#### DISCOURSE-CONFIGURATIONALITY AND THE SCOPE OF NEGATION\*

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#### 1. Introduction

As observed in (1a), quantified subjects cannot be interpreted as partial negation (not > all) in Japanese, unlike English in (1b).<sup>1</sup>

(1) a. Zen'in-ga siken-o uke -na -katta. all -NOM exam-ACC take-Neg-Past \*not > all, all > not

'All did not take the exam.'

b. Everyone didn't attend the meeting.

not > every, every > not

However, it is possible for them to have the interpretation in (2), even in Japanese.

(2) a. Siken-o zen'in-ga uke -na -katta. exam-ACC all -NOM take-Neg-Past

not > all, all > not

'The exam, all did not take.'

b. Hora, zen'in-ga utat -tei -na -i. look, all -NOM sing-Prog-Neg-Pres

not > all, all > not

'Look, all are not singing.'

c. Zen'in-ga siken-o uke-na-i nara koma -ru. all -NOM exam-ACC take-Neg-Pres if be embarrassed-Pres

not > all, all > not

'If all don't take the exam, I will be embarrassed.'

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<sup>&</sup>lt;sup>1</sup> Although it is reported that there are some speakers who accept the partial negation interpretation of the subject in (1a), it seems that all speakers agree that it is much easier to obtain that interpretation in (2). It is this fact that I will explicate in this paper.

The scope of negation in Japanese has been a controversial issue.<sup>2</sup> Focusing on the possibilities of the partial negation of the subject, I attempt to clarify the scope of negation in Japanese as compared with English and argue that the difference between them naturally follows from the discourse-configurationality (Kiss 1995, Miyagawa 2010) in combination with CP cartography (Rizzi 1997, Haegeman 2000). While the position of the subject in a clause is well-established in English, that is still controversial in Japanese.<sup>3</sup> In order to determine the scope of negation based on the possibility of the partial negation of the subject, it is necessary to define the position of the subject properly. I demonstrate that one dialect of Japanese provides us with a strong tool for doing so.

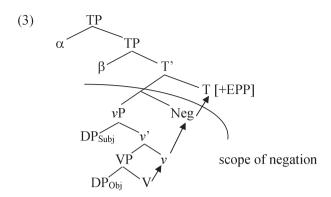
The paper is organized as follows: first, in section 2, I introduce Miyagawa's (2001, 2003) analysis based on EPP with its primary defects. In section 3, I argue for the crucial role of the notions of topic and focus in the analysis of Japanese as a discourse-configurational language and examine the position of the subject and the scope of negation by using the Kumamoto Japanese dialect (KJ) spoken in Kyushu, south-western Japan. In section 4, I outline two insightful analyses by Miyagawa (2010) and Saito (2010) with their problems. In section 5, after introducing the analysis of sentential negation in English by Nishioka (2004, 2007), I propose a new analysis, incorporating the mechanisms of Miyagawa (2010) and Saito (2010) and CP cartography (Rizzi 1997, Haegeman 2000). Then I argue that the difference between Japanese and English with respect to the scope of negation is derived from a difference between a discourse-configurational language and a language with φ-features agreement. Section 6 concludes the paper.

# 2. EPP and the Scope of Negation: Miyagawa (2001, 2003)

Assuming that the scope of negation is the c-command domain of T, Miyagawa (2001, 2003) develops his theory of scrambling based on [EPP], which is schematically represented in (3). If the subject moves to Spec-TP ( $\beta$  in (3)) to check [EPP] on T as in (5a), it is not in the scope of negation, resulting in only the interpretation of total negation (all > not). This is the derivation in (4a). But if the object instead moves there to check [EPP] on T as in (5b), the subject can stay in Spec- $\nu$ P, which is under the scope of negation, and the partial negation results in (4b). However, (4b) has another derivation in (5c), where both the subject and the object move to  $\beta$  and  $\alpha$  respectively, in (3). This results in the total negation of the subject. In other words, EPP is a key factor in explaining the interpretation of the subject in (4).

<sup>&</sup>lt;sup>2</sup> See Shibata (2015) and Nishioka (2017) for brief survey on the issue.

<sup>&</sup>lt;sup>3</sup> See Koizumi (2017) for a recent discussion on it.



(4) a. Zen'in-ga siken-o uke -na -katta. (=(1a)) \*not > all, all > not all -NOM exam-ACC take-Neg-Past

'All did not take the exam.'

b. Siken-o zen'in-ga uke -na -katta. (=(2a)) not > all, all > not > not > not > not > all > not >

'The exam, all did not take.'

(5) a.  $[TP Subj_i ... [NegP [vP t_i ...Obj... tv-v] tv-v-Neg] V-v-Neg-T_{[EPP]}]$  Subj > not

b.  $[TP Obj_i ... [NegP [\nu P Subj ...t_i ...t_{V-\nu}] t_{V-\nu-Neg}] V-\nu-Neg-T_{[EPP]}]$  not > Subj

c.  $[TP \ Obj_j \ [TP \ Subj_i \dots [NegP \ [vP \ t_i \dots t_j \ \dots t_{V-v}] \ t_{V-v-Neg}] \ V-v-Neg-T_{[EPP]}]]$  Subj > not

However, Miyagawa's EPP based analysis cannot capture the facts in (6) and (7).4

(6) a. Hora, zen'in-ga utat-tei -na -i. (=(2b)) not > all, all > not > look, all -NOM sing-Prog-Neg-Pres

'Look, all are not singing.'

b. Zen'in-ga mada ki -tei -na -i. not > all, all > not all -NOM yet come-Perf-Neg-Pres

'All haven't come yet.'

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<sup>&</sup>lt;sup>4</sup> A similar example to (7) is presented in Saito (2009) as a problem of Miyagawa (2001, 2003). Miyagawa (2001, 2003) also notices the availability of the partial negation of the quantified subject in *koto*-embedding and suggests that subjunctive tense may be the cause for it.

(7) a. Zen'in-ga siken-o uke -na -i nara koma -ru. (=(2c)) all -NOM exam-ACC take-Neg-Pres if be embarrassed-Pres

not > all, all > not

'If all don't take the exam, I will be embarrassed.'

b. Zen'in-ga sono tesuto-o uke -na -katta kara raigetu mata all -NOM that test -ACC take-Neg-Past because next month again

sore-o su-ru. not > all, all > not

it -ACC do-Pres

'Because all didn't take that test, we will have another one next month.'

(6) involves intransitive verbs with progressive and perfective aspects and (7) involves subordinate clauses, both of which allow partial negation of the subject, unlike (4a). Miyagawa's (2001, 2003) EPP analysis would predict that the subject moves to Spec-TP to check T's EPP and thus making its partial negation impossible, contrary to fact.

Moreover, as Saito (2009) points out, Miyagawa's EPP analysis faces a difficulty in explaining the following paradigm:

(8) a. Zen'in-ga zibun-zijin-o seme -na -katta. \*not > all, all > not all -NOM self -self -ACC blame-NEG-Past

'Everyone did not blame herself/himself.'

b. Zibun-zisin-o<sub>i</sub> zen'in-ga  $t_i$  seme -na -katta. not > all, all > not self -self -ACC all -NOM blame-NEG-Past

'Herself/Himself, everyone did not blame.'

According to Miyagawa, the partial negation of (8b) is obtained only if the object moves to Spec-TP to satisfy T's EPP and the subject remains at Spec-vP. However, if that happens, the violation of Binding Condition C should be caused because the subject is c-commanded by the anaphor, and the ungrammaticality should be predicted, contrary to fact.

#### 3. Discourse-Configurationality of Japanese

### 3.1. Clause-Initial Position and Topic/Focus

Kiss (1995:6) categorizes discourse-configurational languages as having the properties in (9).

(9) a. The (discourse-)semantic function 'topic,' serving to foreground a specific individual that something will be predicated about (not necessarily identical with the grammatical

subject), is expressed through a particular structural relation (in other words, it is associated with a particular structural position).

b. The (discourse-)semantic function 'focus,' expressing identification, is realized through a particular structural relation (that is, by movement into a particular structural position).

It is well-known that Japanese has these properties. Kuno (1973) argues that only a sentence initial -wa marked phrase can be interpreted as a (thematic) topic in the sense of (9a). Kuroda (1988) suggests that it occupies Spec-CP. In (10) the sentence is about *Masao* and *sono hon* is only interpreted contrastively with the other books.

