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This paper provides new evidence for the availability A-movement out of a CP and considers its theoretical implications. The discussion concerns what I call the “pseudo”-small clause construction in Japanese, which has not received much attention in the literature. The pseudo-small clause construction shows a puzzling constraint on major subjects originating in complement clauses: the major subjects must receive accusative Case from a matrix predicate despite the availability of nominative Case within the complement clauses. To explain this constraint, it is proposed that (i) pseudo-small clauses are phasal CPs and (ii) the major subjects originating in the pseudo-small clause complements must undergo movement into a matrix theta-position, which takes place across the CP phase. It is also suggested that (i) Tense in Japanese moves to C, (ii) Standard Japanese has null complementizers, and (iii) the ban on A-movement out of a CP is explained in terms of the locality of Agree.

Keywords: Agree; improper movement; Inverse Case Filter; major subjects; phases; small clauses

1 Introduction

This paper is concerned with the locality of A-movement. Since the advent of Phase Theory (Chomsky 2000, 2001, 2004, 2007, 2008, 2013), CPs and vPs have been claimed to be phases. Given the Phase Impenetrability Condition (PIC), which states that an element moving out of a phase must move to the edge of the phase, A-movement out of CPs is ruled out by the ban on “improper” movement (A-A’-A movement; see Chomsky 1973; May 1979; Fukui 1993, among others): an NP that originates in an A-position must move to CP Spec, which is an A’-position, and further A-movement from CP Spec is ruled out as improper movement. However, a number of authors have argued that such improper movement is indeed possible, exploring some ramifications for the A/A’ distinction and locality of movement (Tanaka 2002; Bošković 2007; Obata 2010; Takeuchi 2010; Obata & Epstein 2011, among others). Against this backdrop, this paper aims to provide new evidence that A-movement out of phasal CPs is possible and consider some theoretical implications. In particular, an analysis of a certain type of Japanese complement clauses provides a new case of movement into a theta-position that takes place across a CP phase boundary and supports a particular approach to improper movement phenomena.
The discussion concerns what I call the “pseudo”-small clause construction.\(^1\) The pseudo-small construction is obtained by embedding a certain type of complex predicate headed by a stative predicate as the complement of the verb \(su/si\) ‘make’ (Tada 1992, 1993):\(^2\)

\[
\text{(1) Mary-ga kono teeburu-o sagaoyo-o hazime-yasuku si-ta.}^{3}
\]

Mary-NOM this table-ACC work-ACC begin-easy make-PST

‘Mary made this table easy to begin work on.’

In (1), the matrix predicate \(si\) ‘make’ selects the clause headed by the complex predicate consisting of the adjective \(yasu\) ‘easy’ and the verb \(hazime\) ‘begin’. The embedded subject receives accusative Case. Significantly, as observed by Tada (1992, 1993), this accusative Case-marking is obligatory:

\[
\text{(2) Mary-ga kono teeburu-o/*ga sagaoyo-o hazime-yasuku si-ta.}
\]

Mary-NOM this table-ACC/*NOM work-ACC begin-easy make-PST

‘Mary made this table easy to begin work on.’

Example (2) shows that subjects of pseudo-small clause complements must have accusative Case.

This ban on embedded nominative subjects observed above resembles the ban on nominative subjects in (regular) small clause complements:

\[
\text{(3) John-ga [Mary-o/*ga kawaiku] si-ta.}
\]

John-NOM Mary-ACC/*NOM pretty make-PST

‘John made Mary pretty.’

The –\(ku\) ending of Japanese adjectives is usually assumed to indicate non-finite complementation (Takezawa 1987; Kikuchi & D. Takahashi 1991; Nishiyama 1999; Sode 1999; Fukumitsu 2001; Koizumi 2002; Sakai et al. 2004; Kawai 2008, among others). Example (3) is thus analyzed as follows: as there is no Tense, which is responsible for nominative Case, the subject of the small clause complement cannot receive nominative Case.\(^4\) As the \(tough\)-adjectives in the pseudo-small clause complements also have the –\(ku\) ending, it is quite tempting to explain (2) and (3) in the same way. However, it will be shown below that the appeal to lack of Tense faces empirical problems. I thus propose a novel account, which rests on the following assumptions: (i) pseudo-small complements are (phrasal) CPs, (ii) the embedded subject overtly moves into the matrix VP to receive a theta-role, and (iii) the embedded subject must receive accusative Case due to the Inverse Case Filter.

This paper is organized as follows. In Section 2, I discuss properties of the pseudo-small clause construction and set the stage for the following sections. In Section 3, I propose an analysis of the properties, which rests on the assumptions laid out above. In Section 4, I provide evidence for the movement of accusative major subjects. In Section 5, I provide evidence that pseudo-small clause complements are CPs. In Section 6, I discuss

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\(^1\) I use the term \textit{pseudo-small clause} to refer to complements of \(su/si\) ‘make’ headed by stative predicates such as \textit{tough}-adjectives. Matsuoka (2013) uses the same term to refer to (apparent) small clause complements of epistemic verbs. This paper does not discuss the cases discussed by Matsuoka (2013), however.

\(^2\) The stem of this verb is realized as \(su\) when combined with the present tense morpheme –\(ru\) and is realized as \(si\) when combined with the past tense morpheme –\(ta\).

\(^3\) One might wonder why this example is acceptable given that two consecutive accusative phrases are usually claimed to be impossible in Japanese (Harada 1973, 1975; Shibatani 1973, 1978; Hiraiwa 2010, among others). I will come back to this point in fn. 17 below.

\(^4\) See Section 8 for further discussion.
cases that do not seem to involve accusative major subjects. In Section 7, I consider the implications of the proposed analysis for the nature of “improper” movement. Section 8 is the conclusion.

2 Observations

In this section, I examine the properties of the pseudo-small clause construction and propose more explicit generalizations, which sets the stage for the following sections. In particular, I discuss (i) the position of accusative subjects, (ii) the thematic property of accusative subjects, (iii) the availability of Tense within pseudo-small clause complements, and (iv) the status of the ban on nominative subjects in the pseudo-small clause construction.

As stated in Section 1, pseudo-small clauses are obtained by embedding a complex predicate headed by a tough-adjective as the complement of the verb su/si ‘make’ (Tada 1992, 1993). The tough-construction in Japanese has been extensively discussed in the literature (Inoue 1978, 2004; Saito 1982, 2011; Kuroda 1986; Takezawa 1987; Niinuma & Taguchi 2006, among others). One of its important properties is that it allows major subjects (i.e. non-thematic subjects; Kuroda 1986), which receive the exhaustive-listing interpretation in non-subordinate clauses (Kuroda 1965; Kuno 1973, among others):

\[(4)\] John-ga kono teeburu-de sagyoo-o hazime-ru.
‘John begins work on this table.’

\[(5)\] Kono teeburu-ga (John-ni totte) sagyoo-o/ga hazime-yasu-i.
‘This table is easy (for John) to begin work on.’

In (4), the NP John, which is the thematic subject of the verb hazime ‘begin’, appears as the PP adjunct and the NP kono teeburu ‘this table’, which corresponds to the adverbial phrase in (4), receives nominative Case. This nominative phrase receives the exhaustive-listing interpretation, which is reflected in the second translation of the example. Following Kuroda (1986), I call such nominative phrases in the sentence-initial position major subjects. Roughly put, major subjects must be interpreted with focus. Note that the thematic object sagyoo ‘work’ in (5) can have nominative Case, which is available with a complex predicate headed by a stative predicate (Kuno 1973). However, the nominative object in (5) does not receive the exhaustive-listing interpretation and receives the neutral-description interpretation (Kuno 1973). The pseudo-small clause construction is obtained by embedding an example like (5) as the complement of the verb su/si ‘make’. Su/si is known to take adjectival complements, as shown in (3) repeated below as (6):

‘John made Mary pretty.’

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\(^5\) Inoue (1978, 2004) classifies the tough-construction into four types. I here focus on only one type (Type 1 under Inoue’s classification), which behaves quite differently from the other types (cf. Saito 1982; Kuroda 1986; Takezawa 1987).
Given that the *tough*-construction involves adjectives such as *yasu* ‘easy’, we can embed a *tough*-sentence as the complement of the verb *su/si*. This is how we obtain the pseudo-small clause construction:

(7) Mary-ga kono teeburu-o sugyoo-o hazime-yasuku si-ta.
    Mary-NOM this table-ACC work-ACC begin-easy make-PST
    ‘Mary made this table easy to begin work on.’ (= (1))

What receives accusative Case in (7) is the major subject, which receives nominative Case in (5).

Let us now consider some basic properties of the pseudo-small clause constructions. First, accusative major subjects are located above pseudo-small clause complements. I examine the distribution of Negative Polarity Items (NPIs). In Japanese, indeterminate pronouns such as *nani* ‘what’ and *dare* ‘who’ function as NPIs when they are structurally licensed by the particle –*mo* (Kuroda 1965; McGloin 1976; Kishimoto 2001; D. Takahashi 2002; Hiraiwa 2005, among others):

(8) a. Taroo-wa [cp [dare-[mo]] kae-ru to] omottei-na-i.
    Taro-TOP who-MO return-PRS COMPREPORT think-NEG-PRS
    ‘Taro does not think that anyone returns.’

b. Taroo-wa [cp dare-ga kae-ru to]-mo omottei-na-i.
    Taro-TOP who-nom return-PRS COMPREPORT -MO think-NEG-PRS
    ‘Taro does not think that anyone returns.’

c. *Dare-ga [cp Taroo-ga kae-ru to]-mo omottei-na-i.
    who-nom Taro-nom return-PRS COMPREPORT -MO think-NEG-PRS
    ‘No one thinks that Taro returns.’

In (8a), the embedded subject, which is the indeterminate pronoun *nani* ‘what’, is accompanied by –*mo* and is c-commanded by the matrix negation. In (8b), –*mo* is dislocated from the indeterminate pronoun and adjoined to the complementizer to, which I assume is a complementizer for Reports of direct discourse (Report head) (Saito 2010a; b). This example is also acceptable. In (8c), the matrix subject is an indeterminate pronoun, and –*mo* is adjoined to the Report head to. This example is unacceptable. Essentially following Kishimoto (2001), I assume the following licensing condition for indeterminate pronouns (cf. Hiraiwa 2005):

(9) Indeterminate pronouns must be contained in the projection of the head –*mo* is adjoined to (cf. Kishimoto 2001).

This condition accounts for the distribution of indeterminate pronouns in the following way. In (8a), –*mo* occupies or is adjoined to the head of a nominal projection, which contains the indeterminate pronoun (cf. D. Takahashi 2002). In (8b), –*mo* is adjoined to the Report head to, whose projection (i.e. CP) contains the indeterminate pronoun. On the other hand, in (8c), the indeterminate pronoun, which is the matrix subject, is located above the CP complement. The subject indeterminate pronoun thus fails to be licensed.6

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6 Note also that movement of an indeterminate pronoun out of the scope of –*mo* yields degraded results (Kishimoto 2001; Hiraiwa 2005):

(i) a. Kishimoto (2001: 604; slightly modified)
    Taro-NOM what-ACC read-v-MO do-NEG-PST
    ‘Taro did not read anything.’
Let us now consider the following examples of the pseudo-small clause construction with an indeterminate pronoun:

    Mary-NOM table-ACC what-ACC begin-easy -MO make-NEG-PST
    ‘Mary did not make the table easy to begin anything on.’

    Mary-NOM what-ACC work-ACC begin-easy -MO make-NEG-PST
    ‘Mary did not make anything easy to begin work on.’

In both (10) and (11), –mo is attached to the pseudo-small clause complement. Example (10), where the indeterminate pronoun is the embedded accusative object, is significantly better than (11), where the indeterminate pronoun is the accusative major subject. This indicates that the accusative major subjects of the pseudo-small clause construction are located above the pseudo-small clause complements.

