood particle. Third, an analysis of split control will be given that is compatible with the claim that the PMD or minimality is respected in the grammar.

The chapter is organized as follows: section 2 attempts to document the relevant data to the main issues. Basic properties of embedded imperative constructions and those of what we call decisive constructions are laid out. In section 3, the data pertaining to split control are introduced. It is shown that sentences whose null subject is analyzed as split-controlled are obligatory control constructions. Section 4 attempts to provide a possible analysis of split control constructions and explore its

consequences. Section 5 concludes the chapter.

2 Mood Particles and Obligatory Control

2.1 *Decisives and Imperatives*

This section introduces preliminary data concerning two mood particles triggering OC. The discussion of these mood particles will become useful when we identify under what conditions split control is allowed. The particles of interest here include *-e/-ro* on the one hand, and *-yoo/-oo* on the other. The examples given in (8) illustrate the two mood constructions.³

- (8) a. (boku-wa) beeguru-o tabe-yoo
I-Top bagel-Acc eat-YOO
'I'll eat bagels.'
- b. (kimi-wa) beeguru-o tabe-ro
You-Top bagel-Acc eat-Imp
'You eat bagels!'

(8)b is an imperative sentence and contains the imperative mood marker *-ro*. The particle *-(y)oo* can be translated as 'intend to' or 'decide to' in cases like those cited in (8)a. I dub this use of *-(y)oo* the 'decisive'.⁴ As we will see in section 3, there is another use of the same particle, which is pragmatically different from the use seen in (8)a. Not to prejudice which use a particular instance of *-(y)oo* falls under, I gloss *-(y)oo* simply as "YOO" in this chapter.

A rough semantic and pragmatic characterization of the particles found in (8) is in order. It is useful to appeal to the notions of 'To-Do LIST' and of discourse participants such as 'speaker' and 'addressee', along the lines of Portner (2004). Portner proposes that imperative sentences represent a To-Do LIST, which is defined as a set of properties and that "[t]he conventional force of imperatives,

what we can call Requesting, is to add the property denoted by the imperative to the addressee's To-Do LIST" (Portner 2004; see also Portner and Zanuttini 2005). For instance, *leave!* denotes the property of leaving and this property is placed on the addressee's To-Do LIST. In this light, the conventional force of the decisive is to add the relevant property to the speaker's To-Do LIST.⁵ This is why (8)a and (8)b have the translations they have.

As for the syntax of these particles, I assume throughout the chapter that they are heads of Mood Phrases and that no Case for the subject of these clauses is available inside the domain of MoodP (see Hasegawa 1981, Watanabe 1996 for relevant discussion). Whether or not TP is projected below Mood does not really matter, but nothing seems to prevent one from adopting an analysis where MP dominates TP.⁶

Now we turn to embedding of these mood constructions. Being headed by the complementizer *-to*, they can occur in the complement position of a verb.

- (9) a. Taro-wa boku-no beeguru-o tabe-yoo-to keikakusita
 Taro-Top my bagel-Acc eat-YOO-C planned
 'Taro planned to eat my bagel.'
- b. Yoko-wa Hiroshi-ni boku-no beeguru-o tabe-ro-to meireisita
 Yoko-Top Hiroshi-Dat my bagel-Acc eat-Imp-C ordered
 'Yoko ordered Hiroshi to eat my bagel.'

It has been always an issue whether embedded clauses found in examples like these involve real embedding, i.e. whether they involve indirect speech or not. As Han (1998/2000: 159) noted, Japanese seems to allow imperatives to be embedded. At this point, it suffices to recognize that when a mood clause is embedded, To-Do LISTS are relative to the speaker and the addressee of the indirect speech. In section 2.3, I will argue that these sentences involve indirect quotation, rather than direct quotation.

2.2 Diagnostic Properties of OC

This section applies some OC diagnostics to embedded mood clauses to show that they are obligatory control clauses.⁷

First, the null subject of the embedded mood construction under consideration requires an antecedent, and the antecedent is uniquely determined. The null subject of embedded decisive sentences and imperative sentences necessarily corefers to the matrix subject and the matrix indirect object, respectively. In the decisive construction given in (10)a, a Condition B effect is observed, which suggests that Δ must be bound by *Hiroshi*. Likewise, Δ in the imperative construction given in (10)b is necessarily bound by the matrix indirect object, *Yoko*.

- (10)a. Hiroshi_i-wa [Δ {??kare_i/zibun_i}-o hihansi-yoo-to] {omotta/kessinsita}
 Hiroshi-Top him/self-Acc criticize-YOO-C thought/decided
 ‘Hiroshi_i {thought of criticizing/ decided to criticize} {??him_i, self_i}.’
- b. Hiroshi_i-wa Yoko_j-ni [Δ {kare_i/??kanozyo_j/zibun_{i/j}}-o hihansi-ro-to] {itta/meireisita}
 Hiroshi-Top Yoko-Dat he/she/self-Acc criticize-Imp-C said/ordered
 ‘Hiroshi_i {said to/ordered} Yoko_j to criticize {him_i, ??her_j, self_{i/j}}.’

Second, the null subject of the mood clauses must be c-commanded by its antecedent. The difference between (11)a and (11)b below demonstrates that the subject of the embedded decisive clause, unlike that of a regular finite clause, must be c-commanded by its antecedent.

- (11)a. * kyoodai-no titioya-wa [Δ otagai-o home-a-oo-to] omot-tei-ta
 brothers-Gen father-Top [e.o-Acc praise-Recip-YOO-C] think-Asp-Past
 ‘The brothers’ father thought to praise each other.’
- b. kyoodai_i-no titioya_j-wa [Δ _i otagai-o home-a-u-to] omot-tei-ta
 brothers-Gen father-Top [e.o-Acc praise-Recip-Prs-C] think-Asp-Past
 ‘The brothers’ father thought that they would praise each other.’

The same c-command restriction holds for embedded imperative clauses. The genitive NP inside a larger NP cannot serve as an antecedent for the subject of an embedded imperative while it can for the subject of a finite clause headed by *bekida* ‘should’.

- (12)a. * Taro-wa sono hutago-no hahaoya-ni [Δ otagai-o sonkeisi-a-e-to] itta
 Taro-Top the twins-Gen mother-Dat [e.o.-Acc respect-Recip-Imp-C] said
 ‘Taro told the twins_i’ mother to respect each other_i.’
- b. Taro-wa sono hutago-no hahaoya_j-ni [Δ otagai-o sonkeisi-a-u-bekida-to] itta
 Taro-Top the twins-Gen mother-Dat [e.o.-Acc respect-Recip-Prs-should-C] said
 ‘Taro told the twins_i’ mother they_j should respect each other_i.’

Third, Japanese embedded mood constructions disallow long distance antecedents in the same way as standard OC constructions do.

- (13)a. * karera-wa [Hiroshi-ni [Δ otagai-o naguri-a-oo-to] omow]-ase-ta
 they-Top [Hiroshi-Dat [e.o.-Acc hit-Recip-YOO-C] think]-Caus-Past
 ‘They made Hiroshi think to hit each other.’
- b. karera-wa [Hiroshi-ni [Δ otagai-o naguri-a-u-to] omw]-ase-ta
 they-Top [Hiroshi-Dat [e.o.-Acc hit-Recip-Pres-C] think]-Caus-Past
 ‘They made Hiroshi think that they might hit each other.’

In these examples, the causative morpheme *-(s)ase* takes a tenseless sentential complement in which the verb ‘think’ takes as its complement a *-to*-clause.⁸ Δ is one clause away from the subject of the causative *-sase* and two clauses away from the highest subject. The pair of examples above shows that the lowest, null subject cannot take the highest subject as its antecedent when the most deeply embedded predicate is marked with decisive, but it can when it is a regular finite one. The same contrast holds between imperative clauses and finite clauses like the one headed by ‘should’.

- (14)a. * karera-wa [Yoko-ni otto-ni [Δ otagai-o itawari-a-e-to] it-te] hosikatta
 they-Top [Yoko-Dat husband-Dat [e.o.-Acc care-Recip-Imp-C to.say] wanted
 lit. ‘They_i wanted Yoko to tell her husband Δ_i to be nice to each other.’
- b. karera_i-wa [Yoko-ni otto-ni [Δ_i otagai-o itawari-a-u-bekida-to]
 they-Top [Yoko-Dat husband-Dat [e.o.-Acc care-Recip-Prs-should-C]
 it-te] hosikatta
 to.say] wanted
 ‘They wanted Yoko to tell her husband that they should be nice to each other.’

This locality restriction is totally expected if the null subjects in (13)a and (14)a are OC PROs.

Fourth, the null subject of the mood clauses, like standard OC PRO, cannot function as a free variable. Pronouns behave differently in this respect. Let us start with ambiguity having to do with *only NP* antecedents. (15), which contains a regular finite complement with a null subject, is ambiguous between the interpretations indicated by (i) and (ii).

(15) Hiroshi_i-dake-ga [*pro*_i siai-ni kat-u-to] kangaeteiru
Hiroshi-only-Nom [game-Dat win-Prs-C] think-Stat-Prs

- i. Bound: ‘Hiroshi is the only x such that x thinks that x will win the game.’
- ii. Coreference: ‘Hiroshi is the only x such that x thinks that Hiroshi will win the game.’