(10) Masao-wa sono hon -wa yon -da. Masao-TOP that book-TOP read-Past

'As for Masao, he read that book, but he didn't read the others'

Similarly, Kuno (1973) also argues that a nominative -ga phrase in the sentence initial position must be interpreted as an "exhaustive listing focus" when it involves an individual-level predicate in the sense of Carson (1977), as mentioned by Saito (2010), which is exemplified in (11).

(11) Saru -ga kasiko-i. monkey-NOM smart -Pres

'It is monkeys that are smart.'

Interestingly, both of these are matrix-clause phenomena, as pointed out by Kuno (1973). When embedded, a clause-initial -wa phrase cannot be interpreted as a thematic topic and a clause-initial -ga phrase involving an individual predicate need not be interpreted as an exhaustive focus.

(12) a. Masao-ga/ \*-wa yon-da hon -wa kore des-u. Masao-NOM/-TOP read-Past book-TOP this be -Pres

'The book that Masao read is this.'

b. Jiroo-wa saru -ga kasiko-i to it -ta. Jiroo-TOP monkeys-NOM smart -Pres that say-Past

'Jiroo said that monkeys are smart.'

In (12a) *Masao* with -wa cannot be interpreted as a thematic topic and unacceptable as is, although it will be acceptable when it is interpreted contrastively by adding some context (such as *Jiro didn't read it but...*). In (12b) the (exhaustive) focus reading of monkeys (i.e. it is monkeys that are smart) is not forced, although it is a possible interpretation.

The above phenomena clearly demonstrate the characteristics of Japanese as a discourse-configurational language; the topic in the sense of (9a) is linked up with a clause-initial position of a matrix clause (i.e. a main clause phenomenon), while focus is not restricted to but is related with it. If one were to shift perspective slightly, one intriguing question emerges: whether Japanese matrix clauses always require a topic or focus. It might seem the answer should be negative because of the existence of 'neutral description' (Kuno 1973) sentences such as the following.

- (13) a. Tegami-ga ki -ta. letter -NOM come-Past
  - Tukue-no ue -ni hon -ga a -ru.
     desk -GEN top-on book-NOM be-Pres
     'There is a book on the desk.'
  - c. Atama-ga ita -i.head -NOM hurt-Pres'(Lit.) Head aches./ I have a headache.'

Here no topic phrase with -wa exists and the subject with nominative -ga need not be interpreted as the focus (although it can). These are sentences which can be interpreted as thetic judgement (Kuroda 1992). However, we can assume that these sentences also involve implicit 'stage-topics' that express the 'here-and-now' in the discourse, in the sense of Erteschik-Shir (1997, 2007). Then it follows that matrix clauses must always involve a topic/focus while subordinate clauses can involve focus, which can be stated as in (14).

(14) Topic/focus must always be activated in matrix clauses, while only focus can be done so in subordinate clauses in Japanese.

I also assume that the activation of topic/focus originally occurs in the CP area of the matrix clauses and it is inherited by T in some cases, which will be discussed in section 4. Because the topic/focus sensitivity of subjects is directly observable in the nominative case marking in Kumamoto Japanese (KJ), let us see some KJ data to confirm the discourse-configurationality of Japanese in the following subsection.

### 3.2. Data from Kumamoto Japanese (KJ)

KJ uses *-no* as well as *-ga* as nominative markers, unlike standard Japanese (SJ), which only uses the *-ga* nominative, as observed in (15). I argue, following Kato (2007) and Nishioka (2018a, b), that KJ data reveal the positions of subjects in Japanese which cannot be detected by solely observing SJ data.

- (15) a. Tenki -ga/\*-no ii -ne.<sup>5</sup> weather-NOM fine-Part 'Look! Nice weather, isn't it?'
  - b. Tenki -ga/-no yoka-ne. (KJ) weather-NOM fine -Part

'Look! Nice weather, isn't it?'

As for the differences between -ga and -no in KJ, the generalization in (16) holds, which can be demonstrated in (17) and (18).

- (16) a. -no nominative subject in KJ occupies a lower position than -ga nominative subject.
  - b. -no nominative subject in KJ cannot have a topic/focus interpretation (anti-topic/focus property), while -ga subject can have either. (Cf. Nishioka 2018a)
- (17) a. Ame-ga/\*?-no uresikakotuni hur-iyo -ru. (KJ) rain -NOM happily fall-Prog-Pres 'It, happily, is raining.'
  - b. Uresikakotuni ame-ga/no hur-iyo -ru. (KJ) happily rain-NOM fall-Prog-Pres
     'Happily, it is raining.'
- (18) a. Taroo-ga/\*-no kinoo son hon -ba koo-ta. (KJ)
  Taroo-NOM yesterday that book-ACC buy-Past

  'Taroo bought the book yesterday.'
  - b. Taroo-ga/\*-no iintyo (des-u) tai. (KJ) Taroo-NOM chair (be -Pes) Part
    - 'Taroo is the chair.'
  - c. Hora, basu-ga/-no ki -ta. (KJ) look, bus -NOM come-Past 'Look, here comes a bus.'

<sup>&</sup>lt;sup>5</sup> Japanese examples without designation of KJ are all SJ.

 $<sup>^6</sup>$  Fukuda (2009) independently argues explicitly for the focus property of genitive -ga and implicitly for non-focus/topic property of -no in DP of KJ.

(17) shows that a high adverb such as 'happily' cannot follow a *-no* marked subject unlike *-ga* marked one, which is derived from (16a): *-no* marked subject stays in a lower position and cannot precede a high adverb which is located in TP or higher. Following Kato (2007) and Nishioka (2018a, b), I assume that *-no* marked subject occupies Spec-vP and *-ga* marked subject is located in Spec-TP or a higher position for many speakers. I will return to this point later in this section. The subject 'Taroo' functions as the topic or focus of the sentence in (18a),<sup>7</sup> and the focus in (18b), which is an exhaustive listing sentence. *-no* cannot be used in either case. On the other hand, a *-no* marked subject appears in (18c), in which the subject functions as neither topic nor focus in a thetic interpretation. <sup>8</sup> Moreover, the anti-topic/focus property of *-no* marked subject is directly observable in (19) and (20).

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(19) a. Kozutumi-no todoi -ta (bai). (KJ) parcel -NOM arrive-Past (Part)

'A parcel has arrived.'
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- b. Kozutumi-dake/-sae -ga/\*-no todoi -ta (bai). (KJ) parcel -only/-even-NOM arrive-Past (Part)
   'Only/Even a parcel has arrived.'
- (20) a. An byooin -de Taroo-ga/-no umare -ta (tai). (KJ) that hospital-in Taroo-NOM be born-Past (Part)

  'In that hospital Taroo was born.'
  - b. An byooin -de watasi-ga/\*-no umare -ta (tai). (KJ) that hospital-in I -NOM be born-Past (Part)
     'In that hospital I/you was/were born.'

Elements with focus particles such as *-dake* 'only', and *-sae* 'even' cannot be marked with nominative *-no* as in (19b). On the other hand, non-anaphoric weak personal pronoun subjects (though third person pronouns are rarely used in colloquial speech in Japanese) are always the topic of the sentence according to Erteschik-Shir (1997), and thus cannot be marked with *-no* as in (20b). Here nominative subject is the first person pronoun and should be the topic unless it is focused, and should also be marked by *-ga*.

I claim that the positional property of *-no* marked subjects in (16a) is derived from their anti-topic/focus property in (16b). If the topic/focus must always be activated in matrix

<sup>&</sup>lt;sup>7</sup> I follow Miyagawa (2010) and Nishioka (2018a, b) in that other phrases than a *-wa* marked phrase can express the topic of the sentence. See Miyagawa (2017) for further elaboration.

<sup>&</sup>lt;sup>8</sup> Thus a *-no* subject cannot be used in the corresponding sentence in KJ to (11), while it is fine in the corresponding KJ sentences to (13).

clauses in Japanese, as stated in (14), and the unmarked position for it is the clause initial position (a high position of the clause), a -no marked subject cannot appear there due to (16b). This predicts that a -no marked subject appears more freely in subordinate clauses, where the activation requirement in (14) does not hold; in sentences with scrambling, where scrambled elements satisfy the requirement; and in presentational sentences or sentences with thetic judgment, where implicit stage topics can be assumed and the requirement is satisfied by them. This is borne out by the data.

