

Negative polarity, A-movement, and clause architecture in Japanese

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Abstract The main objective of this paper is to show that the syntactic behavior of negative polarity items (NPIs) allows us to assess whether or not an argument undergoes A-movement in Japanese. Japanese has two types of NPIs. One type of NPI, which is referred to as the ‘argument modifier’ type, is licensed with reference to the surface A-position of the argument which it modifies (i.e. this type of NPI is licensed in a position in which the argument appears after A-movement, if it applies) and the other, which is referred to as the ‘floating modifier’ type, can be licensed in the underlying theta-marking position where its host argument is first merged (i.e. the position before the host undergoes A-movement). Data regarding the two types of NPIs reveal that in Japanese, subject raising is conditioned by the property of tense (T): if T carries a Case feature to value the Case feature of a nominative argument, it also has an EPP feature to induce subject raising, but if T does not carry any Case feature, it does not have an EPP feature. The NPI data also show that in Japanese, negative *nai* is head-raised when it is associated with a predicate with some verbal properties.

Keywords Negative polarity item · A-movement · EPP · Neg-head raising · Negative scope · Japanese

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1 Introduction

Negative polarity items (NPIs) have the general property that they occur in negative contexts. Nevertheless, exactly how NPIs are formally licensed is still arguable (Ladusaw 1980; Linebarger 1980; Laka 1990; Progovac 1994; Giannakidou 1998; Horn and Kato 2000; and many others). In this paper, Japanese is seen to have two types of NPIs, which are sanctioned in distinct syntactic configurations: One type of NPI, which is referred to as the ‘argument modifier’ type, is licensed with reference to the surface A-position of the argument it modifies (i.e. this type of NPI is licensed in a structural position in which the modifying argument appears after A-movement, if it applies). The other type, which is referred to as the ‘floating modifier’ type, can be licensed in the underlying theta-marking position where its host is first merged (i.e. the position before the host undergoes A-movement).

The syntactic behavior of the two types of NPIs provides us with a way of assessing the structural organization of clauses. Specifically, I argue that the difference in their syntactic behavior allows us to discern whether or not an argument undergoes A-movement. Under the predicate-internal subject hypothesis (Koopman and Sportiche 1991; Sportiche 1988; Fukui 1986; Kitagawa 1986; Kuroda 1988), two subject positions are available in clause structure—Spec-vP, where a subject receives its theta role from the verb, and Spec-TP, which is the landing site of a subject (when it undergoes subject raising). This raises an issue over which position a subject should occupy (even in a simple clause). In Japanese, no general consensus has been reached as to whether subjects appear in vP-internal position or undergo A-movement to Spec-TP (Fukui 1986; Kuroda 1988; Miyagawa 1989, 2001, 2005; Kishimoto 2001), because it is difficult in Japanese, an SOV language, to detect the effect of A-movement. I suggest that NPIs provide a straightforward way of measuring whether or not subjects undergo raising to Spec-TP.

The presence or absence of A-movement can be confirmed by making use of one species of raising construction where the main predicate is combined with the aspectual auxiliary verb *iru* ‘be’. In this raising construction, a negator *nai* ‘not’ may either precede or follow the auxiliary verb. Notably, when the negator precedes the aspectual verb *iru* ‘be’, negative scope does not extend over the matrix TP, but is limited to the embedded TP. Accordingly, when an argument merged with vP (located below NegP) undergoes A-movement to the matrix Spec-TP, it is extracted from the scope of negation. It is shown that in Japanese, subjects are A-moved to Spec-TP when they are marked with nominative or dative case, and that in cases where the subject receives oblique *de* ‘with’ or *kara* ‘from’ marking, the possibility of subject raising (A-movement) is determined according to whether the clause contains a nominative argument.

Novel data regarding the two types of NPIs lead to the conclusion that Japanese has two types of finite tense (finite T)—ordinary T which Agrees with arguments, and inert T which does not. It is argued that in Japanese, when T values the (unvalued) Case feature of a nominative argument, the specifier (EPP) requirement of T is imposed, i.e. T carries an EPP feature to induce subject raising. The syntactic behavior of the two types of NPIs also illustrates that in Japanese, the head raising of negative *nai* takes place when it is associated with a predicate possessing certain

verbal properties, and this brings about the consequence that the scope of negative *nai*, which is originally located in the head position of NegP, extends over TP.