Second, the accusative major subjects behave as an internal argument of the verb su/si ‘make’ (cf. Koizumi 2002; Matsuoka 2010). I use the adverb ippai ‘many’ as a diagnostic for direct internal arguments (Kishimoto 2005; see Matsuoka 2010 for discussion of small clause subjects in this respect. The English translation and the glosses of the following example are adapted from Matsuoka 2010: 301).

(12) Kishimoto (2005: 121)
    Gakusee-ga puramoderu-o heya-de ippai tukut-ta.
    student-NOM plastic.model-ACC room-in many make-PST
    ‘Students made a lot of plastic models in the room.’

The event denoted by the verb in (12) is measured out by the number of plastic models, not by the number of students. The example is thus translated as ‘Students made a lot of plastic models in the room’ but not as ‘A lot of students made plastic models in the room’. This shows that the direct internal argument puramoderu ‘plastic model’ measures out the event denoted by the verb (cf. Tenny 1994). This point is further confirmed by the following example (cf. Kishimoto 2005):

(13) Puramoderu-ga gakusee-ni yotte heya-de ippai tukur-are-ta.
    plastic.model-NOM students-by room-in many make-PASS-PST
    ‘A lot of plastic models were made by the students in the room.’

Example (13) is the passive counterpart of (12), and the event described by the verb is still measured out by the NP puramoderu ‘plastic models’, which is assumed to be base-generated as the direct internal argument and to move to the subject position.

When we add ippai ‘many’ to the pseudo-small clause construction, we see that the accusative major subjects behave like direct internal arguments in the relevant respect:

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b. Kishimoto (2001: 604; slightly modified)
*Nani-ga [., (Taroo-ni yotte) t yom-v-are-mo] si-nakat-ta.
Anything-NOM Taro-by read-v-PASS-MO do-NEG-PST
‘Anything was not read (by Taro).’

The indeterminate pronoun in (ia) is the accusative object of the transitive verb and is licensed by –mo within the vP. The dummy verb su ‘do’ is inserted to morphologically support negation and Tense. Importantly, the indeterminate pronoun in (ia), which is the nominative subject of the passive sentence, fails to be licensed by –mo within the vP. This means that an indeterminate pronoun cannot be licensed by –mo once the former moves out of the scope of the latter.
(14) Mary-ga heya-de ippai teebru-o [sagyoo-o hazime-yasu] si-ta.
Mary-NOM room-in many table-ACC work-ACC begin-easy make-PST
‘Mary made many tables easy to begin work on in the room.’

The accusative major subject teebru ‘table’ measures out the event denoted by the verb. This strongly suggests that the accusative major subject in this example is interpreted as the direct internal argument of the matrix verb su/si ‘make’.

Third, pseudo-small clause complements involve Tense, which is shown by the availability of nominative Case. Pseudo-small clauses seem to allow the presence of thematic nominative subjects, which strongly suggests that pseudo-small clauses involve Tense that assigns nominative Case to the thematic subjects. Let us first start with an example where a major subject and a thematic subject co-occur in a single sentence (cf. Saito 1982):

this table-NOM John-NOM work-ACC begin-easy-PRS
‘This table is easy for John to begin work on.’
‘It is this table that is easy for John to begin work on.’

This example has two nominative phrases. Kono teebru ‘this table’, which receives the exhaustive-listing interpretation, is the major subject, and John, which receives the neutral-description interpretation, is the thematic subject selected by hazime ‘begin’. When we embed this example as the complement of the verb su/si ‘make’, we obtain the following examples:

Mary-NOM this table-ACC John-NOM work-ACC begin-easy make-PST
‘Mary made this table easy for John to begin work on.’

The thematic subject John receives nominative Case in (16a) and (16b). Significantly, (16a), where the major subject receives accusative Case, is considerably better than (16b), where the major subject has nominative Case. The following examples with an indeterminate pronoun show that while the accusative major subject in (16a) is in the matrix clause, the thematic nominative subject in (16a) stays in the complement clause:

(17) Mary-ga kono teebru-o [dare-ga saqyo-hazime-yasu] -mo
Mary-NOM this table-ACC who-NOM work-ACC begin-easy -MO
si-nakat-ta.
make-NEG-PST
‘Mary didn’t make this table easy for anyone to begin work on.’

I thank Hideki Kishimoto for pointing out the contrast to me.
(18) *Mary-ga nani-o [John-ga sugyoo-o hazime-yasuku] -mo
Mary-NOM what-ACC John-NOM work-ACC begin-easy -MO
si-nakat-ta.
make-NEG-PST
‘Mary didn’t make anything easy for John to begin work on.’

In both (17) and (18), –mo is adjoined to the pseudo-small clause complement. Example (17), where the embedded nominative subject is the indeterminate pronoun, is significantly better than (18), where the accusative major subject is the indeterminate pronoun. This indicates that the accusative major subject, but not the embedded nominative subject, is located above the pseudo-small clause complement.

Before discussing (16a) and (16b) in detail, it is necessary to spell out some assumptions adopted in this paper. I assume in this paper that structural Case in Japanese is licensed via Agree (Hiraiwa 2001, 2005; Nomura 2003, 2005; Ura 2007; Takahashi 2010, 2011, among others) and syntactic derivation proceeds in a phase-by-phase manner, where vPs and CPs constitute phases (Chomsky 2000, 2001, 2004, 2007, 2008, 2013). Furthermore, at each phase level, the complement of a phase head is sent to the LF and the PF interfaces by Transfer, which makes the transferred syntactic object inaccessible for further syntactic operations. This idea is implemented as the PIC, which restricts access to syntactic objects in a lower phase (Chomsky 2000, 2001, 2004, 2007, 2008, 2013):

(19) Phase Impenetrability Condition (PIC; Chomsky 2000: 108)
In phase α with head H, the domain of H is not accessible to operations outside α, only H and its edge are accessible to such operations.

I assume that specifiers of a phase head and elements adjoined to the phase head are edges of the phase (Chomsky 2000). Given the PIC, a functional head cannot assign Case to an NP in a domain already transferred to the interfaces, and the NP needs to be at the edge of the phase so as to be accessible from the functional head. This is illustrated in (20), where YP is a phase and F attempts to assign Case to NPs contained in YP (ZP is the Transfer domain):

(20) \[ \{XP \quad \{VP \quad \{NP_1_{ZP} \quad [NP_2] \}Y\} \quad F\] 

As NP_2 is contained in ZP, which becomes inaccessible after Transfer, F cannot assign Case to NP_2. On the other hand, NP_1, which is at the edge of YP, is still visible to F after ZP is transferred.

We are now ready to discuss the relevance of the contrast between (16a) and (16b). If the matrix T in (16a) assigned Case to the embedded thematic subject, this apparent long-distance Case licensing across the accusative major subject should be excluded as a violation of the PIC. Example (16a) should have the following derivation (VP is the Transfer domain):

(21) *\[\quad \{VP \quad \{NP_{[ACC]} \quad [NP_{[NOM]} \quad make] \quad v\} \quad T\] 

The matrix clause has the accusative major subject, which receives accusative Case from the matrix v. This, in turn, signals the presence of the matrix VP phase. Given the PIC in (19), the matrix VP phase makes the complement VP inaccessible for further syntactic operations. The matrix T hence cannot assign Case to the embedded subject, which is contained in the matrix VP. Note also that the PIC in (19) dictates that an NP is accessible to a functional head in the next higher phase if the NP is at the edge of the phase.
where it is located. This means that the embedded nominative subject must be at the edge of the matrix vP in (21) so as to be accessible from the matrix T. However, this option is excluded by the acceptability of (17), which indicates that the embedded nominative subject stays within the pseudo-small clause complement. Therefore, if we continue to assume that nominative subjects are Case-licensed by Tense and Case in Japanese is licensed via Agree, the contrast between (16a) and (16b) strongly suggests that the embedded nominative subject is Case-licensed by the embedded Tense, which in turn suggests that there is Tense in the pseudo-small clause complement. The above observations are summarized below:

(22)  
a. Accusative major subjects are located above pseudo-small clause complements.  
b. Accusative major subjects are internal arguments of su/si ‘make’.  
c. Pseudo-small complements involve Tense.

Note that (22c) leads us to reconsider the nature of the ban introduced above, which is now stated as the ban on embedded nominative major subjects in the pseudo-small clause construction:

(23) Embedded major subjects must receive accusative Case in the pseudo-small clause construction.

(24) Mary-ga kono teebru-o/*ga saygoo-o hazine-yasuku si-ta.  
Mary-NOM this table-ACC/*NOM work-ACC begin-easy make-PST  
‘Mary made this table easy to begin work on.’  

Tada (1992; 1993) proposes that the ban on embedded nominative major subjects follows from the assumption that the adjective in (24) is in the non-finite form (Takezawa 1987; Kikuchi & D. Takahashi 1991; Nishiyama 1999; Sode 2001; Koizumi 2002; Sakai et al. 2004; Kawai 2008, among others): as the complement of su/si ‘do’ has no Tense, which assigns nominative Case, nominative major subjects are disallowed. However, we have already seen above that the availability of thematic subjects within pseudo-small clause complements in fact suggests the availability of Tense within the complement clauses, which leaves (23) unexplained.

3 Analysis

In this section, I propose an analysis of the pseudo-small clause construction and provide an explanation of the ban on embedded nominative major subjects. In particular, it is argued that (i) pseudo-small clause complements are (phasal) CPs, (ii) major subjects originating in pseudo-small clause complements move into a matrix theta-position, and

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8 Tada (1992, 1993) observes that pseudo-small clause complements can contain nominative objects (he judges the relevant example as ?; Tada 1992: 97; Tada 1993: 128):

(i) Mary-ga kono teebru-o saygoo-ga hazine-yasuku si-ta.  
Mary-NOM this table-ACC/work-NOM work-begin-easy make-PST  
‘Mary made this table easy to begin work on.’

(iii) the Inverse Case Filter forces accusative Case on the moved major subjects. Before providing an analysis, however, I discuss some important assumptions regarding (i) the structural status of major subjects and its implications for Case-licensing of nominative phrases and (ii) movement into theta-positions.

3.1 Major subjects and nominative Case-licensing via Agree

The structural status of major subjects has been extensively discussed in the literature (Inoue 1978, 2004; Saito 1982, 2011; Kuroda 1986; Takezawa 1987; Niinuma & Taguchi 2006, among others). In this paper, I assume that major subjects are located in the Spec of CP (Inoue 2004; Niinuma & Taguchi 2006; Saito 2011). In particular, essentially following Saito (2011), who discusses the structural position of major subjects in the context of the layered CP structure (cf. Rizzi 1997; Hiraiwa 2005; Saito 2010a; b; Hiraiwa & Ishihara 2012), I assume that major subjects are located in the Spec of the lowest CP in the layered CP domain. Example (25) is thus analyzed as (26):

    this table-NOM (John-for) work-ACC/NOM begin-easy-PRS
    ‘This table is easy (for John) to begin work on.’
    ‘It is this table that is easy (for John) to begin work on.’  (= (5))

(26)  

Here, the major subject is located in the Spec of PredP in the sense of Saito (2010a), which is further dominated by Fin(ite)P and ForceP. I also assume that (i) major subjects are thematically licensed in the Spec of PredP by predication (cf. Takezawa 1987; Heycock 1993) and (ii) tough-adjectives select a vP complement (Inoue 2004; Niinuma & Taguchi 2006).