- (21) a. Hanako-ga/-no ik-u nara watasi-mo konpa-ni ik-u. (KJ) Hanako-NOM go-Pres if I -also party -to go-Pres 'If Hanako goes to the party, I will too.'
  - b. Taroo-ga/-no odot -ta ken minna -ga yorokon -da. (KJ) Taroo-NOM dance-Past because everyone-NOM be pleased-Past
    - 'Because Taroo danced, everyone was pleased.'
- (22) a. Jiroo-ga/\*-no son hon -ba yon -da. (KJ) Jiroo-NOM that book-ACC read-Past 'Jiroo read that book.'
  - b. Son hon -ba Jiroo-ga/-no yon -da. (KJ) that book-ACC Jiroo-NOM read-Past'That book, Jiro read.'
- (23) a. Tegami-ga/-no ki -ta. (KJ) letter -NOM arrive-Past.
  - 'A letter has arrived.'
  - b. Ame-ga/-no hur-iyo -ru. (KJ) rain -NOM fall-Prog-Pres'It is raining.'
  - c. Kodomo-ga/-no nak-iyo -ru. (KJ)child -NOM cry-Prog-Pres'A child is crying.'
  - d. Taro-ga/-no mada utow-to -ran. (KJ)
    Taro-NOM yet sing -Perf-Neg.Pres

    'Taro hasn't sung yet.'

The sentences in (21) exemplify the cases of subordinate clauses, that in (22b) is a case of scrambling and the sentences in (23) represent presentational/thetic interpretation sentences. Note that progressive/perfective aspects help to enhance this interpretation. Here *-no* marked subjects are possible. Note that *-ga* marked subjects are also allowed with or without the meaning of focus, because *-ga* marked subjects can have topic/focus interpretations but it is not forced. As one may notice, the sentences in (21) and (23) all involve intransitive verbs. In this respect, a few words should be in order. Actually, speaker variation is found with the use of *-no* marked subjects in transitive constructions without scrambling in subordinate clauses ((24)), or in sentences involving progressive or perfective aspects, which makes a thetic interpretation easier ((25)).

- (24) a. ??/?Hanako-no tesuto-ba ukn nara Jiroo-mo uke -ru. (KJ)
  Hanako-NOM test -ACC take if Jiroo-also take-Pres

  'If Hanako takes the test, Jiroo will also take it.'
  - b. ??/? Taroo-no susi -ba kuu-ta ken Jiroo-mo kuu-ta. (KJ)
     Taroo-NOM sushi-Acc eat -Past because Jiroo-also eat -Past

     'Because Taroo ate sushi, Jiroo also ate it.'
- (25) a. ??/? Kodomo-no uta -ba uta -iyo -ru. (KJ) child -NOM song-ACC sing-Prog-Pres 'A kid is singing a song.'
  - b. ??//? Hanako-no (mada) syukudai -ba si -to -ran. (KJ) Hanako-NOM (yet) assignment-ACC do-Perf-Neg.Pres 'Hanako hasn't done her assignment yet.'

The fact that many KJ speakers reject (24) and (25) may constitute a piece of evidence to support that SSG in (26) holds for Japanese, as suggested by Miyagawa (2012). If *-no* subject is located in Spec- $\nu$ P, as proposed by Kato (2007), the sentences in (24) and (25) violate the generalization in (26). Thus I assume (27), leaving details for further investigation.

- (26) The subject-in-situ generalization (SSG):
  By Spell-Out, vP can contain only one argument with a structural Case feature.

  (Alexiadou and Anagnostopoulou 2007:32)
- (27) The unmarked position of -ga marked subjects in KJ is in Spec-TP while that of -no marked ones is in Spec-vP.

#### 3.3. The Scope of Negation in Japanese

Now we can tackle the scope of negation in Japanese in light of the data in KJ, which indicate the positions of the subject with nominative case markers. Let us start with reviewing the sentences in (4) (repeated here as (28)). The corresponding sentences in KJ are presented in (28').

(28) a. Zen'in-ga siken-o uke -na -katta. (=(1a)) \*not > all, all > not all -NOM exam-ACC take-Neg-Past

'All did not take the exam.'

b. Siken-o zen'in-ga uke -na -katta. (=(2a)) not > all, all > not > not > not > all, all > not > not > not > all, all > not >

'The exam, all did not take.'

(28') a. Zen'in-ga/\*-no siken-ba uke -n -datta. (KJ) \*not > all, all > not all -NOM exam-ACC take-Neg-Past

'All did not take the test.'

b. Siken-ba zen'in-ga/-no uke -n -datta. (KJ) -ga: (\*)not > all<sup>9</sup>, all > not exam-ACC all -NOM take-Neg-Past -no: not > all, \*all > not 'The exam, all did not take.'

The fact that partial negation is allowed in (28b) is accounted for straightforwardly if the subject occupies Spec- $\nu$ P as suggested by the KJ data in (28'b). However, the possibility of partial negation in (28'b) with -ga suggests that Spec-TP is also in the scope of negation in sentences with scrambling unlike those without it as in (28a)/(28'a). Next, consider (6), repeated here as (29), with the corresponding KJ data in (29').

(29) a. Hora, zen'in-ga utat -tei -na -i. (=(2b)) not > all, all > not > look, all -NOM sing-Prog-Neg-Pres

'Look, all are not singing.'

b. Zen'in-ga mada ki -tei -na -i. not > all, all > not all -NOM yet come-Perf-Neg-Pres

'All haven't come yet.'

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<sup>&</sup>lt;sup>9</sup> Although Nishioka (2017, 2018a) reports that the partial negation is impossible here, many speakers allow it, especially when the focus is placed on the object. Thus I will present an analysis to accommodate it.

(29') a. Hora, zen'in-ga/-no uto -to -ran. (KJ)
look, all -NOM sing-Prog-Neg.Pres
-no: not > all, \*all > not
'Look, all are not singing.'

b. Zen'in-ga/no mada ki -to -ran. (KJ) -ga: not > all, all > not all -NOM vet come-Perf-Neg.Pres -no: not > all, \*all > not

These sentences suggest that Spec-TP is under the scope of negation in presentational/thetic sentences because the partial negation of -ga subjects is possible in KJ, which is supposed to occupy Spec-TP. As mentioned in 3.1, I assume that presentational/thetic sentences involve implicit stage topics. Moreover, in cases the topic is overtly given, the same holds also true, as confirmed by (30). The sentences in (30) involve transitive verbs and the subject should be in Spec-TP, according to (26)/(27); nevertheless the partial negation of the subject is possible. If the topic marker -wa is dropped, the initial phrase (in that restaurant) can also be interpreted as the focus of the sentence and still the same scope relation holds.

(30) a. Ano mise -de(-wa) zen'in-ga susi -o tabe-na -katta. that restaurant-in(-TOP) all -NOM sushi-ACC eat -Neg-Past

not > all, all > not

'In that restaurant all didn't eat sushi.'

b. An mise -de(-wa) zen'in-ga/??-no susi -ba kuwa-n -datta. (KJ) that restaurant-in (-TOP) all -NOM sushi-ACC eat -Neg-Past

not > all, all > not

'In that restaurant all didn't eat sushi.'

The observation made above is summarized in (31). If scrambled phrases as well as overt/implicit topic or overt focus phrases can be topic/focus, (31a, b, c) will be unified, rendering (32).

- (31) a. The scope of negation in sentences involving scrambling is wide enough to include Spec-TP.
  - b. The scope of negation in presentational/thetic sentences is wide enough to include Spec-TP.
  - c. The scope of negation with an overt topic/focus phrase is wide enough to include Spec-TP.

<sup>&#</sup>x27;All haven't come yet.'

(32) In matrix clauses, if there is an overt or implicit topic phrase, or an overt focus phrase in front of the nominative subject, the scope of negation is wide enough to include Spec-TP.

The KJ examples corresponding with the cases involving subordinate clauses in (7), which are repeated as (33), are presented in (33').

(33) a. Zen'in-ga siken-o uke-na -i nara koma -ru. (=(2c)) all -NOM exam-ACC take-Neg-Pres if be embarrassed-Pres

not > all, all > not

'If all don't take the exam, I will be embarrassed.'