Pro can be interpreted as either a bound variable (as in (15)i, called a ‘bound’ interpretation) or a free variable (as in (15)ii, called a ‘coreference’ interpretation). The following scenario is intended to make the bound interpretation false and the coreference interpretation true. The fact that (15) can be uttered truly in this situation shows that *pro* allows a coreference reading.

(16) Hiroshi: “I’m sure I will win my game.”
Atsuko: “I’m sure I will win my game. I don’t think Hiroshi will win his game.”
Yoko: “I doubt that Hiroshi will win his game.”

The null subjects of embedded decisives and imperatives disallow such readings. Consider the decisive first.

(17) Hiroshi_i-dake-ga [Δ _i siai-ni kat-oo-to] kangaeteiru
Hiroshi-only-Nom [game-Dat win-YOO-C] thinks
‘Hiroshi thinks to win the game.’

- i. Bound: ‘Hiroshi is the only x such that x thinks that x will win the game.’
- ii. *Coreference: Hiroshi is the only x such that x thinks that Hiroshi will win the game’

The following scenario, in which Hiroshi, Atsuko and Yoko are the relevant individuals, makes the coreference interpretation true and the bound one false.

(18) Hiroshi: “I’m gonna win my game.”

Atsuko: “I will win my game. I don’t think Hiroshi will even try to.

Yoko: “I wanna win my game, of course. Hiroshi? I’m not sure he is interested in winning his game.”

Statement (17) is rejected here. This shows that the statement does not have the coreference interpretation. Hence, we conclude that Δ cannot act like a pronoun. If it is OC PRO, the judgment obtained here is not surprising. The same is found with embedded imperatives.

(19)a. John-wa Taro-dake-ni [Δ Izu-ni ik-e-to] itta
John-Top Taro-only-Dat [Izu-to go-Imp-C] said
‘John told only Taro that he should go to Izu.’ (John told only Taro, “You go to Izu!”)

b. John-wa Taro_i-dake-ni [*pro*_i Izu-ni ik-u-bekida-to] itta
John-Top Taro-only-Dat [Izu-to go-Prs-should-C] said
‘John told only Taro_i that he_i should go to Izu.’

(20)i. Bound: Only Taro is an x such that John told x that x should go to Izu.
[Ok with both (19)a and (19)b]

ii. Coreference: Only Taro is an x such that John told x that Taro should go to Izu.
[Not possible with (19)a and ok with (19)b]

(19)a, where the imperative mood marker occurs, and (19)b, where the finite auxiliary *bekida* ‘should’ occurs, are contrasted.

The asymmetry between bound variable and free variable interpretations for decisive and imperative subjects can be illustrated on the basis of their behavior in ellipsis contexts as well. The subject of an embedded decisive does not allow a strict reading in ‘stripping’ while that of a regular finite clause does. (See Hoji 1990 for extensive discussion about the ellipsis phenomenon in question.)

(21)A: Atsuko-wa [Δ kasyu-ni {a. nar-oo/ b. nar-u}-to] omotteiru
Atsuko-Top [singer-Cop become-YOO become-Prs-C] thinks
‘Atsuko_i {is thinking of becoming, expects that she_i will become} a singer.’

B: Hiroshi-mo da
Hiroshi-even Cop
‘Hiroshi, as well.’

When the utterance in (21)B follows that in (21)A-a, it cannot mean: Hiroshi expects that Atsuko will become a singer. When it follows (21)A-b, in contrast, the sentence is ambiguous. The imperative construction works in the same way except that it is object control.

(22)A: John-wa Taro-ni [Δ Izu-ni {a. ik-e/ b. ik-u-bekida}-to] itta
 John-Top Taro-Dat [Izu-to go-Imp go-Prs-should-C] said
 ‘John told Taro to go to Izu.’
 ‘John told Taro {to go, that he should go} to Izu.’

B: Hiroshi-ni-mo da
 Hiroshi-Dat-even Cop
 ‘Hiroshi, as well.’

When the embedded predicate contains an imperative head [(22)A-a], the strict reading is extremely difficult. With the finite auxiliary ‘should’ [(22)A-b], the strict reading and the sloppy reading are equally available.

Fifth, it has been accepted in the literature that OC PRO can only support a *de se* interpretation while pronouns allow a non-*de se* interpretation. Now consider examples of embedded decisives like the one given in (23).

(23) Hiroshi-wa [Δ gaikoku-ni ik-oo-to] omotteiru
 Hiroshi-Top [foreign country-to go-YOO-C] thinks
 ‘Hiroshi thinks of going abroad.’

Suppose that Hiroshi plans to go abroad. He had already got his passport and recently obtained a visa. One day, he goes drinking and comes home very drunk. He finds the passport on the table, and does not remember that it is his passport with his picture, along with the visa he had gotten from the embassy. Looking at the picture, he thinks: “I don’t know who this guy is, but he seems to be planning to go abroad soon. I wish I could, too!” In this non-*de se* context, (23) cannot be uttered felicitously. In contrast, (24), whose embedded predicate has the simple present tense form, allows for a reading compatible with this situation.

- (24) Hiroshi-wa [Δ gaikoku-ni ik-u-to] omotteiru
 Hiroshi-Top [foreign country-to go-Prs-C] thinks
 ‘Hiroshi thinks he will go abroad.’

The subject of embedded *-yoo*-clause, like standard OC PRO, cannot receive a non-*de se* interpretation.

2.3 $\Delta \neq$ Null Equivalent of Overt Indexicals

Before we go on, one potentially interfering factor needs to be considered. How do we make sure that embedded decisive and imperative clauses do not involve direct quotation?⁹ If the subject of direct quotes behaved in exactly the way that null subjects of mood clauses behave, our claim that they are occurrences of OC PRO would be weakened. First, root decisives and imperatives require first and second person subjects, respectively.

- (25)a. Δ Izu-ni ik-oo-tto
 Izu-to go-YOO-Clause Final Particle
 ‘{I’m, *You’re, *He’s, ..} gonna go to Izu.’
- b. Δ Izu-ni ik-e
 Izu-to go-Imp
 ‘{You, *me, *John}, go to Izu!’

Note also that, whether they are embedded or not, indexicals in Japanese are often null. In fact, true direct quotes seem to pass at least some of the diagnostics that we use to argue that the subject of embedded mood clauses is OC PRO. Remember for instance the context that was described when the impossibility of a non-*de se* interpretation with Δ was examined (see the paragraph surrounding (23)). (26), which is a direct quote, cannot be uttered to describe the same situation. The first person expression *ore* ‘I’ requires that what is quoted be Hiroshi’s direct thought. This is exactly the way OC PRO differs from pronouns with respect to this diagnostic.

- (26) Hiroshi-wa [[ore-wa gaikoku-ni iku] to] omotteiru
 Hiroshi-Top [[I-Top foreign country-to go.Prs C] thinks
 ‘Hiroshi thinks: “I will go abroad”.’

For these reasons, it needs to be shown that embedded decisives and imperatives can involve indirect quotation.

It turns out that subordinate decisive and imperative clauses do not have to be direct quotes. First, long distance wh-movement cannot originate inside and take scope outside a direct speech. When a quote contains a first person noun phrase that refers to the author of the speech, a wh-phrase cannot appear inside.¹⁰

- (27) * Hiroshi_i-ga [ore_i-wa doko-ni ik-u(-zo) to] itta-no
 Hiroshi-Nom [I-Top where-to go-Prs-Part C] said-Q
 ‘What place is x such that Hiroshi said, “I will go to x”?’

Embedded decisive clauses with a null subject can contain a wh-element that undergoes long distance association with an interrogative C.

- (28) Hiroshi_i-ga [Δ_i doko-ni ik-oo-to] itta/kimeta-no
 Hiroshi-Nom [where-to go-YOO-C] said/decided-Q
 ‘What place is x such that Hiroshi said/decided that he would go to x?’

Hence, the embedded clause with -(y)oo at least can be an indirect quote. Another way to show that we are dealing with indirect quotation is with a third person pronoun referring back to the author or addressee of the report. This forces the embedded clause to be an indirect quote. ‘He’ inside a direct quote cannot be coreferential with the speaker or the hearer of the main utterance.

- (29) * Hiroshi_i-ga [boku_i-wa kare_i-no ie-o u-ru-zo] to kangaeteiru
 Hiroshi-Nom [I-Top his house-Acc sell-Prs-Part] C thinks
 ‘Hiroshi_i thinks: “I_i will buy his_i house.”’

As in (30), the embedded mood particle can co-occur with *kare* ‘he’, which is coindexed with a matrix element.

- (30) Hiroshi_i-ga [Δ kare_i-no ie-o ur-oo-to] kangaeteiru

Hiroshi-Nom [his house-Acc sell-YOO-Prs-C thinks
 ‘Hiroshi thinks of selling his_i house.’

Likewise, when the author or addressee of the quoted speech differs from the actual speaker or hearer (of the main utterance), using first or second person expressions in the quote forces it to be indirect speech.

(31) *John said, “I_(actual speaker) am a hero.”

The embedded decisive and imperative constructions in (32), which contain indexicals that refer to the speaker or hearer of the actual context, are perfectly acceptable.