This paper is organized as follows. Section 2 first discusses the general properties of negative polarity items, as well as the assumptions about the clause structure of Japanese, and then suggests that Neg-head raising brings out the effect that negative scope extends over TP. Section 3 shows that the aspectual construction where the aspectual verb *iru* ‘be’ is combined with the main predicate allows us to diagnose the presence or absence of subject raising (A-movement). In Sect. 4, I suggest that when tense bears a Case feature to value the Case feature of a nominative argument, the EPP requirement is imposed on the clause. It is argued that Japanese has ordinary finite T equipped with a full set of formal features and inert finite T without, and that the nominative-case constraint emerges when the clause is associated with ordinary finite T. Section 5 shows that Neg-head raising does not take place in clauses headed by predicates that do not possess categorical status as lexical verbs. Section 6 is a discussion of implications derived from the analysis, and Sect. 7 presents a conclusion.

2 Negative polarity items and negative scope

In this section, on the basis of the behavior of NPIs, Japanese is seen to differ from English, in that the scope of negation in simple verbal clauses is not limited to vP (projected below NegP) but extends over TP. After delineating some assumptions about clause structure, I suggest that the difference between Japanese and English in the extent of negative scope is attributed to the presence or absence of Neg-head raising to a higher position.

Let us begin by discussing how NPIs interact with negation. Japanese has several kinds of NPIs, such as *dare-mo* ‘anyone’, *Ken-sika* ‘Ken-only’, and *amari* ‘very’. These NPIs share the property that they occur only in negative contexts.

- (1) a. Kon-kai-wa {Ken-sika/dare-mo/amari ooku-no gakusei-ga}
 this-time-TOP {Ken-only/anyone-Q/very many-GEN student-NOM}
 ko-nakat-ta.
 come-NEG-PST
 ‘{Only Ken/No one/Not very many students} came this time.’
- b. *Kon-kai-wa {Ken-sika/dare-mo/amari ooku-no gakusei-ga} ki-ta.
 this-time-TOP {Ken-only/anyone-Q/very many-GEN student-NOM} come-PST
 ‘{Only Ken/Anyone/Very many students} came this time.’

In (1a), NPIs are licensed because the clause is headed by the negated predicate *ko-nakat-ta* ‘did not come’.¹ On the other hand, (1b) is an affirmative clause, and thus, the NPIs are not licensed (due to the absence of a negator). (2) shows that the NPIs need to appear in the scope domain of a negator.

¹ Negative *nai* belongs to an inflectional category, created by combining the stem with a tense morpheme, as in *na-i* [NEG-PRS] and *nakat-ta* [NEG-PST]. Predicates in the present form are used as citation forms.

- (2) *Kon-kai-wa {Ken-sika/dare-mo/amari ooku-no gakusei-ga}
 this-time-TOP {Ken-only/anyone-Q/very many-GEN student-NOM}
 [Mari-ga ika-nakat-ta to] it-ta.
 Mari-NOM go-NEG-PST that say-PST
 ‘{Only Ken/Anyone/Very many students} said this time that Mari did not go.’

In (2), the NPIs appear in the matrix clause, but the negator is located in the embedded clause; (2) is excluded as ungrammatical, on the grounds that it has a syntactic configuration where the NPIs fall outside the scope domain of the negator.

While NPIs are licensed under the scope of negation, there is one interesting behavioral difference that distinguishes Japanese from English. In Japanese, NPIs are legitimate regardless of whether they appear in subject or object position in simple verbal clauses.

- (3) a. Kyoo-wa {Ken-sika/dare-mo/amari ooku-no gakusei-ga}
 today-TOP {Ken-only/anyone-Q/very many-GEN student-NOM}
 hon-o yoma-nakat-ta.
 book-ACC read-NEG-PST
 ‘{Only Ken/No one/Not very many students} read books today.’
 b. Kyoo-wa Ken-ga {hon-sika/nani-mo/amari ooku-no hon-o}
 today-TOP Ken-NOM {book-only/anything-Q/very many-GEN book-ACC}
 yoma-nakat-ta.
 read-NEG-PST
 ‘Ken read {only books/nothing/not very many books} today.’

The absence of a subject-object asymmetry with regard to NPI licensing in (3) suggests that negative scope extends over TP in Japanese. In contrast, English displays a subject-object asymmetry.

- (4) a. John did not read any book.
 b. *Anyone did not read the book.

Since the scope of *not* residing in NegP does not extend over TP in English, an NPI cannot appear in subject position even though it is allowed to occur in object position. In Japanese, just like in English, NegP can be assumed to project between TP and vP, as a negative clause has the predicative sequence of V-Neg-T. Then, the facts of NPIs in Japanese, which behave differently from NPIs in English, raise the question of why Japanese does not show a subject-object asymmetry in NPI licensing.²

² Non-NPI quantifiers can often take scope narrower than a sentential negator even when they appear in the subject position where NPIs are not licensed. For instance, an English sentence like (ia) can have a ‘not > everyone’, as well as an ‘everyone > not’ interpretation, despite the fact that *everyone* occupies Spec of TP outside the scope of negation.