Zen'in-ga sono tesuto-o uke -na -katta kara raigetu mata all -NOM that test -ACC take-Neg-Past because next month again
 sore-o su-ru. not > all, all > not

it -ACC do-Pres

'Because all didn't take that test, we will have another one next month.'

(33') a. Zen'in-ga/?(?)-no siken-ba uke -n nara koma -ru. (KJ) all -NOM exam-ACC take-Neg.Pres if be embarrassed-Pres

not > all, all > not

'If all don't take the exam, I will be embarrassed.'

b. Zen'in-ga/?(?)-no son tesuto-ba uke -n -datta ken raigetu mata all -NOM that test -ACC take-Neg-Past because next month again
 sore-ba su-ru. (KJ) not > all, all > not it -ACC do-Pres

'Because all didn't take that test, (we will) have another one next month.'

Here also we can see the quantified subject in Spec-TP is in the scope of negation, producing partial negation. Thus we can sum up the scope of negation in Japanese as in (34), which implies an important generalization in (35).

- (34) a. In matrix clauses, if there is an overt or implicit topic phrase, or an overt focus phrase in front of the nominative subject, the scope of negation is wide enough to include Spec-TP. (= (32))
  - b. In other cases of matrix clauses, the nominative subject is located outside the scope of negation.
  - c. In subordinate clauses, the scope of negation is wide enough to include Spec-TP.

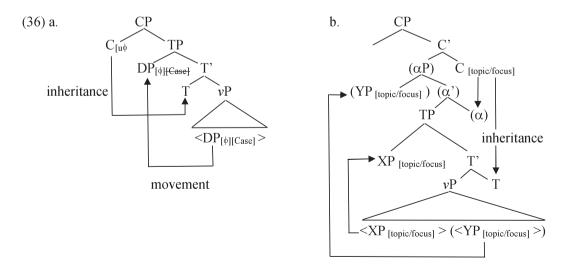
(35) The scope of negation in Japanese is associated with the activation of topic/focus and the elements involved in the activation is always outside the scope of negation.

The possible subjects in Spec-TP in (34a) are within the scope of negation because they are not the elements involved in the activation of topic/focus; an implicit (stage) topic in (31b), or an overt topic/focus in (31a, c) can be the elements involved in the activation, while the nominative subject in other matrix clauses must be involved in the activation and are outside the scope of negation, as stated in (34b). The activation is not mandatory in subordinated clauses, as I argued in (14). This is the reason for (34c). Activated topic/focus phrases seem to be located in the CP area, if we follow Kuroda's (1988) suggestion for -wa (thematic) topic phrases, but where does the subject in (34b) stay when it gets the interpretation? In the next section, I introduce two insightful analyses reflecting the discourse-configurationality of Japanese, in which two opposing ideas are suggested as a position of the elements with topic/focus interpretations.

### 4. Analyses of the Discourse Configurationality of Japanese

### 4.1. Downward Feature Inheritance: Miyagawa (2010)

Miyagawa (2010) argues that discourse-configurational languages such as Japanese have an Agree system based on the [topic/focus] feature with the feature-inheritance mechanism from C to T, which parallels the proposal by Chomsky (2007, 2008) for languages with  $\phi$ -feature agreement such as English. In this system the occurrence of agreement on T triggers movement of the appropriate elements to Spec-TP. This is illustrated in (36). (36a) is the original proposal by Chomsky, while (36b) is the proposal for Japanese by Miyagawa (2010).  $\alpha$ P is added here, which optionally projects and whose head  $\alpha$  receives the [topic/focus] feature from C when multiple elements in TP have the [topic/focus] feature. The derivations for the sentences in (37) are illustrated in (38).



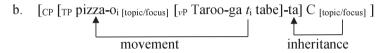
(37) a. Taroo-ga piza -o tabe-ta.

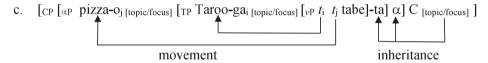
Taroo-NOM pizza-ACC eat -Past

'Taroo ate pizza.'

b. Piza -o<sub>i</sub> Taroo-ga t<sub>i</sub> tabe-ta.
 pizza-ACC Taroo-NOM eat -Past
 'Pizza, Taro ate.'







In (37a), the subject has the [topic/focus] feature and has moved to Spec-TP to agree with T's feature, which is inherited from C, as illustrated by (38a). In (37b), on the other hand, the object instead has the [topic/focus] feature and has moved to Spec-TP to agree with T's feature, while the subject without the [topic/focus] feature stays in-situ at Spec-vP as in (38b). (37b) has another derivation in (38c), where both the subject and the object have the [topic/focus] feature and move to Spec-TP and Spec- $\alpha$ P, respectively. The adequacy of this analysis is supported by KJ data, as demonstrated by Nishioka (2018a, b). The corresponding KJ sentences for (37) are provided in (39).

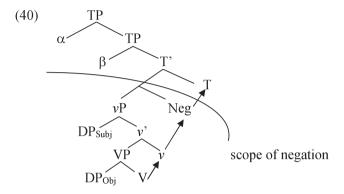
- (39) a. Taroo-ga/\*-no piza -ba kuu-ta. (KJ)
  Taroo-NOM pizza-ACC eat -Past

  'Taro ate pizza.'
  - b. Piza -ba<sub>i</sub> Taroo-ga/-no t<sub>i</sub> kuu-ta. (KJ) pizza-ACC Taroo-NOM eat -Past
     'Pizza, Taroo ate.'

Recall (16) in 3.2. in which the correspondence between the positions and the interpretations of nominative case markers -ga and -no is argued for. If the derivation of (39a) involves (38a), the ill-formedness of the -no subject in KJ naturally follows from (16b); a -no subject cannot move to Spec-TP to check [topic/focus] due to its anti-topic/focus property. If (39b) involves the two derivations in (38b, c), it captures the fact that the -no subject occurs in (38b)

and the -ga subject occurs in (38c), as argued in Nishioka (2018a, b). Thus, the positions of the two subjects are well accounted for in line with (16a).

This analysis, with the assumption in (3), repeated here as (40) (that is, adding NegP to (36b)), predicts that the subject with [topic/focus] which moves to Spec-TP is out of the scope of negation and only the subject in Spec-vP can be in the scope of negation.



Unfortunately, however, this is not correct. As we observed in (28'b), the subject located in Spec-TP even derived in the way shown in (38c) can have a partial negation interpretation for many speakers. In other words, this analysis fails to account for (31a). It is also unclear how this analysis can accommodate (34a) and (34c).

Furthermore, the problem in Miyagawa (2001, 2003), pointed out by Saito (2009), still remains. Recall (8), repeated here as (41).

(41) a. Zen'in-ga zibun-zisin-o seme -na -katta. \*not > all, all > not all -NOM self -self -ACC blame-NEG-Past

'Everyone did not blame herself/himself.'

b. Zibun-zisin-o<sub>i</sub> zen'in-ga  $t_i$  seme -na -katta. not > all, all > not self -self -ACC all -NOM blame-NEG-Past

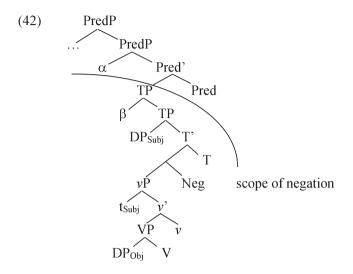
'Herself/Himself, everyone did not blame.'

If (41b) involves the derivation in (38b) to be compatible with the partial negation, it should cause the violation of Binding Condition C, predicting its ungrammaticality.

### 4.2. Upward Movement Analysis to Spec-PredP: Saito (2010)

Based on the clause-initial effects, as we observed in (10) and (11), Saito (2010) proposes a functional projection of PredP, which selects a finite TP, arguing that an initial element of matrix clauses moves to Spec-PredP and gets interpretations of thematic topic (if the phrase is marked with -wa) and (exhaustive listing) focus (if it is a nominative phrase).