(32)a. Hiroshi_i-ga [Δ_i boku-no ie-o ka-oo-to] kangaeteiru
 Hiroshi-Nom [my house-Accbuy-YOO-Prs-C] thinks
 ‘Hiroshi thinks of buying my(=the actual speaker) house.’”

b. Hiroshi-ga Yoko_i-ni [Δ_i kimi-no ie-o ka-e-to] meizita
 Hiroshi-Nom Yoko-Dat [your house-Acc buy-Imp-Prs-C] ordered
 ‘Hiroshi ordered Yoko to buy your(=the actual hearer) house.’

Therefore, we are not necessarily dealing with root phenomena in looking at these mood constructions. These subordinate sentences can be indirect speech.

The patterns of judgments concerning the OC diagnostics that have been used in section 2.2 remain the same even when the possibility of direct quotation is eliminated. Some of the data are presented below.

(33)a. * sono kyoodai-no titioya-wa [Δ otagai-o dokode home-a-oo-to] omotteita-no
 that brother-Gen father-Top [e.o-Acc where praise-Recip-YOO-C] thought-Q
 ‘Where did the brothers’ father think [to praise each other *t*]?’

b. * keikan-wa sono kyoodai-no titioya_j-ni [Δ otagai-o dokode home-a-e-to]
 policeman-Top that brother-Gen father-Top [e.o-Acc where praise-Recip-Imp-C]
 meireisi-ta-no
 order-Past-Q
 ‘Where did the police officer order the brother’s father [to praise each other *t*]?’

- (34)a. * karera-wa [Yoko-ni otto-ni [Δ otagai-o doregurai itawari-a-e-to]
 they-Top [Yoko-Dat husband-Dat [e.o.-Acc how much care-Recip-Imp-C]
 it-te] hosikatta-no
 to.say] wanted-Q
 ‘How nice did they want Yoko to tell her husband Δ to be *t* to each other?’
- b. * karera-wa [Yoko-ni [Δ otagai-o doregurai itawari-a-oo-to] omotte-te] hosikatta-no
 they-Top [Yoko-Dat [e.o.-Acc how much care-Recip-YOO-C] to.think] wanted-Q
 ‘How nice did they want Yoko to think of Δ being *t* to each other?’
- (35)A: John_i-wa Taro-ni [Δ kare_i-no ie-ni ik-e-to] itta
 John-Top Taro-Dat [his house-to go-Imp-C] said
 ‘John_i told Taro_j to go to his_i house.’
- (36)A: Yoko-wa John_i-ni [Δ kare_i-no ie-ni ik-oo-to] omow-ase-ta
 Yoko-Top John-dat [his house-to go-YOO-C] think-Caus-Past
 ‘Yoko made John_i think of going to his_i house.’
- (37)B: Hiroshi-ni-mo da
 Hiroshi-Dat-also Cop
 ‘Hiroshi, as well.’

(33) and (34) show that the c-command condition and the ban on long distance control are respected with *wh*-in-situ placed within the mood clauses. (35)-(37) are examples relevant to the ellipsis test, which contain a third person pronoun coreferential with a matrix element inside a mood clause. When (37)B follows (35)A or (36)A, the elliptical utterance can only mean, respectively, the property of being told by John to go to John’s house applies to Hiroshi (as well as Taro), and the property of being made by Yoko to think of going to John’s house applies to Hiroshi (as well as John).

3 Split Control and the Exhortative Use of *-(y)oo*

3.1 Where Split Control is Licensed

Having established that decisive mood and imperative mood particles trigger OC, I would like to turn to split control in Japanese, which, to my knowledge, has not been discussed in the literature. As we will see, the following seems to be the case: that null subjects of embedded clauses containing the imperative particle *-ro/-e* never allow split control, whereas null subjects of embedded clauses containing the particle *-(y)oo* allow it under a certain interpretation. First, observe a minimal pair of examples in which imperative and *-(y)oo*-constructions are contrasted.

(38)a. * Taro-wa Hiroshi-ni [Δ otagai-o sonkeesi-a-e-to] itta/ meireisita
Taro-Top Hiroshi-Dat [e.o.-Acc respect-Recip-Imp-C] said/ ordered
lit. ‘Taro said to/ordered Hiroshi that Δ respect-IMP each other.’

b. Taro-wa Hiroshi-ni [Δ otagai-o sonkeesi-a-oo-to] itta/ teiansita
Taro-Top Hiroshi-Dat [e.o.-Acc respect-Recip-YOO-C] said/ proposed
lit. ‘Taro said/proposed to Hiroshi that Δ respect-YOO each other.’

(38)a and (38)b only differ with respect to the kind of mood particle attached to the embedded verb. The difference in meaning between these sentences can be made clearer by translating them into the versions with a direct quote. See (39)a and (39)b. The former is unacceptable.

(39)a. * Taro-wa Hiroshi-ni [kimi-wa otagai-o sonkeesi-a-e-yo!] to itta
Taro-Top Hiroshi-Dat [you-Top e.o.-Acc respect-Recip-Imp-SFP] C said
‘Taro said to Hiroshi: “Respect each other!”’

b. Taro-wa Hiroshi-ni [watasi-tati-wa otagai-o sonkeesi-a-imas-yoo] to itta/teiansita
Taro-Top Hiroshi-Dat [we-Top e.o.-Acc respect-Recip-Pol-YOO] C said/proposed
‘Taro said to Hiroshi: “Let’s respect each other.”’

Notice that the use of *-(y)oo* in (38)b and (39)b is, meaning-wise, different from the use of what appears to be the same particle in the decisive construction. The instance of *-(y)oo* found in these examples is associated with exhortation of a similar sort to that found with the English *let’s*-construction. Nakau (1973: 38-39) already observed that this particle is ambiguous between two

uses.

- (40)a. Taro-wa boku-no beeguru-o tabe-yoo-to keikakusita
Taro-Top my bagel-Acc eat-YOO-C planned
'Taro planned to eat my bagel.'
- b. Taro-wa Hanako-ni boku-no beeguru-o tabe-yoo-to teiansita
Taro-Top Hanako-Dat my bagel-Acc eat-YOO-C proposed
'Taro proposed to Hanako to eat my bagel.'

(40)a means that Taro had the plan to eat the actual speaker's bagel. The sentence is a subject control construction. (40)b roughly describes the situation in which Taro told Hanako: "Let's eat that guy's bagel", where "that guy" should be understood as the speaker of (40)b.

Recall that in section 2, we essentially followed Portner (2004) in characterizing the discourse function of the decisive as follows: it is to add the property denoted by the VP to the To-Do LIST of the speaker (of the reported speech). In the same vein, the function of the exhortative is to place the relevant property on the To-Do LIST of the addressee as well as that of the speaker of the reported speech (Portner and Zanuttini 2005 and references cited therein). Take *kaer-oo* 'let's leave' for example. The property of leaving is added to the addressee's To-Do LIST as well as the speaker's own To-Do LIST.

In the next subsection, I will show that examples like (38)b are an instance of split control rather than partial control; that is, that the embedded subject is plural.

3.2 Reciprocal and Reflexive Predicates

To argue that examples like (38)b involve split control, one needs to show that the predicates in (38)a and (38)b are plural predicates. Hoji (1997) observes that the Japanese reciprocal *otagai* can take split antecedents, citing examples like (41) (=Hoji's 9b with the glosses slightly modified):

- (41) Ieyasu_i-wa Nobunaga_j-ni [Singen-ga otagai_{i+j}-o home-tei-ta-to] tuge-ta

Ieyasu-Top Nobunaga-Dat [Shingen-Nom e.o.-Acc praise-Asp-Past-C] tell-Past
 ‘Ieyasu_i told Nobunaga_j that Shingen had been praising them_{i+j}.’

If Hoji is right, one might think that examples like those in (38) show very little because ‘each other’ itself does not require a plural subject. Curiously enough, when the embedded verb in (41) is reciprocalized, i.e. supplied with the verbal suffix *-aw*, the acceptability of the sentence drops dramatically.¹¹

(42) * Ieyasu-wa Nobunaga-ni [Singen-ga otagai-o home-at-teita-to] tuge-ta
 Ieyasu-Top Nobunaga-Dat [Shingen-Nom e.o.-Acc praise-Recip-Asp-Past-C] told
 Intended meaning: ‘Ieyasu_i told Nobunaga_j that Shingen had been praising them_{i+j}.’

The generalization seems to be that when *otagai* appears inside a VP whose head is morphologically reciprocalized with *-aw*, the reciprocal anaphor requires a local plural binder. If this is the case, the acceptability of examples like (38)b, where the reciprocalizer is present, suggests that the null embedded subject appearing in those examples is a plural noun phrase, taking the matrix subject and indirect object as its split antecedents.

Next, observe that when two local controllers are not available, the null subject of the *-(y)oo*-construction cannot support split antecedents (as Landau observes for English; see (6)).

(43) a. * Taro-wa Hiroshi-ni [[kare-ga [Δ otagai-o sonkeisi-a-oo-to]
 Taro-Top Hiroshi-Dat [[he-Nom [e.o.-Acc respect-Recip-YOO-C]
 {omotteiru/kessinsita}-koto]-o tugeta
 thinks/decided-C_{koto}]-Acc told
 Intended meaning: ‘Taro_i told Hiroshi_j that he_i {thought/ had decided} that they_{i+j} should respect each other.’

b. Taro_i-wa ootoo-ni [[kare_i-ga Hiroshi_j-ni [Δ _{i+j} otagai-o sonkeesi-a-oo-to]
 Taro-Top brother-Dat [[he-Nom Hiroshi-Dat [e.o.-Acc respect-Recip-YOO-C]
 itta/ teiansita-koto]-o tugeta
 said/ proposed-C_{koto}]-Acc told
 ‘Taro_i told his brother that he_i had said/proposed to Hiroshi_j to respect each other_{i+j}.’