- (i) a. Everyone did not run.
 b. [_{TP} everyone did [_{NegP} not [_{vP} ~~everyone~~ run]]]

The head raising of a negative marker provides a key to understanding the issue on the difference in the syntactic behavior of NPIs between Japanese and English. To be concrete, I suggest that in Japanese, but not in English, negative scope extends over TP due to the presence of Neg-head raising, which raises Neg to T (and further to Fin), as represented in (5).

- (5) a. Japanese: [_{FinP} [_{TP} SUBJ [_{NegP} [_{vP} OBJ V-v] **Neg**] **Neg-T**] Neg-T-Fin]
 b. English: [_{FinP} Fin [_{TP} SUBJ T [_{NegP} Neg [_{vP} V-v OBJ]]]]

I assume that FinP, which determines the finiteness of a clause, is projected over TP (Rizzi 1997, 2004). I claim that in Japanese, the T-head is associated with finiteness, so that its overt head raising to Fin is instantiated.

In this connection, note that in Romance and Germanic languages, complementizers often have a morphological manifestation of finiteness/non-finiteness. Thus, Rizzi (1997) suggests that FinP is associated with the C-system (see also Radford 2009). It can be postulated that in such languages, the finiteness marking on the verb is licensed, if the finiteness feature [\pm finite] on Fin is transferred from the complementizer to the verb via agreement (i.e. head-to-head agreement). In Japanese, by contrast, complementizers do not morphologically signal the distinction between finite versus non-finite clauses, and the status of tense can be distinguished only by way of its own morphology. In light of the fact that finiteness is not marked on any type of complementizer, it is reasonable to hypothesize that Japanese lacks the mechanism of transferring the finiteness feature [\pm finite] from Fin to T via agreement. This being the case, I submit that, in Japanese, the T-head, which has finiteness marking, undergoes movement to Fin to license its finiteness feature, and hence, appears in the projection of Fin.

If a T-head is placed in the Fin-head position, the structure where tense takes scope over TP is created.³ Furthermore, if the Neg-head forms a complex head with T by virtue of Neg-head raising to T, the entire head complex comprised of Neg and T should occur in the Fin-head position by way of head raising, as depicted in (5a). In (5a), negative scope extends over TP, because the complex head (including Neg) takes TP as its c-command domain. If Neg-head raising does not take place, negative scope extends over vP, but not TP. Since English does not implement Neg-

Footnote 2 continued

The fact straightforwardly follows if the relative scope of *everyone* can be determined with reference to a vP-internal position, as well as the overt constituent position, as often claimed (see e.g. Aoun and Li 1989, 1993; Hornstein 1995). In (ia), the ‘not > everyone’ interpretation is possible because the lower copy *everyone* in vP is c-commanded by *not*. On the other hand, the upper copy *everyone* in TP c-commands *not*, so the reverse ‘everyone > not’ interpretation is also possible. This fact shows that even if *everyone* is located outside the scope of negation in overt constituent structure, the ‘not > everyone’ interpretation is possible, which in turn suggests that NPIs—rather than non-NPI quantifiers—should be used as diagnostics for assessing the overt constituent position of arguments.

³ Even in languages without overt raising of the T-head to Fin, it can be hypothesized that its raising is instantiated at the LF level, because tense should take scope over the entire proposition, i.e. TP (see McCawley 1998).

head raising in ordinary negative clauses, a subject-object asymmetry is observed in regard to the licensing of NPIs, as in (4).⁴

The present proposal is essentially in accord with the Neg-head raising analysis advanced in Kishimoto (2007, 2008), in the sense that Neg-head raising is taken to be responsible for clause-wide negative scope in Japanese.⁵ There is another line of inquiry advanced in the literature, which attempts to account for the absence of a subject-object asymmetry in NPI licensing, by assuming that in Japanese, unlike in English, subjects stay in vP-internal position (e.g. Aoyagi and Ishii 1994; Kato 1994; Watanabe 2004).

- (6) a. Japanese: [FinP [TP [NegP [vP SUBJ OBJ V-v] Neg] T] Fin]
 b. English: [FinP Fin [TP SUBJ T [NegP Neg [vP V-v OBJ]]]]

Advocates of the analyses taking subjects to stay in situ claim that in Japanese an NPI in subject position is legitimate, because it appears in a structural position low enough to be licensed by a negative head in NegP (via either Spec-head agreement (Aoyagi and Ishii 1994; Watanabe 2004) or c-command (Kato 1994)), as depicted in (6a). While this analysis looks plausible at first glance, there is good reason to believe that the presence or absence of a subject-object asymmetry in NPI licensing should come from a difference in the position of a Neg-head, as I will discuss below.