Specifically, assuming that Spec-TP can be within the scope of negation, as represented in (42), Saito argues that the movement to Spec-PredP ( $\alpha$  in (42)) puts the moved element out of the scope of negation.<sup>10</sup>



Saito assumes that Pred attracts the closest element with [arg] to Spec-PredP ( $\alpha$  in (42)). Thus in (43a), the subject is attracted from Spec-TP to Spec-PredP and results in a total negation interpretation, as represented by (44a). In (43b), in which the object is scrambled to the TP edge before the subject (to  $\beta$  in (42)), the object, instead of the subject, is attracted to Spec-PredP as in (44b), resulting in the partial negation of the subject. (43b) has another derivation in which the subject is attracted to Spec-PredP and the object is scrambled to the edge of PredP as illustrated in (44c). This results in total negation of the subject in (43b).

(43) a. Zen'in-ga siken-o uke -na -katta. (= (4a)/(28a)) \*not > all, all > not all -NOM exam-ACC take-Neg-Past

'All did not take the exam.'

b. Siken-o zen'in-ga uke -na -katta. (=(4b)/(28b)) not > all, all > not exam-ACC all -NOM take-Neg-Past

'The exam, all did not take.'

(44) a.  $[PredP Subj_i][TP \ t'_i][NegP \ [vP \ t_i ... Obj... V-v] \ Neg] \ T] \ Pred]$  (Subj > not)

 $<sup>^{10}</sup>$  Saito (2010) does not make specific how the element in Spec-TP can be within the scope of negation.

b. 
$$[PredP Obj_j [TP t'_j [TP Subj_i [NegP [vP t_i ...t_j ...V-v] Neg] T] Pred]$$
 (not > Subj)

$$c. \quad [_{PredP} \ Obj_{j} \ [_{PredP} \ Subj_{i} \ [_{TP} \ t^{\, \prime}_{i} \ [_{NegP} \ [_{\nu P} \ t_{i} \ \dots t_{j} \dots V - \nu] \ Neg] \ T] \ Pred]] \qquad (Subj > not)$$

Saito resorts to the chain interpretation mechanism for the interpretation of moved phrases. Thus the simple case of scrambling in (45a) is analyzed as in (45b).

(45) a. Hon -o<sub>i</sub> [Taroo-ga 
$$t_i$$
 kat -ta] book-ACC Taroo-NOM buy-Past 'Taroo bought a book.'

b. Hon-o<sub>[arg, phon]</sub> [Taroo-ga hon-o<sub>[arg, phon]</sub> kat-ta]

The object *hon-o* contains the argument feature [arg] and phonetic feature [phon]. <sup>11</sup> [phon] is retained but [arg] is deleted from the scrambled phrase at the landing position, while the converse holds in the copy at the initial position as in (45b). It is assumed that the deletion need not take place as soon as the chain is formed, but only needs to apply before the complement of the phase is transferred to the interpretation components. Therefore, in (44b), when the object resides in the TP edge  $(t'_{ij})$ , [arg] is still available and attracted by Pred and the object moves to Spec-PredP. Miyagawa's problem in (8b)/(41b) is solved by dint of this mechanism. As we see, the partial negation is derived by the derivation in (44b), where [arg] of the scrambled object at Spec-TP should be deleted when transferred and if Binding Condition C applies to the output of the derivation, as proposed by Chomsky (1993), no problem occurs. <sup>12</sup>

Saito's (2010) analysis elegantly captures the discourse-configurationality of Japanese and scope facts of negation with the assumption that Spec-TP is always included in the scope of negation. However, it is not clear how partial negation of the clause-initial subject is made possible in (6)/(29), repeated in (46). If the initial phrase in matrix clauses must move to Spec-PredP, it should be predicted that an interpretation of partial negation is impossible. <sup>13</sup>

<sup>&</sup>lt;sup>11</sup> Saito (2010) also assumes categorical feature [cat] in addition to [arg] and [phon]. But it is left out because it does not play any role in the discussion.

<sup>&</sup>lt;sup>12</sup> Note that if this mechanism is adopted, (41b) may not be a problem also for Miyagawa (2010).

<sup>&</sup>lt;sup>13</sup> This might be solved if we assume, as we do, that implicit stage topics are involved here and they suspend the attraction of the subject.

(46) a. Hora, zen'in-ga utat-tei -na -i. (= (2b)) not > all, all > not look, all -NOM sing-Prog-Neg-Pres

'Look, all are not singing.'

b. Zen'in-ga mada ki -tei -na -i. not > all, all > not all -NOM yet come-Perf-Neg-Pres'All haven't come yet.'

Moreover, Saito's analysis faces a difficulty in accommodating the following contrast.

- (47) a. Taroo-ga itumo heya-ni i -na -i. always > not, \*not > always Taroo-NOM always room-in be-Neg-Pres
  - 'Taroo is always not in the room.'
  - b. Taroo-ga itumo heya-ni i -na -i kara koma -ru. Taroo-NOM always room-in be-Neg-Pres because in trouble-Pres

always > not, not >always

'Since Taro is always not/not always in the room, we are in trouble.'

According to Saito's upward movement analysis, the subject must move to Spec-PredP, which is a position outside the scope of negation, but nothing should force the movement of the adverb *always* with it. Then the impossibility of partial negation of the adverb (\*not > always) in (47a) is an enigma in the structure of (42). In contrast, it is possible to obtain it in a subordinate clause such as (47b). Here the movement to Spec-PredP should not be forced if it is the requirement associated with matrix clauses, but total negation of the adverb (*always* > not) is obtained as well as partial negation (not > always).

To sum up, Miyagawa's (2010) [topic/focus] feature-inheritance analysis cannot accommodate wide scope phenomena of negation ((34a, c)), while Saito's (2010) upward movement analysis cannot explain scope relations between negation and an adverb in (47). This suggests we need an alternative analysis. I will propose one, incorporating their insights as well as mechanisms. But before that, let us see how the scope of negation is established in English based on Nishioka (2004, 2007)

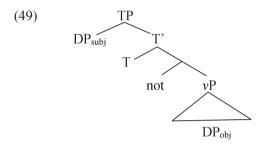
# 5. Articulated Structure and the Scope of Negation

#### 5.1. The Scope of Negation in English

Nishioka (2004, 2007) argues that the scope of negation in English is higher than TP based on negative polarity items (NPIs) and partial negation of quantifiers. First let us see the

arguments based on NPIs. It is widely accepted that NPIs such as *any* in English must be c-commanded by a negative element, to which the contrast in (48) has been attributed.

- (48) a. \*Anyone did not attend the party.
  - b. John did not eat anything.



As schematized in (49), the object is c-commanded by *not*, but the subject is not. However, this simplistic c-command analysis cannot account for the following examples.

(50) a. Pictures of *anyone* did not seem to be available. (Boeckx 2000:362)

b. A good solution to *any* of these problems does not exist. (Hoeksema 2000:136)

(51) a. Even then the writers of *none* of the reports thought that *any* rain had fallen *anywhere* else. (Klima 1964:278)

b. I gave pictures of *no* one to *anyone*. (Ota 1981:22)

In (50), although the NPIs embedded in the subject are not c-commanded by *not*, the sentences are still grammatical. If the reconstruction of A-movement is unavailable, as argued by Chomsky (1993, 1995), Lasnik (1999), among others, the grammaticality poses an enigma. Moreover, irrespective of the reconstruction of A-movement, the negative elements (*none*, *no one*) in (51) do not c-command NPIs without resulting in ungrammaticality. In order to account for these data and to unify a variety of sentential negation including (52), Nishioka (2004, 2007) proposes that Pol above TP establishes the scope of negation through Agree with negative elements in TP, as illustrated in (53).<sup>14</sup>

(52) a. John does *not* eat chocolates. (not)

b. John *never/seldom* eats chocolates. (negative adverbs)

c. John ate *nothing*. (negative quantifier)

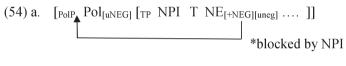
(53) a. [PolP Pol[uNEG] [TP (...) NE[+NEG][uneg] (...)]] (NE stands for negative element)

-

<sup>&</sup>lt;sup>14</sup> Holmberg (2016) independently proposes a similar idea in which PolP between CP and TP is assumed but the subject resides in Spec-PolP, rather than Spec-TP in English, which fails to explain (1b) as well as (50).