Another related question that is worth addressing here is whether the major subjects under consideration are base-generated in the Spec of PredP or move to the Spec of PredP from some other position (Kuroda 1986; Takezawa 1987, among others). Of importance here is Takezawa’s (1987) observation that a major subject does not have to bind any gaps in a given sentence (the glosses and Romanization are modified from the original examples):

(27) Takezawa (1987: 210)
Kooitta ziko-ga (higaisya-nitotte)
    this.kind.of accident-NOM injured.party-for
bakudaina songaibaisyoo-o seekyuussi-yasu-i.
enormous.amount.of compensation-ACC claim-easy-PRS
Lit. ‘This kind of accident is easy (for the injured party) to claim an enormous amount of compensation.’

(28) Takezawa (1987: 210)
Kotosi (gakusee-nitotte-wa) gengogaku-ga ii sigoto-o
    this.year students-for-TOP linguistics-NOM good job-ACC
mituke-niku-i rasi-i.
    find-difficult-PRS seem-PRS
Lit. ‘It seems that this year, linguistics is difficult (for students) to find a good job.’

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9 I assume the Report head to introduced in (8) projects ReportP above ForceP (Saito 2010a; b).
As there are no gaps associated with the major subjects in these sentences, Takezawa (1987) concludes that the major subjects in (27) and (28) are base-generated in the sentence-initial position. This point is further confirmed by the lack of long-distance reading with adjunct major subjects. Consider first the following example with an adjunct major subject:

    this way-NOM John-for company-ACC quit-easy-PRS
    ‘This way is easy (for John) to quit the company in.’
    ‘It is this way that is easy (for John) to quit the company in.’

Example (29) has the manner adjunct kono hoohoo ‘this way’ as the major subject. Significantly, this major subject cannot allow any long-distance dependency, which would be possible if the major subject could be associated with a gap (cf. Murasugi 1991):

(30) Kono hoohoo-ga (John-ni totte) zyoosi-ni [pro kaisya-o
    this way-NOM John-for supervisor-DAT company-ACC
    yame-ru to] ii-yasu-i.
    quit-PRS COMP REPORT say-easy-PRS
    ‘This way is easy (for John) to tell the supervisor that he will quit the company in.’
    ‘It is this way that is easy (for John) to tell the supervisor that he will quit the company in.’

This example is unambiguous in that the adjunct major subject is only understood as modifying the matrix verb ii ‘say’. If the complement clause could contain a gap associated with the major subject, the major subject could be interpreted as modifying the embedded verb yame ‘quit’, contrary to fact. This strongly suggests that the adjunct major subject in (29) and (30) is base-generated in the sentence-initial position. In this paper, I focus on the cases where major subjects are base-generated in the sentence-initial position (i.e. Spec of PredP).

The above assumption regarding the structural status of adjunct major subjects has implications for the mechanism of nominative Case-licensing. As for Case-licensing of nominative phrases, I follow Koizumi (1994, 1995, 1998) and assume that all nominative phrases (major subjects, thematic subjects, thematic objects) are uniformly Case-licensed by Tense. I also reinterpret Koizumi’s (1994, 1998) proposal in terms of Agree and head-movement. Koizumi (1994, 1998) proposes the following licensing conditions for Japanese nominative phrases:

    a. An NP receives the exhaustive-listing interpretation only if it is Case-licensed in the Broad Checking Domain of Tense.
    b. An NP receives the neutral-description interpretation only if it is Case-licensed in the Narrow Checking Domain of Tense.

Koizumi (1994, 1995, 1998) assumes the AGR-based Case theory of Chomsky (1993), where nominative Case is licensed by Tense that moves to AGRs and thematic subjects are located within AGRsP. The licensing conditions in (31) basically say that NPs adjoined

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10 I do not intend to claim that all the cases of the Japanese tough-construction must involve base-generation of major subjects. For the present purpose, it suffices to assume that there are cases where major subjects must be base-generated in the Spec of PredP. See Takezawa (1987) for discussion.
to AGRsP receive the exhaustive-listing interpretation, while NPs in the Spec of AGRsP receive the neutral-description interpretation. Importantly, all nominative phrases are uniformly Case-licensed by T via checking:

(32) \[ \text{exhaustive-listing} \quad \text{neutral-description} \]

While I follow Koizumi (1994, 1998) with respect to the Case-source of nominative phrases, this analysis cannot be implemented as it is under the current set assumptions. If nominative Case is licensed by T via Agree (Hiraiwa 2001, 2005; Nomura 2003, 2005, Ura 2007; Takahashi 2010, 2011), as assumed in this paper, Case-assigners (probes) need to c-command Case-assignees (goals). T then needs to c-command the major subjects. However, if the major subjects are base-generated in the sentence-initial position (Spec of PredP under the current analysis), T cannot c-command them. Notice, however, that there has been a growing body of literature claiming that C as well as T is implicated in the Case-licensing of subjects (Watanabe 1993; Pesetsky & Torrego 2001; Chomsky 2007, 2008, 2013, Saito 2012, among others). Particularly following the insight of Watanabe (1993), who claims that T ultimately moves to C when subjects are Case-licensed, I propose that T undergoes head-movement to Fin and assigns nominative Case to all the nominative phrases within a clause via Multiple Agree (Hiraiwa 2001, 2005). Example (25) with the nominative object is schematically represented as follows:²²

(33) \[ \text{this table [NOM]} \quad \text{easy [NOM]} \]

I assume that (i) head-movement is an adjunction operation (Baker 1988) and (ii) a head adjoined to another head can c-command everything that the latter c-commands. This in turn indicates that after T moves to Pred and the complex head formed by this head-movement moves to Fin, T (and Pred) c-command everything Fin c-commands. T thus c-commands the major subject. Given that Case-assigners must c-command Case-assignees, this T-to-Fin head movement ensures that major subjects located in the Spec of PredP as well as thematic nominative subjects and nominative objects are uniformly Case-licensed by Tense, preserving the essence of Koizumi’s (1994, 1995, 1998) proposal.

3.2 External Merge, internal Merge, and movement into theta-positions

Another important theoretical assumption in this paper concerns movement into theta-positions. I assume that both external Merge (formerly called Merge) and internal Merge (formerly called Move) can satisfy selectional requirements of predicates (Bošković 1994; Hornstein 1999, 2001, 2003; Boeckx et al. 2010; Wurmbrand 2013, among others). This

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²² The problem still remains if the major subjects are assumed to be base-generated in a TP-adjoined position (cf. Saito 1982; Koizumi 1994, 1998).

²² See also Koizumi (1995, 2000), who argues that Japanese verbs move to C, which entails that T also moves to C.

²² I assume that vP constitutes a phase only when v assigns structural accusative Case (Takahashi 2010, 2011; Miyagawa 2011; Saito 2012). Given that the tough-adjective “absorbs” accusative Case of v in (33), vP in this example does not constitute a phase. Case-licensing of the nominative object in this example therefore does not violate the PIC introduced in (19).

²² I assume the following definition of c-command following Kayne (1994: 18):

(i) X c-commands Y iff X and Y are categories and X excludes Y and every category that dominates X dominates Y.

Under this definition of c-command, a head X adjoined to another head Y asymmetrically c-commands everything that Y asymmetrically c-commands.
in fact follows from Chomsky’s (2004, 2007, 2008, 2013) suggestion that there is no
distinction between external Merge and internal Merge: if external Merge can apply
to theta-positions, internal Merge can also apply to theta-positions (Hornstein 1999, 2001,
2003; Bowers 2008; Fujii 2013, among others). Crucially, however, I assume that theta-
roles are not features (cf. Wurmbrand 2013), which means that selectional relations
cannot be established via Agree. Elements therefore must be merged (either internally
or externally) to a particular syntactic position to be selected by predicates.

3.3 “Improper” movement of accusative major subjects

We are now ready to provide an analysis of the pseudo-small clause construction and
understand the nature of the ban on embedded nominative major subjects. I propose
that the ban under consideration derives from an interaction of A-movement out of a CP
and the Inverse Case Filter. The generalizations and the relevant example are repeated
below:

(34)  
  a. Accusative major subjects are located above pseudo-small clause complements.
  b. Accusative major subjects are internal arguments of su/si ‘make’.
  c. Pseudo-small complements involve Tense.  

(35)  
Embedded major subjects must receive accusative Case in the pseudo-small clause
construction.

(36)  
Mary-ga kono teeburu-o/*ga sagyoo-o hazime-yasuku si-ta.
Mary-NOM this table-ACC/*ACC work-ACC begin-easy make-PST
‘Mary made this table easy to begin work on.’

I assume that the verb su/si ‘make’ takes ForceP as its complement and the embedded
major subject obligatorily moves into the matrix VP to obtain a theta-role. The pseudo-
small clause construction is thus analyzed as follows (irrelevant parts are omitted here;
PredP is the relevant Transfer domain):

(37)

\[
\begin{array}{l}
\left[ v_P \left[ v_P \left[ [_{\text{ForceP}} \left[ _{\text{FinP}} \left[ \text{NP}_i \left[ _{\text{PredP}} t_i \right] \right] \right] \right] \right] \right] \right] \text{make} \ v] \\
\text{Step 1}
\end{array}
\]

I also assume that (i) FinP is a phase (cf. Hiraiwa 2005), which means that PredP is a
Transfer domain\(^{15}\) and (ii) the Fin head can have an EPP/edge feature (cf. Chomsky 2000,
2001, 2004, 2007, 2008). The major subject first moves to the FinP edge so that the
former can undergo further syntactic movement. This is described as Step 1 in (37).

Recall that the verb su/si ‘make’ takes an internal argument. To satisfy this selec-
tional requirement, the major subject moves to the matrix theta-position. This is because
selectional requirements cannot be satisfied via Agree. This is described as Step 2:

(38)

\[
\begin{array}{l}
\left[ v_P \left[ v_P \left[ \text{NP}_i \left[ _{\text{ForceP}} \left[ _{\text{FinP}} t_i \left[ _{\text{PredP}} t_i \right] \right] \right] \right] \right] \right] \text{make} \ v] \\
\text{Step 2}
\end{array}
\]

Note that Step 1 (movement of the embedded major subject to the Spec of FinP) itself is
optional. However, if Step 1 did not happen, the matrix predicate su/si ‘make’ would not

\(^{15}\) A question still remains as to how we can understand the phasehood of “CP” under the layered CP structure
discussed in the text. More specifically, if the CP projection, which is often assumed to be a phase, is now
decomposed into several projections, it is necessary to consider which projection within the CP layer con-
stitutes a phase (cf. Shlonsky 2010). I leave this important question open in this paper.
be able to discharge its theta-role to the major subject, yielding a deviant output. The movement of the major subject in (38) thus provides an instance of A-movement out of a CP, which is often ruled out as "improper" movement.

The above assumptions account for the three properties of the pseudo-small clause construction discussed in the last section: (34a) is accounted for because the accusative major subjects move into the matrix VP; (34b) is accounted for because the accusative major subjects overtly move into the matrix theta-position; and finally, (34c) is accounted for because the pseudo-small clause complement is a full CP (ForceP). As CP dominates TP, Tense and nominative Case, which is assigned by Tense, are predicted to be available.

What remains to be accounted for is the ban on embedded nominative major subjects. I propose that this constraint follows from the Inverse Case Filter (Bošković 2002; Epstein & Seely 2006, among others), which roughly states that Case-assigners must assign Case. I assume the version of the Inverse Case Filter proposed by Taguchi (2009):

(39) Taguchi (2009: 421)
Traditional Case-assigners must assign their Case-feature whenever possible in accordance with the PIC.