It is in fact easy to confirm empirically that in Japanese nominative subjects undergo raising to TP, just as in English, and that Neg-head raising makes it possible for negative scope to extend over TP. In the next section, on the basis of the aspectual construction where negative *nai* ‘not’ precedes the aspectual verb *iru* ‘be’, I will show that nominative subjects appear in Spec-TP as a consequence of subject raising.

3 Two types of NPIs

In Japanese, there are at least two classes of NPIs that need to be licensed under the scope of negation. One class of NPIs (i.e. the ‘argument modifier’ type) includes noun-modifying expressions like *amari ooku-no* [very many-GEN] ‘very many’. As I will discuss below, since *amari ooku-no* directly attaches to an argument it modifies, it appears in the surface A-position of the modifying argument. *Wh*-NPIs such as *nani-mo* ‘anything’ and *dare-mo* ‘anyone’ belong to the other class (i.e. the ‘floating modifier’ type), and they can be placed in the underlying theta-marking position where their host arguments are first merged, behaving like floating quantifiers.

In simple verbal clauses, the behavioral differences between the two classes of NPIs are not easily detected, mainly because negative scope extends over TP, owing to the presence of Neg-head raising. Nevertheless, the relevant differences show up in the raising construction where the negative *nai* precedes the aspectual verb *iru*

⁴ In English, an NPI can appear in subject position when *not* resides in a higher position than TP, e.g. the NPI *anyone* is licensed in a sentence like *What didn't anyone see?*

⁵ Kishimoto (2007, 2008) does not regard a Neg-head as ending up in the head position of a higher projection than TP.

‘be’. In the following discussion, the two classes of NPIs are seen to provide evidence that nominative subjects undergo raising to TP.

3.1 Two variants of the raising construction

In this section, for the purpose of confirming the existence of A-movement in Japanese, I will look into the raising construction formed on the aspectual verb *iru* ‘be’ (carrying a progressive or perfective meaning).⁶ (7) is a representative example of the aspectual construction.

- (7) Ken-ga hon-o yon-de i-ru.
 Ken-NOM book-ACC read-GER be-PRS
 ‘Ken is reading books.’

One particularly interesting feature of the aspectual construction is that the negator *nai* ‘not’ can appear in two different syntactic positions. As shown in (8), the negative *nai* may either precede or follow the aspectual verb (but must follow the main verb).

- (8) a. Imadani Mari-ga hon-o yon-de i-**na**-i.
 still Mari-NOM book-ACC read-GER be-NEG-PRS
 ‘Still, Mari is not reading the book.’ (V-BE-NEG)
 b. Imadani Mari-ga hon-o yoma-**nai**-de i-ru.
 still Mari-NOM book-ACC read-NEG-GER be-PRS
 ‘Still, Mari has not been reading the book.’ (V-NEG-BE)

As I will discuss below, when negative *nai* ‘not’ is followed by the aspectual verb *iru*, as in (8b), negative scope extends only over the embedded TP. The limited extent of negative scope in the type of aspectual construction in (8b) allows us to assess whether an argument undergoes A-movement.

The aspectual construction in (7) can be assumed to have a bi-clausal structure, where the main verb *yomu* ‘read’ in the *te*-form (i.e. *yon-de*) is embedded under the verb *iru*. In this type of aspectual construction, *-te/de* attached to the main verb serves as a non-finite tense marker, possessing infinitival properties semantically (Kishimoto 2012; Nakatani 2013). In the aspectual construction at issue, since only the matrix clause is finite, two temporal adverbs referring to distinct time frames are not allowed to occur, as shown in (9a). In contrast, in (9b), which comprises two separate finite clauses, two temporal adverbs are allowed to occur; one temporal adverb is licensed in the matrix clause, and another in the embedded clause.

⁶ The aspectual verb *iru* may be associated with several distinct interpretations, including progressive and perfective interpretations; importantly, when *nai* ‘not’ is followed by the aspectual verb *iru*, negative scope extends only over the embedded TP regardless of its interpretation.

- (9) a. *Kyoo Ken-ga [kinoo hon-o yon-de] i-ta.
 today Ken-NOM yesterday book-ACC read-GER be-PST
 ‘Today, Ken was reading books yesterday.’
- b. Kyoo Ken-ga [Mari-ga kinoo hon-o yon-da to] it-ta.
 today Ken-NOM Mari-NOM yesterday book-ACC read-PST that say-PST
 ‘Today, Ken said that Mari read books yesterday.’
- c. [Ken-ga kinoo ki-te] Mari-ga kyoo ki-ta.
 Ken-NOM yesterday come-GER Mari-NOM today come-PST
 ‘Ken came yesterday, and Mari came today.’