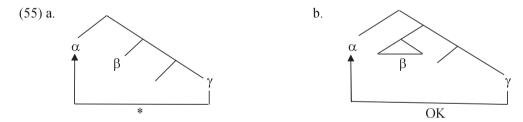
b. 
$$[PolP \mid Feature Transfer: FT]$$

It is assumed here, following Chomsky's (2000) suggestion for *wh* questions, that Pol has an uninterpretable feature [uNEG] and negative elements (NEs) such as *not*, negative adverbs and negative quantifiers have an interpretable feature [+NEG] with an uninterpretable feature [uneg] and Agree applies between Pol and NE, resulting in Pol obtaining [+NEG] through feature transfer from NE. If this is true, the scope of negation in English is the c-command domain of Pol, with (50) and (51) posing no problem because NPIs are in the scope of negation. However, the ungrammaticality of (48a) will then be a problem. Nishioka (2004, 2007) proposes that NPIs such as *any*... cause an intervention effect for Agree between Pol and NE. The contrast in (48) is attributed to the intervention effect as represented in (54).



b. 
$$[PolP \ [+NEG] \ Pol_{\underline{\text{funeg}}} \ [TP \ (....) \ NE_{[+NEG] \underline{\text{funeg}}} \ ... NPI...]]$$
 
$$FT$$

The subject NPI in (48a) causes an intervention effect for Agree between Pol and NE (*not*) as in (54a), while the object NPI in (48b) does not as in (54b). The NPIs in (50) do not cause intervention effects because they do not c-command NE by being embedded in the subject DP (i.e. not in the path of the application of Agree) in contrast with (48a). The difference can be schematized in (55), where  $\alpha$  corresponds with Pol,  $\beta$  NPI (*anv*), and  $\gamma$  NE (*not*).



Next let us see examples involving quantifiers.

(56) a. John couldn't solve *many* of the problems. many > not, not > manyb. John didn't invite *every* student. every > not, not > every

(57) a. Many of the children did not go to school yesterday.
b. Everyone didn't come to the party.
many > not, \*not > many
every > not, not > every

Partial negation is easily obtained for both existential and universal quantifiers in the object position as in (56). However, an interesting asymmetry is observed between existential and universal quantifiers in the subject as in (57). Partial negation is impossible for the existential quantifier in (57a), in contrast with the universal quantifier in (57b). This is accounted for if we assume that existential quantifiers but not universal quantifiers cause intervention effects for the application of Agree (and FT) between Pol and NEs. Then the contrast between (56a) and (57a) is captured in parallel with (48)/(54), which can be schematized in (58) just by replacing NPIs with existential quantifiers (EQs).

(58) a. 
$$\begin{bmatrix} \text{PolP} & \text{Pol}_{[\text{uNEG}]} & \text{Tr} & \text{EQ} & \text{Tr} & \text{NE}_{[\text{+NEG}][\text{uneg}]} & \dots \end{bmatrix} \end{bmatrix}$$
 \*blocked by EQ b. 
$$\begin{bmatrix} \text{PolP} & \text{[+NEG]} & \text{Pol}_{[\text{uNEG}]} & \text{[TP} & (\dots) & \text{NE}_{[\text{+NEG}][\text{uneg}]} & \dots & \text{EQ} \dots \end{bmatrix} \end{bmatrix}$$
 FT

Recall that NPI *any* is a member of the category of existential quantifiers. A crucial difference between the NPI *any* and non-NPI existential quantifiers such as *many* is that the former must be interpreted within the scope of negation, otherwise the sentence involving it will be ungrammatical, while the latter quantifiers do not cause ungrammaticality even if they are not in the scope of negation. If EQs moves higher than Pol to avoid the intervention, they will be out of the scope of negation and only the total negation interpretation results. The intervention effects will be circumvented if EQs are embedded in the subject.

(59) Pictures of many linguists were not available. (= Pictures of not many/few linguists were available.) (Linebarger 1980: 50)

This involves the structure in (55b) and supports the Agree-based analysis with the intervention effects as well as the PolP analysis above TP in (53). The arguments above hold intact for embedded clauses.

- (60) a. \*When anyone did not attend the party..., 16
  - b. When John did not eat anything, ....
- (61) a. When/If many of the children did not go to school yesterday, ...

many > not, \*not > many

b. When/If *everyone* didn't come to the party, ... every > not, not > every

<sup>&</sup>lt;sup>15</sup> A rising intonation without a break after the subject is necessary for the universally quantified subject to take a narrow scope with respect to negation (i.e. partial negation) (Jackendoff 1972, Lasnik 1972). However, existentially quantified subject cannot obtain it, even with the same intonation.

<sup>&</sup>lt;sup>16</sup> This will be grammatical in *if* or *before* clauses because they can license NPIs by themselves.

Therefore, the scope of negation appears to be higher than TP in both main and subordinate clauses in English.

# 5.2. Proposal

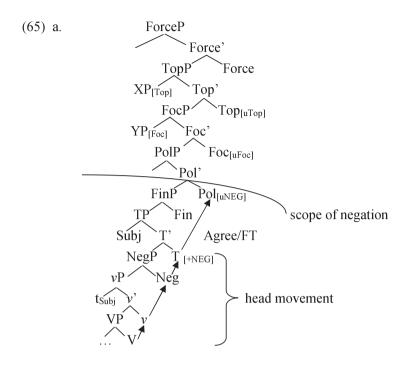
Based on the observation in English, I assume that Japanese also involves PolP above TP, supposing the Agree system between [uNEG] of Pol and [+NEG] of the Neg head attached to the predicates. Moreover, I propose that Japanese also has an articulated CP structure as in (62), following Rizzi (1997) and Haegeman (2000).<sup>17</sup> (Here the directionality of heads are ignored.)

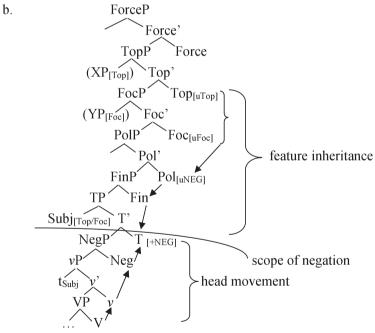
(62) [Force Force Top Top Foc Foc Pol Fin Fin T Neg...]]]]]

I argue that the discourse-configurationality of Japanese, that is, the activation of topic/focus, as argued in section 3, is realized through (i) holding an overt/covert element in Spec-TopP and an overt element in Spec-FocP, or (ii) [topic/focus] feature ([uTOP/uFOC])-inheritance to T, triggering the agreement with an element in Spec-TP. Thus the facts concerning (34) and the generalization in (35) in section 3.3, repeated here as (63) and (64), respectively, are captured as illustrated in (65).

- (63) a. In matrix clauses, if there is an overt or implicit topic phrase, or an overt focus phrase in front of the nominative subject, the scope of negation is wide enough to include Spec-TP. (= (32))
  - b. In other cases of matrix clauses, the nominative subject is located outside the scope of negation.
  - c. In subordinate clauses, the scope of negation is wide enough to include Spec-TP.
- (64) The scope of negation in Japanese is associated with the activation of topic/focus and the elements involved in the activation is always outside the scope of negation.

<sup>&</sup>lt;sup>17</sup> Haegeman (2000: 49), in a different framework, suggests a possible extension of Rizzi (1997) as in (62), adding Pol to Rizzi's (1997) original split CP analysis.





The activation of topic/focus is fulfilled by an overt/implicit topic phrase in Spec-TopP (XP) or an overt focus phrase in Spec-FocP (YP) through agreement with the respective heads in (65a), which is exemplified by (66).

(66) a. Ano mise -de(-wa) zen'in-ga susi -o tabe-na -katta. (= (30a)) that restaurant-in(-TOP) all -NOM sushi-ACC eat -Neg-Past

all > not, not > all

'In that restaurant all didn't eat sushi.'

- b. Hora, zen'in-ga utat-tei -na -i. (=(6a)) not > all, all > not look, all -NOM sing-Prog-Neg-Pres
  - 'Look, all are not singing.'
- c. Siken-o zen'in-ga uke -na -katta. (=(28b)) not > all, all > not exam-ACC all -NOM take-Neg-Past

'The exam, all did not take.'