Recall that the embedded major subjects in the pseudo-small clause construction must move into the matrix VP to obtain a theta-role. This is illustrated below:

(40) \[
\begin{array}{c}
\text{[vP [VP NP_i [ForceP [FinP t_i [PredP t_i]]] make] v]}
\end{array}
\]

Importantly, the moved major subject is now visible to the matrix \(v\), which can assign Case. The Inverse Case Filter stated in (39) then forces Case-assignment of the matrix \(v\):

(41) \[
\begin{array}{c}
\text{[vP [VP NP_{i[ACC]} [ForceP [FinP t_{i[NOM]} [PredP t_{i[NOM]}]]] make] v]}
\end{array}
\]

I assume with Bruening (2001) that valuation of a Case-feature does not entail deletion (i.e. deactivation) of the Case-feature and that deletion/deactivation is delayed until Transfer. A Case-feature thus remains active unless its host NP undergoes Transfer. Note that the major subject in (41), which receives nominative Case within the complement clause via Agree, moves into the matrix VP domain though the FinP edge. The major subject thus escapes Transfer in the complement clause, and its Case feature remains active. The Case-feature of the major subject is re-valued, and the major subject receives accusative Case from the matrix \(v\) (Bruening 2001; Hiraiwa 2005; Narita 2007; Şener 2008).

---

16 I assume that a failure of a predicate to assign a theta-role results in a thematically deviant output, though the derivation may converge (Chomsky 2004, 2008; Bowers 2008; Fujii 2013).

17 The proposed analysis also explains why two consecutive accusative phrases are allowed in (36). It is well known in the literature that when two accusative phrases co-occur, the two must be dislocated from each other. This is due to the Double-o Constraint (henceforth, DoC), which prohibits the occurrence of more than one accusative phrase in a certain syntactic domain such as VP (Harada 1973; Hiraiwa 2010, among others):

(i) a. ?Mary-ga [VP tokyoo-de zaisan-o bossyuu-o si]-ta.
   Mary-NOM Tokyo-in property-ACC confiscation-ACC do-PST
   ‘Mary did confiscation of property in Tokyo.’
   b. Zaisan-o Mary-ga [VP tokyoo-de t_i bossyuu-o si]-ta.
      property-ACC Mary-NOM Tokyo-in confiscation-ACC do-PST

   In (ib), the two NPs receive accusative Case within the VP projection. This example is only marginally acceptable and is claimed to violate the DoC. In (ib), the first accusative NP is moved out of the VP projection; hence, there is no violation of the DoC.

   Recall now that the first accusative phrase of (36) is in the matrix clause after movement (irrelevant parts are omitted in (ii)):

(ii) [VP [VP [NP_{i[NOM]} [VP NP_{i[ACC]} [ForceP [FinP t_{i[NOM]} [PredP t_{i[NOM]} [VP NP_{i[ACC]}]]]]]] make] v]

   I assume that the second NP sagyoo ‘work’ is Case-licensed within the embedded VP. As the two NPs are in the different VPs, the DoC is not violated in (36).
To summarize, I have provided an analysis of the pseudo-small clause construction, which explains all the properties discussed in the previous section. In particular, it has been argued that (i) pseudo-small clauses are (phasal) CPs, (ii) embedded major subjects undergo movement into a matrix theta-position, which takes place across a CP phase, and (iii) the movement under consideration forces accusative Case on the moved major subjects due to the Inverse Case Filter. It has also been suggested that Tense in Japanese moves to C. To the extent the proposed analysis is successful, it provides evidence for A-movement into a theta-position out of a (phasal) CP (cf. Takano 2013).

4 Evidence for movement

In this section, I provide further evidence for movement of embedded major subjects, which supports the claim that embedded major subjects undergo A-movement out of a CP. The discussion is important because accusative major subjects receive a theta-role in matrix clauses; it is then reasonable to ask whether accusative major subjects could be base-generated in their surface position without movement. The proposed analysis and the alternative base-generation analyses are summarized below:

\[
\begin{align*}
(42) & \quad \text{a. [\text{vP} [\text{VP} [\text{NP}_{\text{ACC}}] [\text{ForceP} [\text{FinP} [\text{PredP} [\text{t}_{\text{NOM}}]]]]] \text{ make}] v]} \\
& \quad \text{b. [\text{vP} [\text{VP} [\text{NP}_{\text{ACC}}] [\text{ForceP} [\text{FinP} [\text{PredP} [(\text{pro})]]]]] \text{ make}] v]}
\end{align*}
\]

(42a) is the proposed derivation of the pseudo-small clause construction, and (42b) shows possible alternative derivations, where the accusative major subject is base-generated in the matrix VP. If the accusative major subject binds \text{pro} in the complement clause, the pseudo-small clause construction could be analyzed on a par with the major object construction (Saito 1985; Oka 1988; Hoji 1991; Takano 2003, among others). It might also be possible to relate the accusative major subject and the complement clause by some kind of predication rule (cf. Takezawa 1987; Heycock 1993), in which case it may not be necessary to posit \text{pro} in the complement clause. In the following subsections, I provide arguments in favor of the movement analysis in (42a) based on (i) the clausemate condition in the cleft construction and (ii) Proper Binding Condition effects.

4.1 The clausemate condition in the cleft construction

The clausemate condition in the cleft construction provides evidence that accusative major subjects originate in pseudo-small clause complements. Elements that appear before a copula in the cleft construction receive focus in the cleft construction (Hoji 1989):\(^{18}\)

\[
\begin{align*}
(43) & \quad \text{Taroo-ga Hanako-ni ringo-o age-ta.} \\
& \quad \text{Taro-NOM Hanako-DAT apple-ACC give-PST} \\
& \quad \text{‘Taro gave Hanako an apple.’}
\end{align*}
\]

\[
\begin{align*}
(44) & \quad \text{Taroo-ga ringo-o age-ta no wa Hanako-ni da.} \\
& \quad \text{Taro-NOM apple-ACC give-PST CompFin TOP Hanako-DAT COP} \\
& \quad \text{‘It was Hanako that Taro gave an apple.’}
\end{align*}
\]

Example (43) is a ditransitive sentence and (44) is a cleft sentence that is derived from (43). In (44), the dative argument \text{Hanako}, which immediately precedes the copula, receives

\(^{18}\) I assume that \text{no} is a complementizer for finiteness (\text{Fin}) (Saito 2010a; b; Hiraiwa & Ishihara 2012).
focus. The clusemate condition dictates that when multiple elements undergo clefting, they must be “clusemates” (Koizumi 1995, 2000; Takano 2002; Hiraiwa & Ishihara 2012, among others). Examples (46) and (47) are both cleft sentences derived from (45):

(45)  Taroo-ga Hanako-ni John-ga ringo-o tabe-ta to it-ta.
     Taro-NOM Hanako-DAT John-NOM apple-ACC eat-PST COMP REPORT  say-PST
     ‘Taro told Hanako that John ate an apple.’

(46)  John-ga ringo-o tabe-ta to it-ta no-wa
     John-NOM apple-ACC eat-PST COMP REPORT  say-PST COMP FIN-TOP
     Taroo-ga Hanako-ni da.
     Taro-NOM Hanako-DAT COP
     Lit. ‘It was Taro to Hanako that said that John ate an apple.’

(47)  *Hanako-ni John-ga tabe-ta to it-ta no-wa
     Hanako-DAT John-NOM eat-PST COMP REPORT  say-PST COMP FIN-TOP
     Taroo-ga ringo-o da.
     Taro-NOM apple-ACC COP
     Lit. ‘It was Taro apples that to Hanako said that John ate.’

When the two matrix elements in (45) Taro and Hanako are clefted, the resulting sentence is acceptable (cf. (46)). When the matrix subject Taro and the embedded object ringo ‘apple’ are clefted, the resulting sentence is unacceptable (cf. (47)). The contrast between (46) and (47) shows that clefted elements must be clusemates.

Let us now consider the pseudo-small clause construction. I show that an accusative major subject can be a clusemate with an element in pseudo-small clause complements. Example (48) is a tough-sentence with an adjunct major subject. We obtain (49) when we embed (48) as the pseudo-small clause complement:

(48)  Kono heya-ga gakusee-ni totte sensee-ni hanasikake-yasu-i.
     this room-NOM student-for professor-DAT speak-easy-PRS
     ‘This room is easy for students to speak to professors in.’
     ‘It is this room that is easy for students to speak to professors in.’

(49)  Mary-ga kono heya-o gakusee-ni totte sensee-ni hanasikake-yasuku
     Mary-NOM this room-ACC student-for professor-DAT speak-easy
     make-PST
     ‘Mary made this room easy for students to speak to professors in.’

Let us now consider how (49) behaves with respect to clefting. Example (50) shows that the accusative major subject can be clefted:

(50)  Mary-ga gakusee-nitotte sensee-ni hanasikake-yasuku si-ta
     Mary-NOM student-for professor-DAT speak-easy make-PST
     no-wa kono heya-o da.
     COMP FIN-TOP this room-ACC COP
     ‘It was this room that Mary made easy for students to speak to professors in’.

Significantly, while the accusative major subject can be clefted with an element in the complement clause, the matrix subject cannot (cf. Hiraiwa 2001; Kuno 2007; Takano 2013):
(51) Mary-ga sensee-ni hanasikake-yasuku si-ta no-wa
kono heya-o gakusee-nitotte da.
Lit. ‘It was this room for students that Mary made easy to speak to professors in.’

(52) *Kono heya-o sensee-ni hanasikake-yasuku si-ta
no-wa Mary-ga gakusee-nitotte da.
Lit. ‘It was Mary for students that made this room easy to speak to professors in.’

(51), where the accusative major subject and the embedded adjunct are clefted, is better than (52), where the matrix subject and the embedded adjunct are clefted. The contrast indicates that the accusative major subject and the embedded adjunct are clausemates. This contrast is expected under the current analysis because the accusative major subject, but not the matrix nominative subject, originates in the complement clause. The accusative major subject thus can be a clausemate with the embedded adjunct:

(53) a. \[
\text{vp NP}_{[\text{NOM}]} \text{vp} \text{FinP} \text{FinP} \text{FinP} \text{PredP} \text{NP}_{[\text{NOM}]} [\text{vp} \text{PP} \text{PP} \text{PP}] \text{make} \text{v}]
\]
b. \[
\text{vp NP}_{[\text{NOM}]} \text{vp NP}_{[\text{ACC}]} \text{FinP} \text{FinP} \text{FinP} \text{PredP} \text{PredP} \text{PredP} \text{PredP} [\text{vp} \text{PP} \text{PP} \text{PP} \text{PP} \text{PP} \text{PP}] \text{make} \text{v}]
\]

As the accusative major subject is base-generated in the embedded clause, the former is a clausemate with the adjunct in the pseudo-small clause complement. As the nominative subject in the matrix clause is base-generated in the matrix clause, the former cannot be a clausemate with the embedded adjunct throughout the derivation.

4.2 Proper Binding Condition effects

Proper Binding Condition (PBC) effects provide evidence that accusative major subjects move into the matrix clause (Fiengo 1977; Saito 1985, 1989, 1992, among others). The PBC states that there should not be any unbound traces, which is illustrated by the following examples (the glosses are modified from the original examples):

(54) Tanaka (2002: 639)
   John-NOM [Bill-NOM the book-ACC buy-PST COMP_{REPORT} ]say-PST
   ‘John said that Bill bought the book.’
b. Sono hon-o John-ga [Bill-ga t\text{\textdollar} kat-ta to] it-ta.
   the book-ACC John-NOM [Bill-NOM buy-PST COMP_{REPORT} ]say-PST
   ‘The book, John said that Bill bought t\text{\textdollar}.’
c. [Bill-ga sono hon-o kat-ta to] John-ga t\text{\textdollar} it-ta.
   ‘[That Bill bought the book], John said t\text{\textdollar}.’
d. *[[Bill-ga t\text{\textdollar} kat-ta to] [sono hon-o [John-ga t\text{\textdollar} it-ta.]]]
   [[Bill-NOM buy-PSTCOMP_{REPORT} ][the book-ACC [John-NOM say-PST]]]
   Lit. ‘[That Bill bought t\text{\textdollar}], the book, John said t\text{\textdollar}.’