Though the relevant examples are inevitably complicated, there is a clear contrast between these two

sentences. Given that Δ requires split antecedents here, the contrast follows if the null subject does not allow long distance antecedents. In the acceptable (43)b, there are two local controllers present in the intermediate clause, while in the unacceptable (43)a, there is only one such antecedent.

One other thing that one can use to keep the embedded predicate a plural predicate is reflexive predicates of a certain type. Consider the following pair of sentences that contain the expression *X-no kao-o sikameru* ‘screw up X’s face’:

- (44)a. Ieyasu-wa Nobunaga-ni [Shingen-ga {*otagai/*zibun-tati/✓zibun}-no kao-o
 Ieyasu-Top Nobunaga-Dat [Shingen-Nom e.o./self-Pl/self-Gen face-Acc
 sikameta-to] tugeta
 screwed.up-C] told
 lit. ‘Ieyasu told Nobunaga that Shingen had screwed up {*each other’s, *selves’, self’s} face
- b. Ieyasu-wa Nobunaga-ni [Shingen-to Yoshimoto-ga
 Ieyasu-Top Nobunaga-Dat [Shingen-and Yoshimoto-Nom
 {otagai/zibun-tati/zibun}-no kao-o sikameta-to] tugeta
 e.o./self-Pl/self-Gen face-Acc screwed.up-C] told
 lit. ‘Ieyasu told Nobunaga that Shingen and Yoshimoto had screwed up {each other’s, selves’, self’s} face.’

The reflexive verb phrase in question seems to require the possessive to be non-distinct from the subject with respect to person, number and gender, just like *crane one’s neck* in English. The reason for the unacceptability of the versions of (44)a with *otagai* ‘each other’ and *zibun-tati* ‘self-Pl’ is then that the embedded subject does not match the possessive, at least in number.¹²

Note incidentally that this matching effect can also be observed for cases where overt pronouns occupy the possessive position. The possessive position does not easily support overt pronouns like *kare* ‘he’ or *karera* ‘they’. But when we compare a case in which the subject of a reflexive predicate and the possessive match in gender and/or number with one in which they do not, a very clear contrast is obtained.

- (45) John-wa {a. *kanozyo-no/ b. ??kare-no} kao-o sikameta

John-Top her his face-Acc screwed up

‘John screwed up { *her, ??his } face.’

(46) John-to Bill-wa { a. *kare-no/ b. ??karera-no } kao-o sikameta

John-and Bill-Top his their face-Acc screwed up

‘John and Bill screwed up { *his, ??their } face.’

As indicated, the b-examples in (45) and (46) are far from perfect. This is probably because, as is common cross-linguistically, the possessive of inalienable possession nouns does not host overt pronouns easily (Kayne 1975 for French, Cheng and Ritter 1988 for Chinese, Yoon 1989 for Korean, Fujii 2000 for Japanese).¹³ It should be noted that when the possessive does not match the subject in gender and/or number, the sentences become hopeless, as in (45)a and (46)a.

Keeping these in mind, consider the following pair, which shows that controlled exhortative subjects allow a plural possessive but controlled imperative ones do not:

(47)a. * John-wa Bill-ni [Δ {otagai/zibun-tati}-no kao-o sikame-ro-to] itta/meireisita

John-Top Bill-Dat [e.o./self-PI-Gen face-Acc screw up-Imp-C] said/ordered

lit. ‘John said to/ordered Bill to screw up { each other’s, selves’ } face.’

Intended meaning ≈ ‘John said to Bill: “Screw up our own face!”

b. John-wa Bill-ni [Δ {otagai/zibun-tati}-no kao-o sikame-yoo-to] itta/teiansita

John-Top Bill-Dat [e.o./self-PL-Gen face-Acc screw up-YOO-C] said/proposed

lit. ‘John said to/proposed to Bill to screw up their face.’

≈ ‘John said to Mary: “Let’s screw up our own face!”

(48)a. * John-wa Bill-ni [Δ karera-no kao-o sikame-ro-to] itta/meireisita

John-Top Bill-Dat [their-Gen face-Acc screw up-Imp-C] said/ordered

lit. ‘John said to/ordered Bill that Δ screw up-Imp their face.’

b.??John-wa Bill-ni [Δ karera-no kao-o sikame-yoo-to] itta/teiansita

John-Top Bill-Dat [their face-Acc screw up-YOO-C] said/proposed

lit. ‘John said to/proposed to Bill to screw up-YOO their face.’

≈ ‘John said to Mary: “Let’s screw up our own face!”

The contrast between (48)a and (48)b suggests the following: the null subject of the imperative resists

being bound by the matrix subject and the matrix indirect object [(48)a], whereas that of the *-(y)oo*-clause does not [(48)b]. Hence, split control is permitted in the latter sentence, but not in the former.

The reflexive construction, just like the reciprocal construction, helps us show that the null subject of exhortatives requires local antecedents when its antecedent has to be split.

(49)a. * John_i-wa Bill-ni [[kare_i-ga [Δ {otagai/zibun-tati}-no kao-o sikame-yoo-to]
 John-Top Bill-Dat [[he-Nom [e.o./self-Pl-Gen face-Acc screw.up-YOO-C]
 {omotteiru/kessinsita}-koto]-o tugeta
 thinks/decided-C_{koto}]-Acc told

‘John_i told Bill that he_i {thought of respecting/ had decided to respect} each other.’

b. John_i-wa ootoo-ni [[kare_i-ga Bill_j-ni [Δ_{i+j} {otagai/zibun-tati}-no kao-o
 John-Top brother-Dat [[he-Nom Bill-Dat [e.o./self-Pl-Gen face-Acc
 sikame-yoo-to] itta/teiansita-koto]-o tugeta
 screw.up-YOO-C] said/proposed-C_{koto}]-Acc told

‘John_i told his brother that he_i had said/proposed to Bill_j to screw up their_{i+j} own face.’

The unacceptability of (49)a can be accounted for if the indirect object of the highest clause *Bill* cannot control Δ across the intermediate clause. Only ‘he’ is a legitimate controller. By contrast, example (49)b is expected to be grammatical since the intermediate clause has two controllers that together satisfy the requirement that the reflexive VP have a plural subject.

We have studied reciprocalized predicates and reflexive predicates with plural possessives, for which the controlled subject is forced to be plural. In both circumstances, the sentence is grammatical only if two local controllers are available and if the particle *-(y)oo*, though not the imperative particle, is used. It is evident that split control is allowed when the control clause is associated with the exhortative meaning and prohibited when it is associated with the directive meaning.

(50) Split control in mood clauses \Leftrightarrow mood = exhortative

Before proceeding to the next section, let us see if diagnostic properties of OC other than the ban on long distance control (cf. (43) and (49)) hold for embedded exhortative clauses. The null subject of

the *-(y)oo*-clause that has split antecedents does not support strict interpretation under ellipsis. Observe the pair of examples in (51) and (52), where the *-(y)oo*-construction and a finite complement construction are contrasted.

(51)A: Taro-wa Hiroshi-ni [Δ otagai-o tasuke-a-oo-to] teiansita
 Taro-Top Hiroshi-Dat [e.o.-Acc help-Recip-YOO-C] proposed
 ‘Taro proposed to Hiroshi to help each other.’

(52)A: Taro_i-wa Hiroshi_j-ni [Δ_{i+j} otagai-o tasuke-a-u-bekida-to] teiansita
 Taro-Top Hiroshi-Dat [e.o.-Acc help-Recip-Pres-should-C] proposed
 ‘Taro proposed to Hiroshi that they should help each other.’

(53)B: Yoko-ni-mo da
 Yoko-Dat-even Cop
 ‘Taro proposed to Yoko also that {a. Taro and Yoko (sloppy), b. Taro and Hiroshi (strict)} should help each other.’

B’: Hanako-mo da
 Hanako-even Cop
 ‘Hanako also proposed to Hiroshi that {a. Hanako and Hiroshi (sloppy), b. Taro and Hiroshi (strict)} should help each other.’

(53)B has the indirect object as the remnant of ellipsis. While the agent of the ‘helping-each other’ event cannot be Taro and Hiroshi when the sentence is continued from (51)A [(53)B-b], this interpretation becomes fine when it is continued from (52)A. (51)B’ is a case in which the subject of *teiansu(ru)* ‘propose’ is an ellipsis remnant. Again, the strict interpretation of the null subject [(53)B’-b] is not allowed with the *-(y)oo* construction [(51)A] being an ellipsis antecedent, whereas it is allowed with the *should* construction [(52)A] being an ellipsis antecedent. Thus split-controlled null subjects behave in the same way as uniquely controlled OC PRO with respect to sloppy/strict identity.

The following example shows that a non-commanding antecedent cannot be coindexed with the null subject that has split antecedents without yielding unacceptability.

(54) # Yamada-kyoozyu-no hisyo-ga Tanaka-kyoozyu-ni

Prof. Yamada-Gen secretary-Nom Prof. Tanaka-Dat

[Δ otagai-o osie-a-oo-to] itta

[e.o.-Acc teach-Recip-YOO-C] said

‘Prof. Yamada’s secretary told Prof. Tanaka to teach each other.’