The initial phrase of (66a) is a topic phrase (XP in (65a)) when it comes with -wa, and a topic or focus phrase (XP or YP in (65a)) when -wa is not attached. The scrambled phrase in (66c) can function as a topic/focus phrase (XP or YP in (65a)) likewise. (66b) is a case that involves an implicit stage topic (XP in (65a)). In all, the subject in Spec-TP falls under the scope of negation, which is established via Agree (and feature transfer (FT)) between [uNEG] of Pol and [+NEG] of the Neg head. This is how the partial negation in (66) is obtained. The total negation mechanism in (65b) can also be applied in (66) where optional focus-feature inheritance occurs, as in the total negation of subordinate clauses in (68), which is illustrated below.

(65b) also represents the case of (63b). This is exemplified by (67).

- (67) a. Zen'in-ga siken-o uke -na -katta. (=(28a)) \*not > all, all > not all -NOM exam-ACC take-Neg-Past
  - 'All did not take the exam.'
  - b. Zen'in-ga susi -o ano mise -de tabe-na -katta. \*not > all, all >not all -NOM sushi-ACC that restaurant-in eat -Neg-Past
    - 'All didn't eat sushi in that restaurant.'

Here there is no overt/implicit element in the CP area, and the activation of topic/focus is realized by the obligatory feature inheritance from C to T and the agreement between the subject in Spec-TP and T in terms of [TOP/FOC] feature. In this case, I argue that the [uTOP/uFOC] feature inheritance from Top/Foc to T drops in at Pol, carrying [uNEG] of it together and Agree applies between [uNEG] and [+NEG] at T. This establishes the scope of negation as the c-command domain of T, excluding Spec-TP. This is why the partial negation is impossible in (67). In subordinate clauses such as (68), the activation of topic/focus is not

required ((14)). The structure of subordinate clauses without the activation is the one without TopP and FocP projections in (65a). Here Agree applies between [uNEG] of Pol and [ $\pm$ NEG] of the Neg head and the scope of negation is established as the c-command domain of Pol, producing the partial negation of the quantified subject in (68) (=(7)).

(68) a. Zen'in-ga siken-o uke -na -i nara koma -ru. (=(2c)) all -NOM exam-ACC take-Neg-Pres if be embarrassed-Pres

not > all, all > not

'If all don't take the exam, I will be embarrassed.'

b. Zen'in-ga sono tesuto-o uke -na -katta kara raigetu mata all -NOM that test -ACC take-Neg-Past because next month again

sore-o su-ru. not > all, all > not it -ACC do-Pres

'Because all didn't take that test, we will have another one next month.'

If focus is optionally involved in subordinate clauses when there is no overt focus phrase in front of the nominative subject, the structure is (65b) without the projection of TopP. Here the feature-inheritance of [uFOC] occurs from Foc to T through Pol carrying [uNEG], and the scope of negation will be the c-command domain of T, resulting in total negation of the quantified subject in Spec-TP. These two types of mechanism can accommodate the contrast in (47) (repeated here as (69)) for which Saito (2010) faces a difficulty.

- (69) a. Taroo-ga itumo heya-ni i -na -i. always > not, \*not > always Taroo-NOM always room-in be-Neg-Pres
  - 'Taroo is always not in the room.'
  - b. Taroo-ga itumo heya-ni i -na -i kara koma -ru. Taroo-NOM always room-in be-Neg-Pres because in trouble-Pres

always > not, not >always

'Since Taro is always not/not always in the room, we are in trouble.'

Since the sentence in (69a) is a matrix sentence without a topic/focus phrase before the subject, the feature inheritance in (65b) should occur, resulting in total negation of the quantified subject as argued for (67), and if the adverbs of frequency is attached to the projection of T (cf. Koizumi's (1993) IP adverbs), it is located in the position outside of the scope of negation, correctly capturing the fact (always > not, \*not > always). In (69b) the same clause occurs as a subordinate clause, thus the [uFOC] inheritance is optional as in (68). If it occurs, the adverb is outside the scope of negation as in the same way as (69a), as schematically represented by (65b). If it does not, the scope of negation is the c-command

domain of Pol, including the projection of TP, as argued for (68) above with the structure of (65a) without TopP/FocP. This is how the sentence in (69b) has the two scope interpretations as indicated.

#### 5.3. On the Difference of the Scope of Negation between Japanese and English

Let us get back to the basic problem that is raised at the beginning of the paper and consider the difference between Japanese and English observed in (1), repeated as (70).

(70) a. Zen'in-ga siken-o uke-na-katta. all -NOM exam-ACC take-Neg-Past \*not > all, all > not

'All did not take the exam.'

b. Everyone didn't attend the meeting.

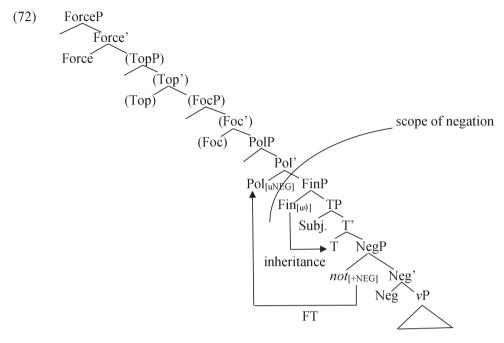
not > every, every > not

The initial subject is outside the scope of negation in Japanese matrix clauses due to [topic/focus] feature-inheritance mechanism, as illustrated by (67), based on (65b). It is assumed that [uNEG] of Pol is carried down to T with [uTOP/uFOCUS] when [uTOP/uFOCUS] feature-inheritance from Top/Foc to T occurs because Pol is on its way and Agree applies at T between [uNEG] and [+NEG] of the Neg head that is moved up to T, establishing the scope of negation as the c-command domain of T. Then what happens in (70b)? Recall Miyagawa's (2010) argument in 4.1 that Japanese as a discourse-configurational language has an Agree system based on the [topic/focus] feature with the feature-inheritance mechanism from C to T, while English as a  $\phi$ -feature agreement language has  $\phi$ -feature Agree system based on  $\phi$ -feature inheritance from C to T, as proposed by Chomsky (2007, 2008), which are represented in (36a, b), respectively. Now suppose that both Japanese and English have the same articulated CP structure as represented in (71).

(71) [ForceP Force [TopP Top [FocP Foc [PolP Pol [FinP Fin [TP T... Neg...]]]]]]

It would not be unreasonable to assume that the source of  $\phi$ -features is Fin if we consider it in light of (71) because nonfinite clauses do not exhibit  $\phi$ -feature agreement between the element in Spec-TP and T in English. Then the  $\phi$ -feature inheritance occurs from Fin to T and because Pol is not on its way, [uNEG] stays at Pol, triggering Agree and feature transfer (FT) between it and [+NEG] of *not* in TP and establishing the scope of negation as the c-command domain of Pol, as argued in 5.1. This is why Spec-TP in English is in the scope of negation, and partial negation is possible in (70b). <sup>18</sup> This mechanism in English is schematically represented in (72).

<sup>18</sup> I assume that total negation is produced by an optional focus movement of the quantified subject in (70b).



This would be compatible with the facts that Topicalized/Focalized elements, if they themselves do not incorporate negation, are outside the scope of negation in English.

(73) a. All the guests of the party, John didn't talk to.

\*not > all, all > not

b. All, not some of the guest, John didn't talk to.

\*not > all, all > not

Unlike Japanese, the existence/activation of topic/focus is not required in English matrix clauses but they can be when Topicalization/Focalization occurs. In (73a, b) universal quantified elements are located in Spec-TopP and Spec-FocP, respectively, and the impossibility of partial negation of them is well-predicted because they are out of the scope of negation as depicted in (72).

#### 6. Concluding Remarks

I have addressed the problem of the different scopes of negation in Japanese and English in terms of the interpretation of the universally quantified subject. This is based on the idea that in order to obtain an interpretation of partial negation for such subjects, the subject must be in the scope of negation. It is then necessary to identify the positions of the subject in clause structures. While the position of the subject in English has been established at Spec-TP, that in Japanese has been controversial. The notion of topic/focus plays a crucial role in Japanese syntactic structures as a discourse-configurational language and specifically, I argued that the activation of topic/focus is required in matrix clauses. Kumamoto Japanese (KJ) exhibits sensitivity to topic/focus by using different nominative case-markers (-ga and -no) and the locations of the subject as well as that of topic/focus elements are identified by

observing KJ data. As a result, it was found out that the scope of negation in Japanese is twofold. One is the c-command domain of Pol above TP when overt/implicit topics or overt focus elements reside in the CP area, which was elaborated as an articulated structure following Rizzi (1997) and Haegeman (2000). The other is the c-command domain of T. Both possibilities are allowed except for the cases in which overt/implicit topics or overt focus elements preceding the nominative subject are not involved. Subordinate structures also allow both possibilities because the activation of topic/focus is not forced. I argued based on empirical data that both the upward movement and downward feature-inheritance are necessary to realize topic/focus activation, incorporating both insights and mechanisms of Saito (2010) and Miyagawa (2010), as represented in (65). Finally I argued that the scope of negation in English is the c-command domain of Pol because English is a φ-feature agreement language that incorporates φ-feature inheritance from Fin to T ((72)). In other words, the scope of negation in Japanese and English is derived from (non) discourse-configurationality of the languages.