In (54a), the matrix verb i ‘say’ takes a finite CP (i.e. ReportP) as its complement. Example (54b) involves an instance of long-distance scrambling (Saito 1985, 1989, 1992), where the embedded object sono hon ‘the book’ moves to the sentence-initial position. In (54c),
the clausal complement undergoes scrambling. Example (54d) involves both long-distance scrambling of the embedded object and scrambling of the clausal complement. The unacceptability of (54d) is explained in terms of the PBC: the scrambled accusative object leaves an unbound trace in the complement clause.

With this in mind, let us return to the pseudo-small clause construction. The following examples show that the accusative major subject leaves an unbound trace in the complement clause:

(55)  
\begin{itemize}
  \item a. Mary-ga \[
  \begin{array}{l}
  \{v_p \text{kono teeburu}_i-o \{c_p, t_i \text{ sago-oo-hazime-yasuku}\} \\
  \text{Mary-NOM this table-ACC work-ACC begin-easy} \\
  \text{si-ta. make-PST}
  \end{array}
  \]
  ‘Mary made this table easy to begin work on.’ \(=\) (2a)
  
  \item b. ??Kono teeburu\(i-o \{c_p, t_i \text{ sago-oo-hazime-yasuku}\}\)Mary-ga \[
  \begin{array}{l}
  \text{this table-ACC work-ACC begin-easy Mary-NOM} \\
  t_i \text{ si-ta. make-PST}
  \end{array}
  \]
  
  \item c. *\[
  \begin{array}{l}
  \{c_p, t_i \text{ sago-oo-hazime-yasuku}\} \text{kono teeburu}_i-o \text{Mary-ga} \\
  \text{work-ACC begin-easy this table-ACC Mary-NOM} \\
  t_i \text{ si-ta. make-PST}
  \end{array}
  \]
\end{itemize}

Example (55a) is the base-line example. Example (55b), where the accusative subject precedes the complement clause after scrambling, is significantly better than (55c), where the complement clause precedes the accusative subject after scrambling.\(^{19}\) The contrast between (55b) and (55c) follows if we assume that the trace of the accusative major subject is subject to the PBC, which prohibits unbound traces: (55c) contains the trace of the accusative major subject, which is unbound. (55c) thus provides independent evidence that major subjects undergo A-movement out of full clauses (cf. Yoon 2007; Hong & Lasnik 2010; Ishii 2012).\(^{20}\)

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\(^{19}\) Example (55b) is still degraded when compared with (55a). I will come back to this contrast below.

\(^{20}\) One reviewer asks how the discussion in the text can be made compatible with a well-known observation concerning the PBC. I have argued for the availability of movement into a theta-position, which means that control as well as raising can be analyzed in terms of A-movement (Hornstein 1999, 2001, 2003; Boeckx et al. 2014). However, there is a paradigm that seems to indicate that raising, but not control, involves movement (cf. Kroch & Joshi 1985; Lasnik & Saito 1992; Boeckx et al. 2014). Eager is a control adjective, and the fronted infinitival complement involves PRO. Example (ii) involves movement of the expletive \(\text{there}\), and the fronted infinitival complement contains a trace left by the expletive. The contrast between (i) and (ii) then seems to suggest that while raising involves movement, control does not, which is at odds with the current set of assumptions. The acceptability of (iii) is understood as an indication that \(\text{likely}\) can be a control adjective whose complement does not involve a trace. As the expletive \(\text{there}\) cannot control PRO, the raising option is forced in (ii) (see Lasnik & Saito 1992).

While a comprehensive analysis of the relevant data goes beyond the scope of the present article, I would like to suggest a possible way to approach the above examples. I suggest that (A) (ii) is explained independently of the PBC (Abels 2002; Boeckx 2002; Hornstein 2003) and (B) (iii) should be analyzed in terms of raising (Abels 2002; Hornstein 2003). The above paradigm thus does not distinguish raising and control with respect to the PBC. The first point is supported by Boeckx’s (2002: 45) observation (the observation is attributed to Koji Sugisaki):

(i) [How eager PRO to win] is John, \(t_i\)

(ii) Lasnik & Saito (1992: 141; slightly modified)

\[\text{[How likely } t_i \text{ to be a riot], there, } t_i\]

(iii) Lasnik & Saito (1992: 141; slightly modified)

\[\text{[How likely *} t_i/\text{PRO, to win the race], is John, } t_i\]

\(\text{Eager}\) is a control adjective, and the fronted infinitival complement involves PRO. Example (ii) involves movement of the expletive \(\text{there}\), and the fronted infinitival complement contains a trace left by the expletive. The contrast between (i) and (ii) then seems to suggest that while raising involves movement, control does not, which is at odds with the current set of assumptions. The acceptability of (iii) is understood as an indication that \(\text{likely}\) can be a control adjective whose complement does not involve a trace. As the expletive \(\text{there}\) cannot control PRO, the raising option is forced in (ii) (see Lasnik & Saito 1992).

While a comprehensive analysis of the relevant data goes beyond the scope of the present article, I would like to suggest a possible way to approach the above examples. I suggest that (A) (ii) is explained independently of the PBC (Abels 2002; Boeckx 2002; Hornstein 2003) and (B) (iii) should be analyzed in terms of raising (Abels 2002; Hornstein 2003). The above paradigm thus does not distinguish raising and control with respect to the PBC. The first point is supported by Boeckx’s (2002: 45) observation (the observation is attributed to Koji Sugisaki):

(iv) *Who said that there was how likely to be a riot?
If pseudo-small clauses were to be analyzed in terms of the major object construction or as involving a predication relation between the accusative major subject and the complement clause, there would be no unbounded traces in (55c), which leads us to expect (55c) to have the same status as (55b) with the following derivational option (see Section 5.2 for discussion):

(56) \[{}_{c_3} (\text{pro}_{j}) \text{sagyoo-o } \text{hazime-yasuku}_{j} \text{kono } \text{teeburu}_{j}-\text{o Mary-ga} \begin{tabular}{l}
\text{work-ACC } \text{begin-easy } \text{this table-ACC Mary-NOM} \\
\text{t}_{j} \text{ si-ta.} \\
\text{make-PST}
\end{tabular}\]

As the pronoun cannot occur in the Spec of the embedded PredP, movement of the accusative major subject is obligatory. This is why (55c) is unacceptable. The unacceptability of the following example, where the major subject position is realized by an overt pronoun, gives further credence to this conclusion:

(57) *Mary-ga \text{kono teeburu}_{j}-\text{o sore}_{j}-\text{ga sagyoo-o hazime-yasuku si-ta.} \begin{tabular}{l}
\text{Mary-NOM this table-ACC it-NOM work-ACC begin-easy make-PST} \\
\text{‘Mary made this table easy to begin work on.’}
\end{tabular}\]

Example (57) involves an overt pronoun sore ‘it’ coindexed with the accusative NP. This pronoun is intended to occupy the Spec of PredP. The unacceptability of this example strongly suggests that pronouns cannot occupy the Spec of PredP in the pseudo-small clause construction, which in turn indicates that the embedded major subject must move into the matrix VP.

5 Evidence for full clause structure

In this section, I provide evidence that pseudo-small clauses are full clauses. Recall that the tough-adjjectives in the pseudo-small construction have the ku-ending:

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Example (iv) crucially differs from (ii) in that the former does not involve fronting of the infinitive. However, (iv) is still unacceptable. Whatever principle rules out (iv) then rules out (ii) (see Abels 2002 and Boeckx 2002 for further discussion). The second point is supported by an observation that the adjective likely with a fronted infinitive in (iii) allows voice alternation. As is well known, raising, but not control, allows voice alternation:

(v) \[\text{Hornstein (2003: 8)}\]
  a. The doctor seemed to examine Mary.
  b. Mary seemed to be examined by the doctor.

(vi) \[\text{Hornstein (2003: 8)}\]
  a. The doctor tried to examine Mary.
  b. Mary tried to be examined by the doctor.

Examples (va) and (vb), which involve a raising predicate seem, essentially convey the same meaning. On the other hand, (via) and (vib), which involve a control predicate try, do not have the same interpretation. Significantly, Hornstein (2003: 78) observes that examples like (iii) allow voice alternation:

(vii) \[\text{Hornstein (2003: 78)}\]
  a. How likely to examine Mary is the Dr.
  b. How likely to be examined by the Dr is Mary.

If likely in (vii) were to be analyzed as a control predicate, it is at least unclear why (viia) and (viib) have the same interpretation. We are then led to analyze (iii) as a case of raising:

(viii) \[\text{Hornstein (2003: 8)}\]
  a. How likely to win the race is John, \(t_{j}\).
  b. How likely is John to win the race.

Nothing then seems to prevent us from analyzing (i) in terms of movement:

(ix) \[\text{Hornstein (2003: 8)}\]
  a. How eager to win the race is John, \(t_{j}\).
  b. How eager is John to win the race.

Control and raising, therefore, do not differ from each other as far as the above paradigm is concerned. The remaining question is why (viii) and (ix) do not violate the PBC. See Takita (2010) for an explanation of the PBC effect in (54d) and its absence in (viii), which could be extended to (55c) and (ix). See also Funakoshi (to appear) for an instance of control that is subject to the PBC (cf. Takita 2013).
(58) Mary-ga kono teeburu-o/*ga sagyoo-o hazime-yasuku si-ta.
   Mary-NOM this table-ACC/*NOM work-ACC begin-easy make-PST
   ‘Mary made this table easy to begin work on.’  (= (2))

As the ku-ending of adjectives is usually claimed to indicate non-finite complementation (Takezawa 1987; Kikuchi & D. Takahashi 1991; Nishiyama 1999; Sode 1999; Fukumitsu 2001; Koizumi 2002; Sakai et al. 2004; Kawai 2008), it is worth examining whether there is independent evidence to support the claim made in this paper. Evidence comes from (i) the distribution of adverbs and (ii) the distribution of pseudo-small clause complements.

5.1 Distribution of adverbs

The distribution of adverbs provides evidence that pseudo-small clause complements involve a clause boundary, which suggests that there are some clausal functional projections within the pseudo-small clause complements. I here discuss the distribution of the manner adverb suguni ‘immediately’. It is well known that manner adverbs cannot undergo long-distance scrambling, which moves elements across a clause boundary (Miyara 1982; Saito 1985; Bošković & D. Takahashi 1998, among others):

(59) a. Mary-ga [kono teeburu-ga suguni sagyoo-o
   Mary-NOM this table-NOM immediately work-ACC
   hazime-yasu-i]-to omot-ta.
   begin-easy-PRS-COMPREPORT think-PST
   ‘Mary thought that this table was easy to begin work on immediately.’

b. *Suguni Mary-ga [kono teeburu-ga t_i sagyoo-o
   immediately Mary-NOM this table-NOM work-ACC
   hazime-yasu-i]-to omot-ta.
   begin-easy-PRS-COMPREPORT think-PST
   Lit. ‘Immediately, Mary thought [that this table was easy to begin work on t_i].’

The adverb suguni ‘immediately’ in (59a) is interpreted in the embedded clause. When this adverb is moved across a clause boundary, as shown in (59b), the example is severely degraded (note that (59b) is acceptable if suguni is understood as modifying the matrix predicate).

Let us now consider the pseudo-small clause construction. The following examples show that a manner adverb in the pseudo-small clause complement cannot be scrambled to the matrix clause.