In (9b), the embedded clause allows a nominative subject to occur, independently of the matrix subject, which also suggests that the embedded clause should be finite. Additionally, note that when a *te*-clause is used as a kind of coordinate clause, as in (9c), a nominative subject is allowed to appear in the *te*-clause. In (9c), *-te* marks finite tense, and accordingly, a temporal adverb can be anchored to the *te*-clause. In (9a), by contrast, a temporal adverb is not allowed to occur in the embedded clause by virtue of the fact that *-te* is non-finite.

Under the predicate-internal subject hypothesis, two subject positions are available, and a subject could be located in Spec-vP, where it receives its theta role from the predicate, or in Spec-TP, to which it is raised if T has an EPP feature. Note that in (9a), unlike (9c), the *te*-complement clause is non-finite. Given that finite, but not non-finite, T serves as a host for overtly realized subjects (see also Sect. 3.2), it is feasible to state that in (7), the non-finite TP projected from *-te* in the embedded clause does not count as the landing site of subjects raised by A-movement. Then, the configuration in (10a) can be posited for (7) if the thematic subject of the main verb undergoes subject raising. On the other hand, (10b) should be the structure for (7) if no subject raising is implemented.

- (10) a. [_{FinP} [_{TP} SUBJ [_{FinP} [_{TP} ~~SUBJ~~ [_{vP} ~~SUBJ~~ [_{vP} OBJ V]_v]_{T-Fin}]_{T-Fin}]
 b. [_{FinP} [_{TP} [_{FinP} [_{TP} [_{vP} SUBJ [_{vP} OBJ V]_v]_{T-Fin}]_{T-Fin}]

On the basis of the aspectual construction, it can be readily shown that in Japanese, nominative subjects undergo raising to the matrix Spec-TP, as in (10a).

Before going into this discussion, it is important to see that the aspectual construction in (7) constitutes one species of raising construction, where the subject located in the matrix Spec-TP originates from within the embedded clause. (The subjects of control constructions do not involve A-movement from within the embedded clause; see Sect. 3.2.) By using inanimate subjects and clausal idioms, we can ascertain that the aspectual construction involves raising. The examples in (11) show that they can be embedded under the aspectual verb *iru*.

- (11) a. Mada sora-ga {hare-te i-na-i/hare-nai-de i-ru}.
 still sky-NOM {clear-GER be-NEG-PRS/clear-NEG-GER be-PRS}
 ‘The sky still has not been clear.’
- b. Kono mise-de-wa imadani kankodori-ga {nai-te
 this shop-at-TOP still cuckoo-NOM {sing-GER
 i-na-i/naka-nai-de i-ru}.
 be-NEG-PRS/sing-NEG-GER be-PRS}
 ‘There are still many customers at this shop.’

The examples in (11) are acceptable regardless of whether the negative *nai* precedes or follows the aspectual verb.⁷ Since inanimate subjects and clausal idioms can appear in raising, but not control, constructions (see e.g. Carnie 2007; Shibatani 1973), the data show that the two variants of the aspectual construction have raising structures.

The extent to which negative scope extends in the aspectual construction differs depending on whether the negator precedes or follows the aspectual verb. It turns out that this property of the raising construction is instrumental in confirming the presence of subject raising in Japanese. By way of illustrating this point, I will make crucial use of the NPI *amari ooku-no* ‘very many’ (falling into the ‘argument modifier’ type) and *wh*-NPIs like *dare-mo* ‘anyone’ (classified into the ‘floating modifier’ type).⁸ The NPI *amari ooku-no* has the property that when it is licensed under the scope of negation, negation is interpreted as taking scope over *amari ooku-no*, obtaining the meaning of ‘not very many’.⁹ Importantly, the NPI *amari ooku-no* (used as a prenominal modifier) allows case marking to be manifested on the modifying nominal, and the *wh*-NPIs falling into the ‘floating modifier’ type allow their host arguments to appear with case marking. As discussed below, whether subjects undergo A-movement to Spec-TP or remain in Spec-vP without

⁷ For some speakers, (11b) seems to be a little hard to process when *nai* precedes *iru*, perhaps owing to the fact that it is not easy to imagine a situation in which the sentence could be uttered. But the intended idiom interpretation is available for (11b) regardless of the position of *nai*. In Japanese, auxiliary verbs are divided into two classes; while auxiliary verbs like *kuru* ‘come’ and *iku* ‘go’ take raising structures, auxiliary verbs like *oku* ‘put’, *ageru* ‘give’, and *miru* ‘try’ take control structures.