≈ ‘Prof. Yamada’s secretary said to Prof. Tanaka: “Why don’t we teach each other?”’

This example is pragmatically biased towards an interpretation in which a professor and the other professor teach each other. Suppose Yamada, a professor of linguistics, thinks that she needs to learn psychology for writing a grant proposal and also believes that Tanaka, a male professor of psychology, wants to learn linguistics from her. She asked her secretary to tell him about her idea. The sentence, however, only yields the interpretation in which the persons who teach each other are the secretary and Prof. Tanaka, as indicated. This means that the indexation given in (55)a is prohibited, while (55)b is allowed.

(55)a. * Prof. Yamada_i’s secretary_j told Prof. Tanaka_k [Δ_{i+k} to teach each other]

b. Prof. Yamada_i’s secretary_j told Prof. Tanaka_k [Δ_{j+k} to teach each other]

If (55)a were allowed by the grammar, no pragmatic anomaly should occur in (54). The data suggest that the representation in (55)a must be excluded. This is readily expected if Δ is OC PRO, whose antecedent(s) must c-command the null subject. The pragmatic anomaly disappears when the complement *-(y)oo*-clause is replaced by a finite complement.

(56) Yamada-kyoozyu_i-no hisyo_j-ga Tanaka-kyoozyu_k-ni

Prof. Yamada-Gen secretary-Nom Prof. Tanaka-Dat

[Δ_{i+k} otagai-o osie-a-u-bekida-to] itta

[e.o.-Acc teach-Recip-Prs-should-C] said

‘Prof. Yamada’s secretary told Prof. Tanaka that they should teach each other.’

≈ ‘Prof. Yamada’s secretary said to Prof. Tanaka: “You and she should teach each other.”’

The data presented in (51)-(56) all argue in favor of split control being OC.

In summary, this section showed that the exhortative construction allows split control and that the construction is an instance of OC. Recall Landau’s remark, which was cited in the quick review of

English facts given in section 1. He notes that “[u]nlike *propose* and *ask*, *recommend* and *order* do not allow split control.” (Landau 2000: 55) It is plausible that *propose* and *ask* can be associated with the exhortative mood but *recommend* and *order* cannot be. If so, the same thing may be happening in both languages.

4 Split Control and the PMD

4.1 A Gap in the Mood Paradigm

There is one pattern of indexation that has not been mentioned in the above discussion of embedded mood constructions. Consider (57), which schematically represents the mood paradigm.

- | | | | |
|--------|---|------------------|-------------|
| (57)a. | $NP_i NP_j [_{CP} \Delta_j \dots Mood^\circ C^\circ]$ | say/order | imperative |
| b. | $NP_i [_{CP} \Delta_i \dots Mood^\circ C^\circ]$ | think/decide/say | decisive |
| c. | $NP_i NP_j [_{CP} \Delta_{i+j} \dots Mood^\circ C^\circ]$ | say/propose | exhortative |
| d. | $NP_i NP_j [_{CP} \Delta_i \dots Mood^\circ C^\circ]$ | V | promissive |

The embedded imperative given in (57)a is straightforward. The patterns given in (57)b and (57)c correspond to examples like (40)a and (40)b, respectively. What has not been examined is the pattern in (57)d, where the matrix predicate takes an indirect object, and the null subject is controlled by the matrix subject and not by the matrix indirect object: The mood meaning associated with this pattern is perfectly imaginable. Its conventional force would be to add the relevant property denoted in the embedded clause, e.g. the property of screwing up one’s own face, to the speaker’s To-Do LIST and crucially not to the addressee’s. Let’s call the unattested use of $-(y)oo$ the ‘promissive’ use. (The term is borrowed from Portner 2004, but it is used in a more specific way here than in Portner’s work. See

footnote 5.) I characterize the promissive differently from the decisive in that the former necessarily involves both the speaker's To-Do LIST and the addressee's, while the latter only involves the speaker's.

Having introduced the hypothetical mood meaning that *-(y)oo* may be associated with, let us determine whether indexation of the type (57)d is actually permitted or not, i.e. whether or not the promissive use of *-(y)oo* is possible. I propose to use the possessive construction discussed in section 3.2. With the verb phrase *X-no kao-o sikameru* 'screw up X's face', the value of X signals the antecedent for its null subject. By manipulating gender of the possessive, we can force Δ to be bound by the matrix subject but not by the matrix indirect object. Bearing this in mind, consider (58) (an example of the same type as (48)b).

- (58) * Taro-wa Hanako-ni [Δ kare-no kao-o sikame-yoo-to] itta/teiansita
 Taro-Top Hanako-Dat [his face-Acc screw up-YOO-C] said/proposed
 lit. 'Taro {said to, proposed to} Hanako to screw up his face.'

The sentence is unacceptable. When 'his face' is replaced with 'their face', it becomes considerably better.

- (59) ?? Taro-wa Hanako-ni [Δ karara-no kao-o sikame-yoo-to] itta/teiansita
 Taro-Top Hanako-Dat [they-Gen face-Acc screw up-YOO-C] said/proposed
 lit. 'Taro {said to, proposed to} Hanako that Δ screw up-YOO their face.'
 ≈ 'Taro said to Hanako: "Let's screw up our own face!"'

(To obtain a perfect sentence with the same interpretation, *otagai* 'each other' or *zibun(-tati)* 'self-Plural' needs to be substituted for *karera* 'they'; see (45)-(46).) The minimal difference here lies in whether the indirect object participates in OC or not, that is, the difference between the schematic representations given in (57)c and (57)d. The contrast between (58) and (59) therefore suggests that no promissive mood marker exists in Japanese.

The point can be confirmed in another way. The effect found in (60) looks like an effect of the Condition B type. A pronoun is too close to its antecedent. If subject control were to be legitimate in

the presence of the ‘intervening’ object that does not control PRO, (60) should be good under that interpretation. But it is not.

(60) * Taro-wa Yoko-ni [Δ kanozyo-o sonkeisi-yoo-to] itta
 Taro-Top Yoko-Dat [her-Acc respect-YOO-C] said
 lit. ‘Taro said to Yoko [Δ to respect her].’

cf. Taro-wa [Δ kanozyo-o sonkeisi-yoo-to] omotta
 Taro-Top [her-Acc respect-YOO-C] thought
 lit. ‘Taro thought [Δ to respect her].’

The fact that the sentence is unacceptable again tells us that subject control over an indirect object is not allowed. The present situation can be summarized as follows:

- (61)a. NP NP [$_{CP}$ [Δ ... Mood $^\circ$] C $^\circ$] V
 i. imperative possible (object control)
 ii. exhortative possible (split control)
 iii. promissive *not possible* (subject control over indirect object)
- b. NP [$_{CP}$ [Δ ... Mood $^\circ$] C $^\circ$] V
 iv. decisive possible (subject control)

Then, the following generalization emerges:

(62) In embedded mood constructions, the complement subject can be controlled by the matrix subject across the indirect object only when it is controlled by the indirect object as well.

The question is, why should this be so? My suggestion is that the PMD is at stake here. In other words, the indirect object counts as an intervener only when it has no control relation with the complement subject.

(63) $NP_i NP_j [_{CP} PRO_i \dots Mood^\circ C^\circ] V$


The PMD, or minimality, provides an answer to the question of why there is no mood marker that is available in environment (63).

It is interesting to note that the verb *yakusokusu(ru)*, the Japanese counterpart of *promise*, cannot

take a *-(y)oo*-clause as its complement, as pointed out by Watanabe (1996).

(64)a. * John-wa Mary-ni/to [Δ kare-no kao-o sikame-yoo-to] yakusokusita
John-Top Mary-Dat/with [his face-Acc screw.up-YOO-C] promised

b. ? John-wa Mary-ni/to [Δ kare-no kao-o sikame-ru-koto]-o yakusokusita
John-Top Mary-Dat/with [his face-Acc screw.up-Prs-C_{koto}]-Acc promised
'John promised Mary to screw up his face.'

The b-example, which is a little degraded because of the presence of the overt pronoun *kare* in the possessive position, shows that the embedded clause can be headed by the nominalizing complementizer *-koto*, which follows the present tense form of the verb.¹⁴

The contrast given in (64) can be accounted for if we make three assumptions: (i) that mood clauses headed by the postpositional complementizer *-to*, unlike *-koto*-clauses, resist Case marking;¹⁵ (ii) that 'promise' must assign objective Case, and (iii) that minimality is respected. Under these assumptions, the indirect object in (64)a must be an NP if, generally, a PP cannot obtain Case. Then (64)a must receive the analysis shown in (63), and therefore the sentence can be excluded as a minimality violation. On the other hand, (64)b can have a derivation in which the indirect object is analyzed as a PP. This is so because objective Case can be assigned to the nominalized CP in this case. If the PP does not cause a minimality violation, the only slightly marginal status of the sentence is expected.¹⁶ If we do not assume the PMD, we seem to have to say that Japanese accidentally does not have a mood marker that is available for the promissive mood, even though the language has a marker for the decisive (which is similar to the promissive in that both are associated with the effect of placing a property on the speaker's To-Do LIST). I do not know at this point how to test the claim that the gap we saw in the paradigm in (57) is an accidental gap. Thus, it seems useful to assume that the above account is correct since, even if it proves to be wrong eventually, it could shed light on the theory of controller choice and the mood system.