#### References

- Alexiadou, A. and E. Anagnostopoulou (2007) "The Subject-in-Situ Generalization Revisited." In H. Gärtner and U. Sauerland, eds., *Interfaces + Recursion = language?: Chomsky's Minimalism and the View from Syntax-Semantics*, Mouton de Gruyter, Berlin, 31-60.
- Boeckx, C. (2000) "A Note on Contraction," Linguistic Inquiry 31, 357-366.
- Carlson, G. (1977) Reference to Kinds in English. Ph.D. dissertation, University of Massachusetts, Amherst.
- Chomsky, N. (1993) "A Minimalist Program for Linguistic Theory." In K. Hale and S. J. Keyser, eds., *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, MIT Press, Cambridge, Mass., 1-52.
- Chomsky, N. (1995) The Minimalist Program, MIT Press, Cambridge, Mass.
- Chomsky, N. (2007) "Approaching UG from Below." In H. Gärtner and U. Sauerland, eds., *Interfaces* + *Recursion* = *language?: Chomsky's Minimalism and the View from Syntax-Semantics*, Mouton de Gruyter, Berlin, 1-29.
- Chomsky, N. (2008) "On Phases." In R. Freidin, C. P. Otero, and M. L. Zubizarreta, eds., *Foundational Issues in Linguistic Theory: Essays in Honor of Jean-Roger Vergnaud*, MIT Press, Cambridge, Mass., 133-166,.
- Erteschik-Shir, N. (1997) *The Dynamics of Focus Structure*, Cambridge University Press, Cambridge. Erteschik-Shir, N. (2007) *Information Structure: The Syntax-Discourse Interface*, Oxford University Press, Oxford.
- Fukuda, M. (2009) "The Genitive Phrase Marked with Ga in Nonstandard Japanese," *Gengoriron no Tenkai to Ooyoo (Extension and Application of Linguistic Theory)*, Eihosha, Tokyo, 216-234.
- Haegeman, L. (2000) "Negative Preposing, Negative Inversion and the Split CP." In L. R. Horn and Y. Kato, eds., *Negation and Polarity*, Oxford Univ. Press, Oxford, 21-61.
- Hoeksema, J. (2000) "Negative Polarity Items: Triggering, Scope, and C-Command." In L. R. Horn and Y. Kato, eds., *Negation and Polarity*, Oxford Univ. Press, Oxford, 115-146.

- Holmberg, A. (2016) The Syntax of Yes and No, Oxford University Press, Oxford.
- Jackendoff, R. (1972) Semantic Interpretation in Generative Grammar, MIT Press, Cambridge, Mass.
- Kato, S. (2007) "Scrambling and the EPP in Japanese: From the Viewpoint of the Kumamoto Dialect in Japanese." In Y. Miyamoto and M. Ochi, eds., Formal Approaches to Japanese Linguistics: Proceedings of FAJL 4, MIT Working Papers in Linguistics 55, MIT Press, Cambridge, Mass., 113-124.
- É. Kiss, K. (1995) "Introduction." In K. É. Kiss ed., *Discourse-Configurational Languages*, Oxford University Press, Oxford, 3-27.
- Klima, E. (1964) "Negation in English." In J. A. Fodor and J. J. Katz, eds., *The Structure of Language*, Prentice-Hall Inc., Englewood Cliffs, NJ, 246-323.
- Koizumi, M. (1993) "Modal Phrase and Adjuncts." In P. M. Clancy, ed., *Japanese/Korean Linguistics* 2, CSLI, Stanford, 409-428.
- Koizumi, M. (2017) "Subject." In M. Shibatani, S. Miyagawa, H. Noda, eds., *Handbook of Japanese Syntax*, Mouton de Gruyter, Berlin, 553-579.
- Kuno, S. (1973) The Structure of the Japanese Language, MIT Press, Cambridge, Mass.
- Kuroda, S-Y. (1988) "Whether We Agree or Not: A Comparative Syntax of English and Japanese," *Linguisticae Investigationes* 12: 1-47.
- Kuroda, S-Y. (1992) "Judgment Forms and Sentence Forms," *Japanese Syntax and Semantics: Collected Papers*, Kluwer Academic Publishers, Dordrecht, 13-77.
- Lasnik, H. (1972) Analyses of Negation in English, Ph.D. dissertation, MIT.
- Lasnik, H. (1999) "Chains of Arguments." In S. D. Epstein and N. Hornstein, eds., *Working Minimalism*, MIT Press, Cambridge, Mass, 189-215.
- Linebarger, M. (1980) The Grammar of Negative Polarity, Ph.D. dissertation, MIT.
- Miyagawa, S. (2001) "The EPP, Scrambling, and *Wh*-in-Situ." In M. Kenstowicz, ed., *Ken Hale: A Life in Language*, MIT Press, Cambridge, Mass., 293-338.
- Miyagawa, S. (2003) "A-Movement Scrambling and Options without Optionality." In S. Karimi, ed., *Word Order and Scrambling*, Blackwell, Oxford, 177-200.
- Miyagawa, S. (2010) Why Agree? Why Move?: Unifying Agreement-Based and Discourse-Configurational Languages, MIT Press, Cambridge, Mass.
- Miyagawa, S. (2012) Case, Argument Structure, and Word Order, Routledge, New York.
- Miyagawa, S. (2017) Agreement Beyond Phi, MIT Press, Cambridge, Mass.
- Nishioka, N. (2004) "Quantifiers and Negation: A Minimalist Approach to Partial Negation," *English Linguistics* 21:2, 323-347.
- Nishioka, N. (2007) Eigo Hiteibun no Toogoron Kenkyu: Soseisyoogo to Kaizaikooka (A Syntactic Study of English Negative Sentences: Feature Checking and Intervention Effects), Kurosio, Tokyo.
- Nishioka, N. (2017) "Expressions that Contain Negation." In M. Shibatani, S. Miyagawa, and H. Noda, eds., *Handbook of Japanese Syntax*, Mouton de Gruyter, Berlin, 635-662.
- Nishioka, N. (2018a) "On the Positions of Nominative Subject in Japanese: Evidence from Kumamoto Dialect." In T. Levin, R. Masuda eds., *Proceedings of the 10th Workshop on Altaic Formal Linguistics (WAFL10)*, MIT Working Papers in Linguistics 87, MIT Press, Cambridge, Mass., 165-177.
- Nishioka, N. (2018b) "On the Scope of Negation and the Position of the Subject in Japanese." In Yoen-Mdd Park, ed., 2018 The Syntax-Phonology Interface in Generative Grammar: Proceedings of the 20th Seoul International Conference on Generative Grammar, 305-319.

- Ota, A. (1981) "Semantic Interpretation of NPs Containing No," Sophia Linguistica 7, 13-28.
- Rizzi, L. (1997) "The Fine Structure of the Left Periphery." In L. Haegeman, ed., *Elements of Grammar*, Kluwer, Dordrecht, 281-337.
- Saito, M. (2009) "Optional A-Scrambling." In Y. Takubo, T. Kinuhata, S. Grzelak and K. Nagai eds., *Japanese/Korean Linguistics* 16, CSLI, Stanford, 44-63.
- Saito, M. (2010) "Semantic and Discourse Interpretation of the Japanese Left Periphery." In N. Erteschik-Shir and L. Rochman, eds., *The Sound Patterns of Syntax*, Oxford University Press, Oxford, 140-173.
- Shibata, Y. (2015) "Negative Structure and Object Movement in Japanese," *Journal of East Asian Linguistics* 24, 217-269.