⁸ To be more precise, the NPI is the modifier *amari* ‘very’. This expression counts as an NPI when it serves to weaken the meaning of its modifying expression. Note that DPs with *sika* ‘only’ fall into the class of NPIs that are licensed with reference to their surface constituent position, and as such, DPs comprising *sika* should pattern with DPs with *amari ooku-no*. The NPI particle *sika*, however, is a postnominal modifier, which often does not allow overt realization of structural case markers. Since this property of *sika* makes it difficult to verify some of the points made in this paper in a straightforward manner, the NPIs with *sika* will not be discussed.

⁹ *Amari* ‘very’ can be combined with other adjectival expressions, such as *amari kasikoi hito* ‘very smart people’. Even in this case, *amari* serves as an NPI, as (i) illustrates.

- (i) Kon-kai amari kasikoi hito-ga koko-ni {i-nakat-ta/*i-ta}.
 this-time very smart people-NOM here-in {be-NEG-PST/be-PST}
 ‘(Not) very smart people were here this time.’

movement can be assessed by considering the syntactic behavior of these NPIs in the raising construction with the aspectual verb *iru*.¹⁰

To be concrete, in the variant of raising construction in which *nai* precedes the aspectual verb *iru* ‘be’, the NPI *amari ooku-no* ‘very many’ modifying the subject is not licensed, but the same NPI modifying an object is legitimate, as shown by the contrast in acceptability between (12a) and (12b).

- (12) a. *Saikin amari ooku-no hito-ga hon-o yoma-nai-de i-ru.
 recently very many-GEN man-NOM book-ACC read-NEG-GER be-PRS
 ‘Recently, very many people have not been reading books.’
 b. Saikin Ken-ga amari ooku-no hon-o yoma-nai-de i-ru.
 recently Ken-NOM very many-GEN book-ACC read-NEG-GER be-PRS
 ‘Recently, Ken has not been reading very many books.’

On the other hand, if the negative *nai* is placed after the aspectual verb *iru*, no subject-object asymmetry arises in NPI licensing.

- (13) a. Saikin amari ooku-no hito-ga hon-o yon-de i-na-i.
 recently very many-GEN man-NOM book-ACC read-GER be-NEG-PRS
 ‘Recently, not very many people have been reading books.’
 b. Saikin Ken-ga amari ooku-no hon-o yon-de i-na-i.
 recently Ken-NOM very many-GEN book-ACC read-GER be-NEG-PRS
 ‘Recently, Ken has not been reading very many books.’

The behavioral difference of the NPIs observed in (12) and (13) follows straightforwardly, given that *nai* occupies the Fin head position as a consequence of its head raising, as illustrated in (14).

- (14) a. [_{FinP} [_{TP} SUBJ [_{VP} [_{FinP} [_{TP} [_{NegP} [_{VP} OBJ V-V] ~~NEG~~ ~~NEG-T~~ ~~NEG-T-Fin~~ Be]T]T-Fin]
 b. [_{FinP} [_{TP} SUBJ [_{NegP} [_{VP} [_{FinP} [_{TP} [_{VP} OBJ V-V]T]T-Fin] Be] ~~NEG~~ ~~NEG-T~~ ~~NEG-T-Fin~~]

In (12), the negative *nai*, which precedes the aspectual verb *iru*, is raised to the embedded Fin, but not any further, as illustrated in (14a), and thus, its scope extends only over the embedded clause. The subject-object asymmetry in NPI licensing in (12) shows that the nominative subject, which is thematically associated with the main predicate, falls outside the scope of negation. This means that the subject is moved to the matrix Spec-TP from within embedded vP via A-movement. In (13),

¹⁰ For judgment matters, I consulted just over twenty speakers. The judgments for the basic contrasts with the NPI *amari ooku-no* are solid for most speakers consulted, but a few speakers do not get the relevant contrasts for a number of reasons. Needless to say, the judgments reported in this paper are based on the first group of speakers. One reviewer reports that some speakers without clear judgments have the second position effect that some element needs to precede *amari ooku-no*. Apparently, the judgments of these speakers are affected by discourse factors (or possibly linear order) far more strongly than structural factors. Some speakers in the first group also prefer *amari ooku-no* not to be positioned in sentence-initial position, although this is not an absolute requirement for them.

by contrast, the negative *nai*, which follows the aspectual *iru*, resides in the matrix Fin, as (14b) illustrates, and hence the scope of *nai* extends over the matrix clause. In this case, no subject-object asymmetry in NPI licensing obtains, because the subject as well as the object of the main verb falls under the scope of negation, even if the subject undergoes raising to the matrix TP.¹¹

Note at this point that in Japanese a focus particle like *dake* ‘only’ can appear to the right of tense. When it occurs after *-tel-de* in the *nai-de iru* construction, a subject-object asymmetry is observed with regard to its focus interpretation, i.e. association with focus—the phenomenon that a focus particle is associated with a (separate) constituent falling under its scope.