In the next section, I propose one analysis to explain the remaining part of the generalization in

(62); that is, subject control is possible when the object also controls PRO, which can be represented as in (65).

(65) $NP_i NP_j [_{CP} PRO_{i+j} \dots Mood^\circ C^\circ] V$

I look for a way to make the derivation for split control sentences avoid violations of minimality.

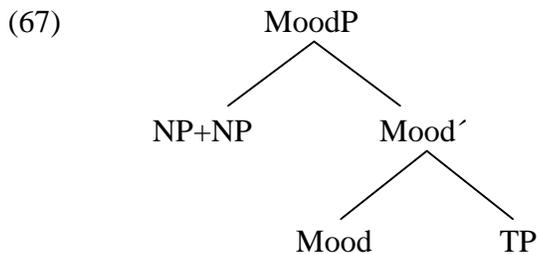
4.2 An Analysis of Split Control

Landau (2000) takes the position that PRO can in principle be bound by two antecedents. He seems to claim, as we saw earlier, that the fact that split control is prohibited in cases we call embedded imperatives is reduced to incompatibility between the meaning of higher verbs and the interpretation of the embedded subject, namely PRO. He notes that “[w]here split control is impossible with certain OC verbs (e.g. *encourage*), there seem to be plausible pragmatic reasons for that. (p.31).”

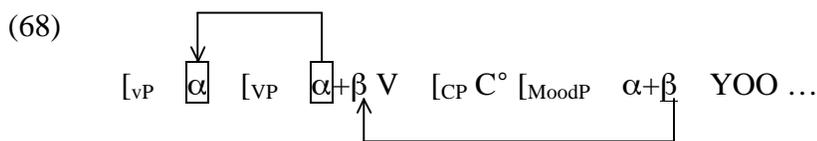
At first blush, this kind of account does not seem to be available when we use the PMD to account for the absence of the promissive. The ‘split control’ configuration arguably violates the minimality principle. In (66), repeated from (65), PRO is controlled by NP_i , which is not a closer antecedent.

(66) $NP_i NP_j [_{CP} PRO_{i+j} \dots Mood^\circ C^\circ] V$

I would like to suggest that one way to make things easier is to appeal to the movement theory of control (Bowers 1973, O’Neil 1997, Hornstein 1999, 2001, 2003, Polinsky and Potsdam 2006, Boeckx and Hornstein 2006, among others). The idea is that, under the movement theory, if the matrix subject does not move over the indirect object, the PMD can be satisfied in such a derivation. To do so, I propose that two NPs are allowed to occur in the specifier of $-(y)oo$. The idea can be illustrated by (67):



The seemingly unusual structure given in (67) makes it possible for the derivation to proceed without violating minimality in tandem with a few other technical assumptions. The proposed derivation is as follows:



In this derivation, α and β are conjoined, and the conjoined elements move to Spec,MoodP from their base position. One of the conjuncts (say, β) then moves to the indirect object position of the matrix clause to check a θ -role feature of V, pied-piping the other conjunct, as in (68). Finally, α moves up to Spec,vP, checking the external θ -role feature of v .

This proposal relies on at least three assumptions that deserve one comment. First, it essentially assumes that at least a certain type of plural noun phrase can be formed by a conjunction in syntax. Schlenker (2002) proposes that variables are conjoined in syntax, citing the following example to argue that *we* is partially bound:

(69) Each of my colleagues is so difficult that at some point or other we've had an argument

The informal paraphrase of the meaning of his example would be: For each of the speaker's colleagues x , x is so difficult that the speaker and x had an argument (See Stockwell et al. 1975, Lasnik 1976 for relevant classic observations). The pronoun *we* is analyzed as 'I+x' in the relevant interpretation. See also Kayne 2002, who hints at the possibility of treating bound plural pronouns as combined traces of moved split antecedents.¹⁷

The second assumption is concerned with the minimality issue. I assume that when they form a

unit, α and β must be “equidistant”. Namely, α should not block movement of β in the first movement (pied-piping α), nor should β block movement of α in the second movement in (68). The movement theory of control implies that movement of “ $\alpha+\beta$ ” must be motivated by the θ -role feature checking of β , because if “ $\alpha+\beta$ ” obtains the Theme role, the wrong interpretation would result. So we need to assume that α is pied-piped when β moves to the matrix clause.

Finally, a comment on movement of α to the specifier of ν P seen in (68) is in order. The movement looks like extraction from a derived position. It is often claimed in the literature that extraction out of a moved element is prohibited (Takahashi 1994, Nunes and Uriagereka 2000, Lasnik 2003, among others). Notice that this view of extraction is not only at odds with the particular analysis of split control that I am considering. Any theory in which movement into a theta-position is allowed faces a potential problem. Based on a fact pointed out by Chomsky (1973), Runner (2006) observes that a problem for a movement theory of control is posed by the acceptability of extraction out of a controller.

(70) Which famous person did Martha persuade [a friend of t] to sign the program?

The logic is that if extraction out of a moved element is prohibited, then sentences like (70) should not be allowed. So, what proponents of a movement theory might have to say is that the condition on extraction in question should be a Condition on Extraction Domains of the Huang type, rather than a condition of the Takahashi type. Namely, domains of lexical heads do not prohibit sub-extraction but those of functional heads do.

Armed with these assumptions, one of the central facts under consideration, i.e. that split control is allowed, can be accounted for under the movement theory of control. This is precisely because there is no stage of the derivation in which α or β asymmetrically c-commands the other when movement takes place. This way, the proposed analysis accounts for the existence of split control and the non-existence of the promissive marker at the same time.

Let's turn to one remaining question. Why don't imperative null subjects support split antecedents?

(47)a is repeated.

- (71) *John_i-wa Bill_j-ni [Δ {otagai/zibun-tati}_{i+j}-no kao-o sikame-ro-to] itta/meireisita
John-Top Bill-Dat [e.o./self-PI-Gen face-Acc screw up-Imp-C] said/ordered
lit. 'John said to/ordered Bill to screw up {each other's, selves'} face.' \approx 'John said to Mary:
"Screw up our own face!"

I do not have a definitive answer to this question. I would rather suggest one speculation. Suppose that the semantics and pragmatics of mood are organized in such a way that they 'read off' the structures that are yielded by syntax. Subject control structures are interpreted as decisive mood clauses, split control structures are interpreted as exhortative mood clauses, and object control structures are interpreted as imperative mood clauses. To put it differently, it is not necessary on this view to posit mood heads such as Decisive, Exhortative, or Imperative to encode the differences among these moods (see Portner 2004, Zanuttini and Portner 2005 for relevant discussion; cf. Han 2000).¹⁸ If the present idea is correct, the question under consideration can no longer be formulated.

4.3 A Note on the Root Case

We started the discussion of mood particles in Japanese with the following examples (repeated from

(8)):

- (72)a. (boku-wa) beeguru-o tabe-yoo
I-Top bagel-Acc eat-YOO
'I'll eat bagels.'
- b. (kimi-wa) beeguru-o tabe-ro
You-Top bagel-Acc eat-Imp
'You eat bagels!'

An example of root exhortatives is added.

- (73) (watasi-tati-wa) beeguru-o tabe-yoo
 we-Top bagel-Acc eat-YOO
 ‘Let’s eat bagels.’

Not surprisingly, NPs that do not refer to discourse participants can never be subjects of these constructions.

- (74) * aitu-wa beeguru-o tabe-{yoo/ro}
 that guy-Top bagel-Acc eat-YOO/Imp

What is curious about these non-embedded cases is that the effects of the PMD found in the embedded cases can be found here as well. We observed in section 4.1 that the decisive interpretation of *-(y)oo* disappears when the higher verb takes an indirect object, which we took to be an instance of the PMD effect. It seems correct that what we call the decisive mood in Japanese, when it appears in a root, requires that there be no addressee participating in the relevant discourse. Namely, decisive sentences are always monologues of some sort. Suppose that Ana is telling Bill that she will leave his party in a couple of minutes and that she is taking for granted that he, being the host of the party, will stay there. It is very odd for her to say to Bill: *kaer-oo* ‘leave-YOO’. Ana may utter the same sentence felicitously when she is alone at the party or when the hearers are just side-participants of the discourse, who are not “the one for whom the speaker most directly designs his utterances” in Potsdam’s words (Potsdam 1996/1998: 166). When an addressee is present, the utterance can only be understood exhortative: Let’s leave. When the existence of the addressee is intended by the speaker, the subject of the *-(y)oo* sentence must be the inclusive ‘we’, whose reference includes the addressee. In other words, the root sentence *kaer-oo* cannot be the promissive, which would presuppose the existence of addressee(s) and would place the property of leaving only on the speaker’s To-Do LIST.

Given the present discussion of control constructions involving mood, we are led to the hypothesis that mood clauses in roots are root infinitives of some sort and that projections that support indexicals like ‘you’ are located somewhere in the relevant clause structure, along the lines of Portner and

Zanuttini (2005); cf. Ross 1970, Speas and Tenny 2003, Tenny 2006. In the present case, ‘Speaker Phrase’ and ‘Addressee Phrase’ are located above Mood Phrase, and it must be the case that Spec,AddresseeP is closer to the Spec,MoodP than the Spec,SpeakerP is. Namely, the movement of an indexical element to Spec,SpeakerP cannot skip the Spec,AddresseeP. (This entails that decisive sentences like (72)a lack AddresseeP.) If the specifiers of these phrases can only support indexicals, then the person restriction found in examples like (74) is readily expected. If I am right that Case is not available inside the domain of MoodP, it is possible to maintain that the motivation for short movement of indexicals is Case in the root constructions. NPs like *aitu* ‘that guy,’ which do not undergo movement to the specifier of SpeakerP or AddresseeP, fail to have their Case licensed. It is also worth stressing that these functional heads should not be available in embedded clauses. If they were, the proposed analysis of control into mood clauses could not be instantiated because the embedded AddresseeP/SpeakerP would trap the embedded subject in the complement clause. They only occur in roots.