(60) a. Mary-ga kono teeburu-o [suguni sagyoo-o hazime-yasuku]
   Mary-NOM this table-ACC immediately work-ACC begin-easy
   si-ta.
   make-PST
   ‘Mary made [this table easy to begin work on immediately].’

b. *Suguni Mary-ga kono teeburu-o [t_i sagyoo-o
   immediately Mary-NOM this table-ACC work-ACC
   hazime-yasuku] si-ta.
   begin-easy make-PST
   Lit. ‘Immediately, Mary made [this table easy to begin work on t_i].’
If we scramble the embedded adverb suguni into the matrix clause, the example is degraded, as shown in (60b). The unacceptability of (60b) provides evidence that pseudo-small clauses involve some clausal functional projections.\(^{21}\)

### 5.2 Distribution of pseudo-small clauses and null complementizers

The distribution of pseudo-small clauses provides evidence that pseudo-small clause complements are CPs. I argue that pseudo-small clauses are headed by a null complementizer. As I pointed out above, the distribution of pseudo-small clause complements is quite restricted:

(61) a. Mary-ga kono teeburu-o [\(_{cp} \ t_j \ sagyoo-o \ hazime-yasuku\)] si-ta.
   Mary-NOM this table-ACC work-ACC begin-easy make-PST
   ‘Mary made this table easy to begin work on.’ (= (55a))

b. ??Kono teeburu-o [\(_{cp} \ t_j \ sagyoo-o \ hazime-yasuku\)] Mary-ga
   this table-ACC work-ACC begin-easy Mary-NOM
   t\(_j\) si-ta.
   make-PST
   (= (55b))

When the pseudo-small clause complement is moved to the sentence-initial position by clause-internal scrambling, the resulting sentence is degraded, as shown by the contrast between (61a) and (61b). Note that scrambling of complements of su/si ‘make’ is not always prohibited. To see this point, let us first consider an example of the Japanese potential construction that allows the presence of major subjects as well nominative objects (cf. Kuno 1973; Saito 1982):

    this table NOM work-ACC/NOM begin-can-PRS
    ‘(We) can begin work on this table.’
    ‘It is this table that (we) can begin work on.’

Example (62) contains the major subject kono teeburu ‘this table’ and the object in this example receives accusative or nominative Case as the potential suffix is a stative predicate (Kuno 1973). Interestingly, when the construction is embedded as the complement clause of su/si, the complement is headed by an overt complementizer yooni (see Nakau 1973; Nemoto 1993; Uchibori 2000; Fujii 2006, among others, for complements headed by yooni).\(^{22}\)

(63) Mary-ga kono teeburu-o sagyoo-o/ga hazime-rare-ru yooni si-ta.
    Mary-NOM this table-ACC work-ACC/NOM begin-can-PRS COMP\(_{FORCE}\) make-PST
    ‘Mary fixed this table to make it possible to begin work on it.’

---

\(^{21}\) The distribution of temporal adverbs may provide another piece of evidence for the presence of clausal functional projections within pseudo-small clause complements. Consider the following example of the pseudo-small construction that contains asita ‘tomorrow’:

(i) Mary-ga kono teeburu-o [asita sagyoo-o hazime-yasuku] si-ta.
   Mary-NOM this table-ACC tomorrow work-ACC begin-easy make-PST
   ‘Mary made this table easy to begin work on tomorrow.’

The acceptability of (i) suggests that pseudo-small clauses can contain asita. If asita is a TP adverb (cf. Koizumi 1991), (i) provides another argument for the presence of a clausal functional projection (i.e. TP) within pseudo-small clause complements.

\(^{22}\) I assume yooni is a Force head (Funakoshi 2009).
That this construction patterns with the pseudo-small clause construction in other respects is shown by the following examples:

**Ban on embedded nominative major subjects**

   Mary-NOM this table-ACC work-ACC begin-can-PRS COMP\_FORCE make-PST
   ‘Mary fixed this table to make it possible to begin work on it.’

   Mary-NOM this table-NOM work-ACC begin-can-PRS COMP\_FORCE make-PST

**Availability of thematic nominative subjects**

Mary-ga kono teebru-o sugyoo-o hazime-rare-ru
Mary-NOM this table-ACC everyone-NOM work-ACC begin-can-PST
COMP\_FORCE make-PST
‘Mary fixed this table to make it possible for everyone to begin work on it.’

**Position of accusative major subjects**

a. *Mary-ga nani-o minna-ga sugyoo-o hazime-rare-ru
   Mary-NOM what-ACC everyone-NOM work-ACC begin-can-PRS
   yooni-mo si-nakat-ta.
   COMP\_FORCE-MO make-NEG-PST
   ‘Mary did not fix anything to make it possible for everyone to begin work on it.’

b. Mary-ga kono teebru-o dare-ga sugyoo-o hazime-rare-ru
   Mary-NOM this table-ACC who-NOM work-ACC begin-can-PRS
   yooni-mo si-nakat-ta.
   COMP\_FORCE-MO make-NEG-PST
   ‘Mary did not fix this table to make it possible for others to begin work on it.’

**Thematic status of accusative major subjects**

Mary-ga teebru-o ippai minna-ga sugyoo-o hazime-rare-ru
Mary-NOM table-ACC many everyone-NOM work-ACC begin-can-PRS
yooni si-ta.
COMP\_FORCE make-PST
‘Mary fixed many tables to make it possible for everyone to begin work on them.’

The contrast between (64a) and (64b) indicates that the embedded major subject must receive accusative Case just like the case of the pseudo-small clause construction. Example (65) shows that the thematic nominative subject is allowed in the complement headed by yooni. Example (66) is the corresponding major subject construction, which has two nominative phrases. In (67a), the accusative major subject is the indeterminate pronoun nani ‘what’ and the particle –mo is adjoined to the complementizer yooni. This indeterminate pronoun cannot be licensed by the matrix negation as an NPI, which shows that the accusative major subject in this example is in the matrix clause. Example (67a) sharply contrasts with example (67b), where the embedded thematic subject is an indetermi-
nate pronoun. Example (68) shows that the accusative major subject measures out the event denoted by *su/si* ‘make’, as shown by the English translation of this example. The accusative major subject thus behaves as an internal argument of *su/si*.

Turning back to our main concern, the following examples show that clause-internal scrambling of the complement clause headed by *yooni* does not yield a degraded sentence:

(69) a. Mary-ga kono teeburu-o [\(\text{cp}_1 t_j \text{sagyoo-o hazime-rare-ru yooni}\)] Mary-NOM this table-ACC work-ACC begin-can-PRS COMP\_FORCE
si-ta.
make-PST
‘Mary fixed this table to make it possible to begin work on it.’  (= (63))

b. Kono teeburu-o [\(\text{cp}_1 t_j \text{sagyoo-o hazime-rare-ru yooni}\)] Mary-ga this table-ACC work-ACC begin-can-PRS COMP\_FORCE Mary-NOM
\(t_j\) si-ta.
make-PST

As shown in (69b), scrambling of the complement clause headed by *yooni* does not affect the acceptability of the example, contrary to the case of scrambling of the pseudo-small clause complement in (61b). This shows that it is not the case that scrambling of the complements of *su/si* ‘make’ is always prohibited. Rather, the degraded status of (61b) seems to stem from a certain property of the pseudo-small clause complement.

The contrast between the pseudo-small clause complement and the complement headed by *yooni* also holds for VP-internal scrambling (cf. Fukumitsu 2001). Consider the following examples, where the complements are scrambled to the left of the VP-adverb *isoide* ‘hastily’:

(70) a. Mary-ga isoide kono teeburu-o [\(\text{cp}_1 t_j \text{sagyoo-o hazime-yasuku}\)] Mary-NOM hastily this table-ACC work-ACC begin-easy
si-ta.
make-PST
‘Mary hastily made this table easy to begin work on.’

b. ??Mary-ga kono teeburu-o [\(\text{cp}_1 t_j \text{sagyoo-o hazime-yasuku}\)] isoide Mary-NOM this table-ACC work-ACC begin-easy hastily 
\(t_j\) si-ta.
make-PST

(71) a. Mary-ga isoide kono teeburu-o [\(\text{cp}_1 t_j \text{sagyoo-o hazime-rare-ru yooni}\)] Mary-NOM hastily this table-ACC work-ACC begin-can-PRS COMP\_FORCE
si-ta.
make-PST
‘Mary hastily fixed this table to make it possible to begin work on it.’

\[\text{If the complement clause precedes the accusative major subject, the resulting sentence is unacceptable:}\]

(i) “[\(\text{cp}_1 t_j \text{sagyoo-o hazime-rare-ru yooni}\)] kono teeburu-o Mary-ga \(t_j\) si-ta.
work-ACC begin-can-PRS COMP\_FORCE this table-ACC Mary-NOM make-PST
‘Mary fixed this table to make it possible to begin work on it.’

Example (i) violates the PBC as the scrambled complement contains the unbound trace \((t_j)\) left by the movement of the accusative major subject. This example thus can be treated on a par with (55c).
When the VP adverb *isoide* ‘hastily’ is placed before the complement, the examples are acceptable, and *isoide* ‘hastily’ is interpreted as modifying the matrix verb *su/ si* ‘make’ (cf. (70a), (71a)). However, once the complement is placed before *isoide* by VP-internal scrambling, the pseudo-small clause construction is degraded while the corresponding sentence with the complement headed by *yooni* remains acceptable (cf. (70b), (71b)).

The contrast between the two types of complements observed above in fact follows from the current analysis. Note that pseudo-small clause complements are full CPs. Assuming that the *ku*-ending of adjectives is a realization of a verbal head that selects AP (Nishiyama 1999; Sode 1999), we are led to assume that the functional layer involving TP and CP is phonologically null (cf. (72a)). This contrasts with the complement headed by an overt complementizer *yooni*, where both T and C are phonologically realized (cf. (72b)).

(72)  
\[
\begin{array}{l}
\text{a. } [\mathsf{CP} [\mathsf{TP} [\mathsf{VP} [\mathsf{AP}] \text{ku}] \text{∅} ] \text{∅}] \\
\text{b. } [\mathsf{CP} [\mathsf{TP} [\mathsf{VP}] \text{ru}_i ] \text{yooni}] \\
\end{array}
\]

The contrast we observed above with respect to the distribution of the two types of complements is now reduced to the well-known contrast between clauses headed by a null complementizer and those headed by an overt complementizer (Stowell 1981; Saito 1986; Pesetsky 1991; Bošković & Lasnik 2003; Kishimoto 2006; An 2007, among others). It is well known that clauses headed by a null C are restricted with respect to their distribution when compared with those headed by an overt C:24,25

(73)  
\[
\begin{array}{l}
\text{Bošković & Lasnik (2003: 527)} \\
\text{a. } (?) \text{It was widely believed } [\mathsf{CP} \text{∅} [\mathsf{TP} \text{he liked linguistics}]]. \\
\text{b. } \text{It was widely believed } [\mathsf{CP} \text{that } [\mathsf{TP} \text{he liked linguistics}]]. \\
\end{array}
\]

(74)  
\[
\begin{array}{l}
\text{Bošković & Lasnik (2003: 527)} \\
\text{a. } [\mathsf{CP} \text{∅} [\mathsf{TP} \text{He liked linguistics}]] \text{ was widely believed.} \\
\text{b. } [\mathsf{CP} \text{that } [\mathsf{TP} \text{he liked linguistics}]] \text{ was widely believed.} \\
\end{array}
\]

(75)  
\[
\begin{array}{l}
\text{An (2007: 12)} \\
\text{a. } *[\mathsf{CP} \text{∅} [\mathsf{TP} \text{John liked linguistics}]]. \\
\text{b. } \text{I believe very strongly } [\mathsf{CP} \text{that John liked linguistics}]. \\
\end{array}
\]

While the null C and the overt C *that* are both allowed when the CP stays in the complement position (cf. (73a), (73b)), the complementizer must be overtly realized when the CP complement is not in the complement position due to passivization or extraposition (cf. (74), (75)). Roughly speaking, a null C is required to be “adjacent” to a matrix verb, while such requirement does not hold for an overt C (see Pesetsky 1991; Bošković &  

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24 The judgments of the English examples are relative, not absolute. Examples (74) and (75) thus simply indicate the contrast between the a-example and the b-example. See Bošković & Lasnik (2003) and An (2007).