- (15) a. Ken-ga hon-o yon-de i-ru **dake** (da).¹²
 Ken-NOM book-ACC read-GER be-PRS only COP
 ‘It is only that Ken is reading books.’
 b. Ken-ga hon-o yon-de **dake** i-ru.
 Ken-NOM book-ACC read-GER only be-PRS
 ‘Ken is only reading books.’

In (15a), *dake* ‘only’ follows the matrix tense, and the sentence can have the subject-focus interpretation that only Ken is reading books, as well as the object-focus interpretation that Ken is reading only books. By contrast, in (15b), *dake* appears to the right of *-tel-de* in the embedded clause and the sentence can have the object-focus interpretation, but not the subject-focus interpretation.

The generalization about the particle *dake* (expressing ‘exhaustivity’) is that it takes scope over the maximal projection to which it attaches (see e.g. Aoyagi 1998, 1999; Kishimoto 2009). In the present perspective, the focusing facts in (15)

¹¹ The possibility that a quantifier takes scope over negation in examples like (ia) and (ib) is not excluded, because an LF construal where a quantifier in subject position escapes the scope domain of negation may be created by virtue of an LF operation (like QR).

- (i) a. Zen’in-ga siken-o uke-nakat-ta (yo).
 all-NOM test-ACC take-NEG-PST PRT
 ‘All people did not take the test.’ (all > not, *not > all)
 b. Siken-o_i zen’in-ga t_i uke-nakat-ta (yo).
 test-ACC all-NOM take-NEG-PST PRT
 ‘All people did not take the test.’ (all > not, not > all)

Miyagawa (2001) observes that *zen’in* ‘all’ in subject position receives different scope interpretations, depending on whether an object is scrambled across it (see Kato 1985 and Saito 2009 for different judgments). It is plausible to hypothesize that LF movement of *zen’in* to a higher position than Spec-TP creates an LF structure that gives rise to the ‘all > not’ interpretation, because there are cases where *zen’in* cannot take scope over negation despite the fact that it occupies the subject position.

- (ii) a. [(Koko-no) kanazusimo zen’in]-ga siken-o uke-nakat-ta (yo).
 here-GEN necessarily all-NOM test-ACC take-NEG-PST PRT
 ‘Not all people (here) took the test.’ (not > all, *all > not)
 b. Siken-o_i [(koko-no) kanazusimo zen’in]-ga t_i uke-nakat-ta (yo).
 test-ACC here-GEN necessarily all-NOM take-NEG-PST PRT
 ‘Not all people (here) took the test.’ (not > all, *all > not)

¹² When *dake* is placed to the right of tense, copula *da* can also be added optionally; stylistically, the option without a copula is marked, but acceptable (see Masuoka and Takubo 1989).

may be accounted for by positing the particle's adjunction to FinP, as in (16), since T resides in the Fin-head position.

- (16) a. $[[_{\text{FinP}} [_{\text{TP}} \text{SUBJ } [_{\text{FinP}} [_{\text{TP}} [_{\text{vP}} [_{\text{VP}} \text{OBJ V}]_{\text{v}}] \text{dake}] \text{dake}] \text{dake}]$
 b. $[[_{\text{FinP}} [_{\text{TP}} \text{SUBJ } [[_{\text{FinP}} [_{\text{TP}} [_{\text{vP}} [_{\text{VP}} \text{OBJ V}]_{\text{v}}] \text{dake}] \text{dake}] \text{dake}] \text{dake}]$

In (16b), *dake* takes embedded scope, and thus, the object, but not the subject, lies within the scope of the focus particle. This gives rise to a subject-object asymmetry in focus interpretation, as in (15b). In (15a), no such asymmetry is observed, since *dake* takes matrix scope, as illustrated in (16a). In (15a), both subject and object fall under the scope of *dake*; thus, either the subject or the object can be focused by *dake*. The focus facts regarding *dake* suggest that the subject is raised to the matrix TP by the EPP requirement of T.

Under the present view, the fact that when *dake* occurs to the right of tense, it takes scope over its associated TP is naturally expected. Importantly, the negative *nai* displays essentially the same scope behavior as the particle *dake*, extending its scope over TP, despite the fact that it appears to the left of tense rather than to the right. Now, given that *nai* first appears in NegP located lower than TP, it is feasible to state that the scope of negative *nai* extends over TP by virtue of obtaining a syntactic configuration in which *nai* appears in the Fin-head position as a consequence of Neg-raising plus head raising of T-Neg complex to Fin, as depicted in (14). Note that the behavior of the NPI *amari ooku-no* in (12) and (13) would not be expected if the subject remained within vP without subject raising to TP; if the subject stayed in vP-internal position without subject raising, the NPI *amari ooku-no* would be licensed even in (12a).