5 Conclusions

This chapter discussed split control and the PMD effect based on facts concerning Japanese mood constructions. It was observed that split control is systematically allowed in exhortative control clauses and not in other clauses and that no subject control mood construction with the matrix indirect object exists in the language. Semantic and pragmatic considerations do not seem to help because the promissive mood seems to be coherent on semantic and pragmatic grounds. Taking this gap in the paradigm as something for a theory of control to explain, we appealed to the PMD (or the minimality condition on A-movement under the movement theory of control) and derived the absence of the ‘promissive’ mood particle in the language. The analysis led us to the hypothesis that minimality is

respected in cases where split control is allowed, i.e. in embedded exhortative constructions. I suggested that a plural subject can be a conjunction of two NPs and that they move to argument positions of the matrix clause in a way that does not violate minimality. Consequently, the impossibility of split control in embedded imperative constructions cannot be a matter of syntax. I suggested that whether a mood clause is imperative, exhortative or decisive is determined by the result of the derivation of that mood clause, recognizing that the nature of the interpretive process needs to be made concrete in future research. In a nutshell, the difference among these moods should not be directly encoded as such in syntax if the absence of promissive clauses is reduced to the PMD. I hope to have shown that such an approach opens up a new way of thinking about mood systems of the sort that languages like Japanese have. Further investigations are needed.

Notes

* This chapter is a slightly revised version of Chapter 3 of my doctoral dissertation. I benefited from useful discussions with Pranav Anand, Keiko Murasugi, Paul Pietroski, and Masaya Yoshida. I want to express my appreciation to Cedric Boeckx, Norbert Hornstein, Jeff Lidz, Juan Uriagereka, and Howard Lasnik, from whom I received helpful comments on earlier versions of the paper. I'd also like to thank the two editors, Norbert Hornstein and Masha Polinsky, for their hard work in editing the volume. All errors are mine.

¹ It looks as though sentences like (1)a violate the PMD as well, because PRO is controlled by the matrix subject, which is not the closest controller. As shown in section 3.1, the Japanese equivalent of this type of example is also unacceptable. I will suggest in section 4 that at least the effect found in Japanese is not a PMD violation. Thanks are due to Howard Lasnik (personal communication) for bringing this point to my attention.

² See Martin (1996: 192) for discussion of a different pattern of judgments. I assume with Landau and Hornstein that split control and partial control differ in the way presented in the text.

³ *-yoo* and *-ro* follow vowel-final stems, whereas *-oo* and *-e* follow consonant-final stems. The imperative morpheme following consonant-final stems can be realized as *-yo* in a formal register.

⁴ The term 'intensive', rather than 'decisive', was used in an earlier version of the present work. Nakau

1973 calls this use of *-(y)oo* ‘volitional’.) Examples like (8)a are essentially internal monologue-like utterances even though the utterer might be aware of being overheard, as will be briefly mentioned in section 4.3. ‘Decisive’ seems to me to fit with this characteristic of the relevant use of *-(y)oo* slightly better than ‘intensive’.

⁵ Portner and Zanuttini use the term ‘promissive’, which covers what we call ‘decisive’ here. I use ‘decisive’ here in order to save the term ‘promissive’ for a slightly different case, which will be discussed in section 4.

⁶ As Nakau (1973) observes, negative imperatives contain the present tense morpheme (which cannot be altered with the past tense).

(i) John-wa Mary-ni [Δ kare-no beeguru-o tabe-ru-na-to] itta
 John-Top Mary-Dat [he-Gen bagel-Acc eat-Prs-Neg.Imp-C] said
 ‘John told Mary not to eat his bagel.’

It is possible to take this to indicate that nonfinite TP is the complement of the Mood head and generalize this analysis to all the mood clauses.

⁷ See Landau 2000, Hornstein 1999, 2001, 2003, and the references cited there for more detailed information on the nature of these diagnostics. See also Fujii (2006: Chapter 2), where the relevant data in Japanese are discussed extensively.

⁸ It might be the case that the dative NP is the ‘deep’ object of *-sase* and that the deep subject of ‘think’ is PRO. But this does not affect the observation made here. The reader could read “dative NP” in the text as “the PRO controlled by that dative NP”.

⁹ This possibility becomes an issue here precisely because the Japanese quotative complementizer *-to* occurs in direct quote complements as well as in indirect quote complements, unlike English *that*. See Shibatani (1978) for an overview of basic properties of the quotative complementizer, and also Motomura 2003 for relevant discussion. Note incidentally that we ignore instances of quotes called “quotational intrusion” such as (i) (from Schlenker 2003).

(i) My three-year old son believes that I am a ‘philosopher’.

See Kuno 1988 for Japanese data of this kind.

¹⁰ See Anand and Nevins 2004, Schlenker 2003, and references cited in them for analyses of so-called shifted indexicals. Japanese indexicals like *ore* ‘I’ do not undergo indexical shift, as shown by the ungrammaticality of (27).

¹¹ See Nakau (1973: 75-76), Ishii (1989), Tonoike (1991) and Nakao (2003) for data concerning the

reciprocalizer *-aw* and analyses of its syntax and semantics.

¹² Reflexive predicates of this kind include *X-no hana-o kamu* ‘blow X’s nose’, *X-no te-o ageru* ‘raise X’s hand (conduct violence)’, *X-no me-o hikaraseru* ‘keep X’s eye (on something)’, and so on. The reason why *zibun* is ok in both examples may be that the reflexive is underspecified in number. Also, note that *otagai* here means ‘their own’.

¹³ This obviation effect (cf. Bouchard 1983, 1984, Lebeaux 1984) may indicate that inalienable possession constructions involve OC. See Pesetsky (1995), who suggests an idea along these lines.

¹⁴ Note incidentally that it is not the case that *yakusokusu(ru)* ‘promise’ never takes a *yoo*-clause. When the downstairs predicate is a plural predicate, it is allowed under the exhortative mood interpretation of *-(y)oo*.

- (i) John-wa Mary-to [Δ (boku-ga kita-ra) otagai-no kao-o sikame-yoo-to]
John-Top Mary-with [I-Nom came-Cond e.o.-Gen face-Acc screw.up-YOO-C]
yakusokusita (yooda)
promised seems

lit. ‘(It seems that) John promised Mary to screw up each other’s face (when I come).’

‘(It seems that) John agreed with Mary to screw up their own face (when I come)’

In this case, the indirect object cannot be marked with dative. See Nakau 1973:74-75, who made an observation quite similar to this.

¹⁵ Mood markers cannot appear in *-koto*-clauses. See Bhatt and Yoon (1991) for discussion.

¹⁶ Verbs like *tika(u)* ‘vow’ behave in exactly the same way as ‘promise’.

¹⁷ A similar but different idea is found in Vassilieva and Larson (2005), who propose an analysis of the Russian plural pronoun construction. Consider first (69) (cited from Vassilieva and Larson 2005: 101).

- (i) My projdēm domoj
we go-Fut home
‘We/*I will go home’

My is first person plural, as indicated in the English translation of the sentence. However, when the plural pronoun appears with a comitative phrase ‘with NP’, it shows an interesting property.

- (ii) My s Ivanom nenavidim brokkoli
we with Ivan hate-1st Pl broccoli
'Ivan and I hate broccoli'

Here 'we + Ivan' comes to mean 'Ivan and I'. To account for this curious fact, Vassileva and Larson propose that plural pronouns take a comitative phrase as their complement and that the first plural pronoun *my* 'we' is semantically interpreted as 'I+__', where __ indicates the slot that is filled with the value of the complement of the preposition *s* in semantics.

¹⁸ If this is the case, verbs should not select these mood clauses in syntax. This is so because there is no such clause as [imperative] or [decisive] in syntax; cf. Landau 2000, 2004 for a theory of control in which selection plays a significant role.