25 However, see Webelhuth (1989, 1992) for an analysis of *that*-less clauses in terms of TP. The argument for the CP status of pseudo-small clauses presupposes the null C analysis of *that*-less clauses. I thank a reviewer for clarifying this point.
Lasnik 2003; An 2007, among others, for theoretical explanations). While a null C is allowed when the CP is in the complement position (cf. (73a)), which satisfies the adjacency requirement, a null C is disallowed when the CP is not in the complement position (cf. (74a), (75a)) because the adjacency between the verb and the null C does not hold. An overt C that, which is not subject to the adjacency condition, is thus required in such contexts (cf. (74b), (75b)).

I propose to assimilate the contrast between the pseudo-small clause complements and the complements headed by yooni (cf. (61), (69), (70), (71)) to the contrast between the complements headed by a null C and the complements headed by an overt C: as the pseudo-small clause complement is always headed by a null C, as shown in (72a), the pseudo-small clause complement must always be adjacent to the verb su/si ‘make’. This is why scrambling of the pseudo-small clause complement is impossible. On the other hand, assuming that the overt complementizer yooni is not subject to the adjacency requirement, the complement clause headed by yooni can appear in the non-complement positions just as the complement headed by that can appear in the non-complement positions. To the extent this analysis is successful, it provides evidence that pseudo-small clause complements are CPs.

The proposed analysis makes a prediction: namely, it predicts that the pseudo-small clause complements cannot be coordinated under Right Node Raising (RNR), while the complements headed by yooni can. To see why this prediction holds, let us first consider the following examples from the Kansai dialect of Japanese, which has been reported to allow a null C when a complement clause is adjacent to a matrix verb (Saito 1986; Kishimoto 2006) (the glosses are modified from the original examples):

(76) Saito (1986: 312–313)
      John-NOM Kobe-to go-PRS COMP say-PST
      ‘John said that he was going to Kobe.’
   b. [CP, Kobe-ni ik-u *(te)], John-ga t,yuu-ta.
      Kobe-to go-PRS COMP John-NOM say-PST
      ‘John said that he was going to Kobe.’

While the null C is allowed when the complement clause is adjacent to the main verb (cf. (76a)), the null C is disallowed when the complement clause is scrambled to the sentence-initial position (cf. (76b)). This shows that adjacency between the verb and the null C does not hold after scrambling. Interestingly, Saito (1986) observes that complements headed by a null C cannot be coordinated under RNR (the glosses are modified from the original example) (see Saito 1986; Mukai 2003; An 2007; Otaki 2011, among others, for RNR in Japanese):

(77) Saito (1986: 318)
   John-ga Kobe-ni ik-u *(te), soide
   John-NOM Kobe-to go-PRS COMP and
   Mary-ga Tooky-ni i-ku *(te), yuu-ta.
   Mary-NOM Tokyo-to go-PRS COMP say-PST
   ‘John said that he was going to Kobe, and Mary said that she was going to Tokyo.’

---

26 I am using the term “adjacency” for a purely descriptive purpose here.
27 I thank Koji Sugisaki for pointing out the relevance of RNR.
28 The judgment reported in Saito (1986) is based on the Kobe variety of the Kansai dialect. Null complementizers are also available in other varieties of the Kansai dialect (Kishimoto 2006). See fn. 29 for further discussion.
I assume that in (77), the null C in the first conjunct is not adjacent to the verb and the null C in the second conjunct is not adjacent to the verb either, due to an intonational break after the second conjunct (cf. Bošković & Lasnik 2003; An 2007; Sato 2010). The overt C te is thus required in both conjuncts.

We are now ready to test the prediction noted above. The current analysis predicts that the pseudo-small clause complements cannot be coordinated under RNR while the complements headed by yooni can. This prediction is borne out:

(78) Mary-ga kono teebru-o kaitekini sagyoo-o hazime-rare-ru yooni, Mary-NOM this table-ACC comfortably work-ACC begin-canPRS COMP \text{FORCE} 
sosite John-ga ano teebru-o kaitekini benkyoo-o and John-NOM that table-ACC comfortably study-ACC
hazime-rare-ru yooni, si-ta.
begin-canPRS COMP \text{FORCE} make-PST
‘Mary fixed this table to make it possible to begin work on it comfortably, and John fixed that table to make it possible to begin study on it comfortably.’

(79) ??Mary-ga kono teebru-o kaitekini sagyoo-o hazime-yasuku ∅c,
Mary-NOM this table-ACC comfortably work-ACC begin-easy
sosite John-ga ano teebru-o kaitekini benkyoo-o hazime-yasuku ∅c,
and John-NOM that table-ACC comfortably study-ACC begin-easy
si-ta.
make-PST
‘Mary made this table easy to begin work on comfortably, and John made that table easy to begin study on comfortably.’

Example (78), where the conjoined elements are both headed by yooni, is considerably better than (79), where the pseudo-small complements are conjoined. Thus, (79) can be treated on a par with (77) without te in both conjuncts. That the degraded status of (79) stems from the presence of the null C is further confirmed by the following observations. First, when the null C under consideration is in the shared element in RNR, the example becomes acceptable:

(80) Mary-ga kono teebru-o, sosite John-ga ano teebru-o,
Mary-NOM this table-ACC and John-NOM that table-ACC
sagyoo-o hazime-yasuku ∅c si-ta.
work-ACC begin-easy make-PST
‘Mary made this table easy to begin work on, and John made that table easy to begin work on.’

The conjuncts in (80) do not include the \textit{tough}-adjective, which I claim is accompanied by a null C. Rather, the \textit{tough}-adjective is in the shared element together with the verb su/si ‘make’. The adjacency condition is thus met here. The acceptability of this example is consistent with the current proposal that (79) is degraded due to the presence of a null C in the conjuncts. Furthermore, when su/si is contained in both conjuncts (cf. Takano 2004; Hirata 2006), the resulting sentence is also better than (79):
Both null Cs in (81) are followed by su/si ‘make’. The example thus satisfies the adjacency condition and is acceptable. This also confirms the current claim that the presence of a null C that does not satisfy the adjacency condition is the cause of the degraded status of (79).

In summary, it has been argued in this subsection that pseudo-small clause complements are headed by a null C, which further supports the current analysis. While the ku-form of adjectives is usually assumed to indicate a “reduced” structure, the results in this section have shown that the common assumption does not hold for the case of pseudo-small clause complements.

6 Cases without overt accusative major subjects

In this section, I discuss cases that do not seem to involve accusative major subjects. Discussion of such cases helps us sharpen the analysis of the ban on embedded nominative major subjects. One reviewer points out that (82b) followed by (82a) is acceptable to her/him:

![Example sentence with table](image-url)
Example (82b) is acceptable without an (overt) accusative major subject. We then have to ask how the verb su/si ‘make’ discharges its theta-role to an NP in (82b). I suggest that (82b) involves pro that refers to the accusative major subject kono teeburu ‘this table’ as well as pro that refers to the subject Mary in (82a):

(83)  a. Mary-wa kono teeburu-o doo kaizoosi-ta no?
     Mary-TOP this table-ACC how fix-PST Q
     ‘How did Mary fix up this table?’
(= (82a))

   b. pro, pro_i oozee-de-mo sugyoo-ga hazime-yasuku si-ta yooda.
      many.people-in-even work-NOM begin-easy make-PST looks
      ‘Apparently (she) made (it) easy to begin work on even in a big group.’
(= (82b))

(83) is then analyzed as follows (irrelevant parts are omitted):

(84) [[vP [vp pro_k [forceP [FinP t_k [PredP t_k[NOM]]]] make] v]]

Pro that refers to kono teeburu ‘this table’ (pro_k) is base-generated in the embedded PredP Spec and moves to FinP Spec. Pro_k then moves into the matrix VP. As pro_k is now visible to the matrix v, which can assign accusative Case, the Inverse Case Filter in (39) forces Case-assignment of the matrix v:

(85) [[vP [vp pro_k[ACC] [forceP [FinP t_k[NOM]] [PredP t_k[NOM]]]] make] v]]

The other reviewer points out another case where the pseudo-small clause construction is acceptable without an accusative major subject ((86b) with the embedded nominative object is provided by the reviewer). The observation seems to hold for the corresponding examples with the complementizer yooni:31

(86)  a. Mary-ga kono teeburu-o sugyoo-o/ga hazime-yasuku si-ta.
     Mary-NOM this table-ACC work-ACC/NOM begin-easy make-PST
     ‘Mary made this table easy to begin work on.’
(= (2), (i) in fn.8)

   b. Mary-ga kono teeburu-de sugyoo-o/ga hazime-yasuku si-ta.
      Mary-NOM this table-on work-ACC/NOM begin-easy make-PST
      ‘Mary made it easy to begin work on this table.’

31 An example similar to (87b) (and (96)) is observed in Kuroda (2003: 452) (the glosses are modified from the original example):

(i) John-ga Bill-ga yasai-o tabe-ru yooni si-ta.
   John-NOM Bill-NOM vegetable-ACC eat-PRS COMP do-PST
   ‘John made Bill eat vegetables.’

I thank one reviewer for bringing Kuroda’s (2003) observation to my attention.
(87)  

       make-PST  
       ‘Mary fixed this table to make it possible to begin work on it.’  

b. Mary-ga kono teeburu-de sayyoo-o/ga hazime-rare-ru yooni si-ta.  
       make-PST  
       ‘Mary made it possible to begin work on this table.’

Both (86b) and (87b) are acceptable on the interpretation that kono teeburu-de ‘on this table’ modifies the embedded predicate hazime ‘begin’. Sayyoo ‘work’ in these examples is thus in the complement clause. Of importance here is the fact that (86b) and (87b) are acceptable even though they do not seem to involve any pro that can refer to an NP in a preceding sentence. Essentially following the suggestion of one reviewer (who brought (82) and Kuroda’s 2003 observation alluded to in fn. 31 to my attention), I suggest that (86b) and (87b) involve pro that corresponds to it (henceforth pro(§)). I assume that pro(§) is comparable to the “dummy” it observed in CP-extraposition constructions (cf. Rosenbaum 1967; Postal & Pullum 1988; see Kuroda 1978 and D. Takahashi 2000 for CP extraposition constructions in Japanese):

(88)  

Svenonius (2002: 5)  

It is obvious where you got that hickey.

I also assume that pro(§) in question (and it in (88)) bear (some) theta-role as a quasi-argument (see Chomsky 1981; 1986. cf. Safir 1985; Svenonius 2001). Examples (86b) and (87b) are then analyzed as follows:

(89)  

\[
\begin{array}{c}
\text{[vP [VP} \\
\text{pro(§)} [\text{ForceP} [\text{FinP} t_i [\text{PredP} t_i ]] \text{make}]v]}
\end{array}
\]

Pro(§) is base-generated in PredP Spec as the embedded major subject and moves to FinP Spec. Pro(§) then moves into the matrix VP. As the moved pro(§) is now visible to the matrix v, which can assign Case, the Inverse Case Filter in (39) forces Case-assignment of the matrix v:

(90)  

\[
\begin{array}{c}
\text{[vP [VP pro(§)[ACC} [\text{ForceP} [\text{FinP} t_i[NOM] [\text{PredP} t_i[NOM] ]] \text{make}]v]}
\end{array}
\]

The above discussion on pro(§) now completes the analysis of the ban on embedded nominative major subjects. I have argued that the theta-roles of the verb su/si ‘make’ and the Pred head must be satisfied by a single NP via movement. I assume that a lexical NP like kono teeburu cannot be merged as PredP Spec when pro(§) is chosen as the embedded major subject. This is so because pro(§) and the lexical NP compete for the single position (PredP Spec) (I thank one reviewer for this point):

(91)  

\[
\begin{array}{c}
\text{[vP [VP [\text{ForceP} [\text{FinP} [\text{PredP}^* [\text{PredP}^* t_i[NOM] ]] \text{make}]v]}
\end{array}
\]

32 However, see D. Takahashi (2000) for an argument that pro in Japanese does not undergo raising (A-movement into a non-theta position). It is beyond the scope of the present paper to investigate in depth properties of pro in Japanese with respect to different kinds of movement.
When \( \text{pro}_{(i)} \) is merged as PredP Spec, the former moves into the matrix VP and receives accusative Case. When the lexical NP \( \text{kono teeburu} \) ‘this table’ is merged as PredP Spec, the former moves into the matrix VP and receives accusative Case. Embedded nominative major subjects are therefore excluded with either option:

\[(92) \quad \ast \text{Mary-ga kono teeburu-ga sugyoo-o/ga hazime-yasuku si-ta.}
\]

\( \text{Mary-NOM this table-NOM work-ACC/NOM begin-easy make-PST} \)

‘Mary made this table easy to begin work on.’