References

- Anand, Pranav & Nevins, Andrew. 2004. Shifty operators in changing contexts. In *Proceedings of SALT 14*, K. Watanabe & R. B. Young (eds), 20-37. Ithaca, NY: CLC Publications.
- Bhatt, Rakesh Mohan & Yoon, James Hye-Suk. 1991. On the composition of COMP and parameters of V2. In *Proceedings of the 10th West Coast Conference on Formal Linguistics*, D. Bates (ed), 41-52. Stanford, CSLI Publications.
- Boeckx, Cedric & Hornstein, Norbert. 2003. Reply to "Control is not movement". *Linguistic Inquiry* 34: 269-280.
- Boeckx, Cedric & Hornstein, Norbert. 2004. Movement under control. *Linguistic Inquiry* 35: 431-452.
- Boeckx, Cedric & Hornstein, Norbert. 2006. The virtues of control as movement. *Syntax* 9: 118-130.
- Bouchard, Denis. 1983. The avoid pronoun principle and the elsewhere principle. In *Proceedings of NELS 13*, P. Sells & C. Jones (eds), 29-36. Amherst, Mass.: GLSA.
- Bouchard, Denis. 1984. *On the Content of Empty Categories*. Dordrecht: Foris.
- Bowers, John. 1973. The Theory of Grammatical Relations. Doctoral dissertation, MIT.
- Cheng, Lisa Lai-Shen & Ritter, Elizabeth. 1987. A small clause analysis of inalienable possession in Mandarin and French. In *Proceedings of NELS 18*, J. Blevins & J. Carter (eds), 65-78. Amherst, Mass.: GLSA.
- Chomsky, Noam. 1973. Conditions on transformations. In *A Festschrift for Morris Halle*, S. Anderson & P. Kiparsky (eds), 232-286. New York: Holt Rinehart & Winston.
- Culicover, Peter W. & Jackendoff, Ray. 2001. Control is not movement. *Linguistic Inquiry* 32: 493-511.
- Culicover, Peter W. & Jackendoff, Ray. 2005. *Simpler Syntax*. New York: Oxford University Press.
- Davies, William D. & Dubinsky, Stanley. 2004. *The Grammar of Raising and Control. A Course in Syntactic Argumentation*. Oxford: Blackwell.
- Franks, Steven & Hornstein, Norbert. 1992. Secondary predication in Russian and proper government of PRO. In *Control and Grammar*, R. Larson, S. Iatridou, U. Lahiri & J. Higginbotham (eds), 1-50. Dordrecht: Kluwer.
- Fujii, Tomohiro. 2000. Multiple nominative constructions and their implications. In *Osaka University Working Papers in English Linguistics 5*, S. Kawakami & Y. Oba (eds), 1-47. Osaka: Osaka University.
- Fujii, Tomohiro. 2006. Some Theoretical Issues in Japanese Control. Doctoral dissertation, University of Maryland.

- Han, Chung-Hye. 1998. The Structure and Interpretation of Imperatives. Mood and Force in Universal Grammar. Doctoral dissertation, University of Pennsylvania. [Published by Garland, New York, 2000.]
- Hasegawa, Nobuko. 1984-85. On the so-called 'zero pronouns' in Japanese. *The Linguistic Review* 4: 289-341.
- Hoji, Hajime. 1990. Theories of Anaphora and Aspects of Japanese Syntax. Ms., University of Southern California.
- Hoji, Hajime. 1997. *Otagai*. Ms., University of Southern California.
- Hornstein, Norbert. 1999. Movement and control. *Linguistic Inquiry* 30: 69-96.
- Hornstein, Norbert. 2001. *Move! A Minimalist Theory of Construal*. Malden, Mass.: Blackwell.
- Hornstein, Norbert. 2003. On control. In *Minimalist Syntax*, R. Hendrick (ed), 6-81. Malden, Mass.: Blackwell.
- Hornstein, Norbert & Lightfoot, David. 1987. Predication and PRO. *Language* 63: 23-52.
- Ishii, Yasuo. 1989. Reciprocal predicates in Japanese. In *Proceedings of ESCOL 6*, 150-161.
- Kayne, Richard S. 1975. *French Syntax: The Transformational Cycle*. Cambridge, Mass.: MIT Press.
- Kayne, Richard S. 2002. Pronouns and their antecedents. In *Derivation and Explanation in the Minimalist Program*, S. D. Epstein & T. D. Seely (eds), 133-166. Oxford: Blackwell.
- Koster, Jan. 1984. On binding and control. *Linguistic Inquiry* 15: 417-459.
- Koster, Jan & May, Robert. 1982. On the constituency of infinitives. *Language* 58: 116-143.
- Kuno, Susumu. 1988. Blended quasi-direct discourse in Japanese. In *Papers from the Second International Workshop on Japanese Syntax*, W. J. Poser (ed), 75-102. Stanford: CSLI Publications.
- Landau, Idan. 2000. *Elements of Control: Structure and Meaning in Infinitival Constructions*. Dordrecht: Kluwer.
- Landau, Idan. 2003. Movement out of control. *Linguistic Inquiry* 34: 471-98.
- Larson, K. Richard. 1991. *Promise* and the theory of control. *Linguistic Inquiry* 22: 103-139.
- Lasnik, Howard. 1976. Remarks on coreference. *Linguistic Analysis* 2: 1-23.
- Lasnik, Howard. 2003. *Minimalist Investigations in Linguistic Theory*. London & New York: Routledge.
- Lebeaux, David. 1984. Anaphoric binding and the definition of PRO. In *Proceedings of NELS 14*, C. Jones & P. Sells (eds), 253-274. Amherst, Mass.: GLSA.
- Madigan, Sean. 2008. Obligatory split control into exhortative complements in Korean. *Linguistic Inquiry* 39: 493-502.

- Manzini, M. Rita & Roussou, Anna. 2000. A minimalist theory of A-movement and control. *Lingua* 110: 409-447.
- Martin, Roger. 1996. A Minimalist Theory of PRO and Control. Doctoral dissertation, University of Connecticut.
- Motomura, Mitsue. 2003. The thematic roles of sentential *to/koto* complements in Japanese and Korean. In *Japanese/Korean Linguistics 12*, P. M. Clency (ed), 295-306. Stanford: SCLI Publications.
- Nakao, Chizuru. 2003. Japanese reciprocal constructions and Binding Theory. In *Linguistic Research 19*, 17-43. Tokyo: University of Tokyo.
- Nakau, Minoru. 1973. *Sentential Complementation in Japanese*. Tokyo: Kaitakusha.
- Nunes, Jairo & Uriagereka, Juan. 2000. Cyclicity and extraction domains. *Syntax* 3: 20-43.
- O'Neil, John H. 1997. Means of Control: Deriving the Properties of PRO in the Minimalist Program. Doctoral dissertation, Harvard University.
- Pesetsky, David. 1995. *Zero Syntax: Experiencers and Cascades*. Cambridge, Mass.: MIT Press.
- Polinsky, Maria & Potsdam, Eric. 2006. Expanding the scope of control and raising. *Syntax* 9: 171-192
- Portner, Paul. 2004. The semantics of imperatives within a theory of clause types. In *Proceedings of Semantics and Linguistic Theory 14*, K. Watanabe & R. B. Young (eds). Ithaca, NY: CLC Publications.
- Portner, Paul & Zanuttini, Raffaella. 2005. Clause typing: From syntax to discourse semantics. Class handout at 2005 LSA Institute, MIT.
- Potsdam, Eric. 1996. Syntactic Issues in the English Imperative. Doctoral dissertation, University of California, Santa Cruz. [Published by Garland, New York, 1998]
- Rosenbaum, Peter S. 1970. A principle governing deletion in English sentential complementation. In *Readings in English Transformational Grammar*, R. Jacobs & P. S. Rosenbaum (eds), 20-29. Waltham, Mass.: Ginn and Company.
- Ross, John R. 1970. On declarative sentences. In *Readings in English Transformational Grammar*, R. Jacobs & P. S. Rosenbaum (eds), 222-272. Waltham, Mass.: Ginn and Company.
- Runner, Jeffrey T. 2006. Lingering challenges to the raising-to-object and object-control constructions. *Syntax* 9: 193-213.
- Schlenker, Philippe. 2003. A plea for monsters. *Natural Language and Linguistic Theory* 26: 29-120.
- Schlenker, Philippe. 2004. Person and binding (A partial survey). *Italian Journal of Linguistics/Rivista di Linguistica* 16: 155-218.
- Shibatani, Masayoshi. 1978. *Nihongo no bunseki (An analysis of Japanese)*. Tokyo: Taishukan.

- Speas, Peggy & Tenny, L. Carol. 2003. Configurational properties of point of view roles. In *Asymmetry in Grammar*, A. M. Di Sciullo (ed), 315-344. Philadelphia/Amsterdam: John Benjamins.
- Stockwell, Robert P., Schacter, Paul & Partee, Barbara Hall. 1973. *The Major Syntactic Structures of English*. New York: Holt Rinehart and Winston.
- Takahashi, Daiko. 1994. Minimality of Movement. Doctoral dissertation, University of Connecticut.
- Tenny, L. Carol. 2006. Evidentiality, experiencers and the syntax of sentience in Japanese. *Journal of East Asian Linguistics* 15: 245-288.
- Tonoike, Shigeo. 1991. Nihongo no sogobun to judoubun (Reciprocal and passive sentences in Japanese). In *Nihongo no voice to tadousei (Voice and transitivity in Japanese)*, Y. Nitta (ed), 83-104. Tokyo: Kuroshio.
- Vassilieva, Masha & Larson, Richard K. 2005. The semantics of the plural pronoun construction. *Natural Language Semantics* 13: 101-124.
- Watanabe, Akira. 1996. Control and switch reference. Ms., Kanda University of Foreign Studies.
- Williams, Edwin. 1980. Predication. *Linguistic Inquiry* 11: 203-308.
- Wurmbrand, Susi. 2001. *Infinitives: Restructuring and Clause Structure*. Berlin/New York: Mouton de Gruyter.
- Yoon, James Hye-Suk. 1990. Theta-Theory and the grammar of inalienable possession constructions. In *Proceedings of NELS 20*, J. Carter, R.-M. Deechaine, B. Philip, & T. Sherer (eds), 502-516. Amherst, Mass.: GSLA.