(cf. (2), (i) in fn.8)

\[(93) \quad \ast \text{Mary-ga kono teeburu-ga sugyoo-o/ga hazime-rare-ru yooni si-ta.}
\]

\( \text{Mary-NOM this table-NOM work-ACC/NOM begin-can-PRS COMP}_{\text{FORCE}} \text{ make-PST} \)

‘Mary fixed this table to make it possible to begin work on it.’

(cf. (63))

The analysis also predicts that embedded thematic nominative subjects should be allowed in the same context. This is because \( \text{pro} \) and the thematic nominative subject do not compete for the single position (PredP Spec): while \( \text{pro} \) is in PredP Spec, the thematic nominative subject is in TP Spec:

\[(94) \quad [\text{VP} [\text{VP} [\text{ForceP} [\text{FinP} [\text{PredP} \text{pro}_{(i)} [\text{TP John}]]]]]] \text{ make} [\text{v}]\]

This prediction is borne out by the following examples ((95) with the embedded accusative object is provided by one reviewer):

\[(95) \quad \text{Mary-ga kono teeburu-de John-ga sugyoo-o/ga hazime-yasuku si-ta.}
\]

\( \text{Mary-NOM this table-ON John-NOM work-ACC/NOM begin-easy make-PST} \)

‘Mary made it easy for John to begin work on this table.’

\[(96) \quad \text{Mary-ga kono teeburu-de John-ga sugyoo-o/ga hazime-rare-ru yooni si-ta.}
\]

\( \text{Mary-NOM this table-ON John-NOM work-ACC/NOM begin-can-PRS COMP}_{\text{FORCE}} \text{ make-PST} \)

‘Mary made it possible for John to begin work on this table.’

\(33\) A possible alternative analysis of (86b), (87b), (95), and (96) would be to assume that \( \text{su}/\text{si} \) ‘make’ only takes ForceP (cf. (ib)), which means that nothing should move into the matrix VP to satisfy the selectional requirement of \( \text{su}/\text{si} \) ‘make’. There would then be no need to posit \( \text{pro}_{(i)} \) that undergoes movement into the matrix VP (I thank one reviewer for hinting at this possibility):

\[(i)\]

\[a. \quad [\text{VP} [\text{VP} \text{pro}_{(i)(ACC)} [\text{FinP} [\text{PredP} \text{pro}_{(i)} [\text{TP John}]]]]] \text{ make} [\text{v}] \quad (= \text{(90)})\]

\[b. \quad [\text{VP} [\text{VP} \text{pro}_{(i)(ACC)} [\text{FinP} [\text{PredP} \text{pro}_{(i)} [\text{TP John}]]]]] \text{ make} [\text{v}] \quad (= \text{(90)})\]

There is, however, a reason to believe that this alternative analysis cannot be maintained. In particular, adopting such an analysis leaves us with no account of the ban on embedded nominative major subjects. Note first that the adoption of the alternative analysis in (ib) entails that \( \text{su}/\text{si} \) ‘make’ is lexically ambiguous: we need to assume \( \text{su}/\text{si} \) that takes only a ForceP complement and \( \text{su}/\text{si} \) that takes both an NP complement and a ForceP complement (see Miyagawa 1999 and Harley 2008 and the references cited therein for analyses of the causative predicate –\( \text{sase} \) ‘cause’ that assume its lexical ambiguity). An overt accusative major subject is required only when \( \text{su}/\text{si} \) selects \( \text{a ForceP complement with an embedded nominative major subject.} \)

We are then left with no account of the ban on embedded nominative major subjects:

\[(ii) \quad \ast \text{Mary-ga kono teeburu-ga sugyoo-o hazime-yasuku si-ta.}
\]

\( \text{Mary-NOM this table-NOM work-ACC begin-easy make-PST} \)

‘Mary made this table easy to begin work on.’

\( (= \text{(2)})\)

I therefore continue to assume that \( \text{su}/\text{si} \) always selects both an NP complement and a Force complement and (86b), (87b), (95), and (96) are analyzed in terms of movement of \( \text{pro}_{(i)} \).
7 Notes on the nature of “improper” movement

In this section, I briefly consider the nature of “improper” movement. I have argued that accusative major subjects in the pseudo-small clause construction undergo A-movement out of a CP, which is often ruled out as “improper” movement (see Chomsky 1973; May 1979; Fukui 1993; Obata 2010; Obata & Epstein 2011, among others). The question that needs to be addressed, then, is why such movement is possible. Let us start with the following example of hyperraising:

(97)  a. Asarina (2011: 17)
      *John seems that is singing.
      [\textit{A}]
      (A)
      [\textit{A'}]
      (A')

The NP \textit{John} in the embedded TP Spec, which is an A-position, moves to the embedded CP Spec, which is an A'-position. The NP then moves to the matrix TP Spec, which is another A-position. The question that should be asked now is how we could distinguish possible “improper” movement in the pseudo-small clause construction and the genuine case of improper movement in (97).\footnote{I have suggested in Takahashi (2011) that A-movement out of a CP is possible when the embedded C-T is not involved in nominative Case assignment. The availability of nominative Case within pseudo-small clause complements (cf. (16), (95)) suggests that such an analysis cannot be maintained.} I suggest here one possible way to resolve the apparent conflict. There has been a growing body of literature that attempts to explain improper movement phenomena in terms of the locality of Agree (Fujii 2007; Halpert 2012; Funakoshi 2014; van Urk 2015). Under this view, (97) is ruled out due to the presence of (interpretable) phi-features on the embedded CP:\footnote{The authors cited in the text suggest that the locality of Agree should be defined in terms of domination as well as c-command (cf. Chomsky 1964; Fukui 1999): as the embedded CP dominates \textit{John}, the former counts as an intervener. This point does not affect the discussion in the text. See also Takahashi (2016).}

(98)  *[\textit{A}]
       \textit{John} that [\textit{A'}] \textit{is} [\textit{A}] \textit{singing}]]]

As the CP complement is closer to the matrix T than \textit{John} is, the matrix T cannot agree with \textit{John}. The subsequent movement of \textit{John} to the matrix TP Spec is thus impossible. Notice that this approach predicts that A-movement out of a CP should, in principle, be possible when there is no intervention effect of Agree (cf. Fujii 2007). A-movement out of a CP in the pseudo-small clause construction provides one such case. As argued in the previous sections, A-movement in the pseudo-small clause construction is an instance of movement into a theta-position, which is not conditioned by Agree:

(99)  \[
      \textit{NP} [\textit{VP} \textit{t} \textit{\textit{ForceP}} [\textit{FinP} \textit{t} \textit{\textit{PredP} t} \textit{\textit{v}}] \textit{make}] \textit{v}]\]

As movement into the matrix VP is not conditioned by Agree, the analysis of improper movement summarized in (98) in fact predicts (99) to be possible (cf. Boeckx et al. 2010).\footnote{I assume that the pseudo-small clause complement itself cannot undergo movement into the higher complement position of the matrix predicate \textit{su/si} ‘make’ due to anti-locality (cf. Abels 2003; Grohmann 2003): the pseudo-small clause complement is too close to the matrix verb \textit{su/si} to satisfy the other thematic requirement of \textit{su/si} by movement.} The proposed analysis of the pseudo-small clause construction therefore gives further credence to an analysis of improper movement in terms of the locality of Agree.
8 Conclusion and further questions

I have argued in this paper that an analysis of the pseudo-small clause construction in Japanese provides a novel case of movement into a theta-position that takes place across a CP phase. To the extent that the proposed analysis is successful, it provides a new argument that A-movement out of a CP is possible. The analysis also necessitates the Inverse Case Filter, which provides a principled account of the ban on embedded nominative major subjects. Furthermore, I have suggested that (i) Tense in Japanese moves to C, (ii) Standard Japanese has null complementizers, and (iii) the ban on A-movement out of a CP is explained in terms of the locality of Agree.

One remaining question concerns the status of the “regular” small clause construction (see Takezawa 1987; Kikuchi & D. Takahashi 1991; Nishiyama 1999; Sode 1999; Fukumitsu 2001; Koizumi 2002; Sakai et al. 2004; Kawai 2008, among others, for discussion):

(100) John-ga [Mary-o/*ga kawaiku] si-ta.
    John-NOM Mary-ACC/*NOM pretty make-PST
    ‘John made Mary pretty.’

As mentioned above, the ban on embedded nominative subjects in the small clause construction is often tied to the ku-ending of adjectives: as the ku-ending of adjectives is assumed to signal non-finite complementation, nominative Case is unavailable in small clause complements. The present analysis of the pseudo-small clause construction may provide a new way to approach this constraint. Recall that the tough-adjectives in the pseudo-small construction also have the ku-ending but allow a nominative phrase, which is licensed by the embedded Tense:

    Mary-NOM this table-ACC John-NOM work-ACC begin-easy make-PST
    ‘Mary made this table easy for John to begin work on.’

The acceptability of (101) thus shows that the ku-ending does not entail non-finite complementation. We might then expect that adjectives with the ku-ending generally allow nominative phrases. However, this does not seem to be the case. Let us first consider the following examples with the adjective maru ‘round’:

(102) a. [NP [Kono teeburu]-no sumi]-ga maru-i.
    this table-GEN edge-NOM round-PRS
    ‘The edges of the table are round.’
    b. Kono teeburu-ga sumi-ga maru-i.
    this table-NOM edge-NOM round-PRS
    ‘It is the edges of the table that are round.’

The possessor argument in (102a) receives genitive Case within the subject NP headed by sumi ‘edge’ (cf. Kitagawa & Ross 1982), and the possessor argument in (102b) receives nominative Case as the major subject and receives the exhaustive-listing interpretation. When we embed (102a) and (102b) as the complement of su/si ‘make’, we obtain the following results:37

37 I thank one reviewer for Syntax for bringing the facts like (103) to my attention.
(103) a. Mary-ga kono teeburu-no sumi-o maruku si-ta.
   Mary-NOM this table-GEN edge-ACC round make-PST
   ‘Mary rounded the edges of the table.’

b. *Mary-ga kono teeburu-o sumi-ga maruku si-ta.
   Mary-NOM this table-ACC edge-nom round make-PST

Interestingly, (103a), which has no nominative phrase within the adjectival complement, is significantly better than (103b), which leaves a nominative phrase within the adjectival complement. If adjectives with the *ku*-ending in general allow nominative phrases, the above contrast is not expected (cf. Kawai 2008). I leave a detailed investigation of the small clause construction in Japanese for my future research.

**Abbreviations**

I use the following abbreviations in this paper: **ACC** = accusative, **COMP** = complementizer, **COP** = copula, **DAT** = dative, **GEN** = genitive, **NEG** = negation, **NOM** = nominative, **PASS** = passive, **PRS** = present, **PST** = past, **Q** = question particle, **TOP** = topic.

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**Competing Interests**

The author has no competing interests to declare.

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