It is also worth mentioning that all types of nominative subjects, including the subjects of unergative, unaccusative, and passive predicates, fall outside the scope of negation when *nai* precedes the aspectual verb *iru*, as (17) shows.

- (17) *Saikin amari ooku-no hito-ga {hasira-nai-de i-ru/taore-nai-de
 recently very many-GEN man-NOM {run-NEG-GER be-PRS/fall-NEG-GER
 i-ru/nagur-are-nai-de i-ru}.
 be-PRS/hit-PASS-NEG-GER be-PRS
 'Recently, very many people have not been {running/falling down/beaten}.'

The data in (17) show that the nominative subjects should undergo subject raising regardless of the type of host predicate. The passive and unaccusative subjects should start out from an object position, located under the scope of *nai*, but end up in a position outside its scope domain as a result of A-movement. Thus, in light of (17), it can be stated that the grammatical status of NPI subjects with *amari ooku-no* is not evaluated with reference to the vP-internal position where they are merged initially (for theta role assignment) if they undergo A-movement to Spec-TP.

In the literature on Japanese, a number of different views are available with regard to the status of subject raising. Some researchers (e.g. Fukui 1986; Kuroda

1988) argue that subjects are not raised to Spec-TP, but others (e.g. Miyagawa 1989; Kishimoto 2001) maintain that they undergo raising to Spec-TP. There are also researchers (e.g. Kageyama 1993) claiming that the subjects of unaccusative verbs, unlike the subjects of unergative verbs, are not amenable to raising. The controversy arises largely due to the fact that, by merely looking at word order, it is not possible in Japanese (as an SOV language) to determine whether subjects remain in vP or are raised to Spec-TP. Notably, by looking at the data in (17), we can confirm that nominative subjects, including unergative and unaccusative subjects, undergo subject raising to Spec-TP.

If T has an EPP feature, subjects undergo A-movement to Spec-TP, but other arguments remain in situ. Thus, with a ditransitive verb like *ageru* ‘give’, which takes two objects alongside a nominative subject, both direct and indirect objects are licensed in the *nai-de iru* construction.

- (18) a. *Saikin amari ooku-no hito-ga Mari-ni hon-o
 recently very many-GEN man-NOM Mari-DAT book-ACC
 age-nai-de i-ru.
 give-NEG-GER be-PRS
 ‘Recently, very many people have not been giving Mari books.’
- b. Saikin Ken-ga amari ooku-no hito-ni
 recently Ken-NOM very many-GEN man-NOM
 hon-o age-nai-de i-ru.
 book-ACC give-NEG-GER be-PRS
 ‘Recently, Ken has not been giving books to very many people.’
- c. Saikin Ken-ga Mari-ni amari ooku-no hon-o
 recently Ken-NOM Mari-DAT very many-GEN book-ACC
 age-nai-de i-ru.
 give-NEG-GER be-PRS
 ‘Recently, Ken has not been giving Mari very many books.’

The data in (18) confirm that both direct and indirect objects, unlike the subject attracted by T, stay within vP in the lower clause. The examples in (19) additionally show that adjuncts associated with the lower main predicates fall under the scope of negation in the *nai-de iru* construction.

- (19) a. Ken-wa [amari ooku-no pen-de iro-o take-nai-de] i-ru.
 Ken-TOP very many-GEN pen-with color-ACC attach-NEG-GER be-PRS
 ‘Ken has not been coloring with very many pens.’
- b. Ken-wa [amari ooku-no basyo-de hanasa-nai-de] i-ru.
 Ken-TOP very many-GEN place-with talk-NEG-GER be-PRS
 ‘Ken has not been talking in very many places.’

The well-formedness of the sentences in (19), where the NPI *amari ooku-no* is appended to the instrumental or the locative PP, is naturally expected, since the NPI adjuncts are associated with the lower main predicate.

Not all NPIs behave this way. In fact, NPIs like *dare-mo* ‘anyone’ and *nani-mo* ‘anything’, which have *wh*-Q forms, do not give rise to a subject-object asymmetry in NPI licensing even when *nai* precedes the aspectual verb *iru*.

- (20) a. Imadani dare-mo hon-o yoma-nai-de i-ru.
 still anyone-Q book-ACC read-NEG-GER be-PRS
 ‘Still, no one has been reading books.’
 b. Imadani Ken-ga nani-mo yoma-nai-de i-ru.
 still Ken-NOM anything-Q read-NEG-GER be-PRS
 ‘Still, Ken has not been reading anything.’

Moreover, the example in (21), where *amari ooku-no gakusei* in (17) is replaced by *dare-mo*, is acceptable, regardless of the choice of predicate.

- (21) Saikin dare-mo {hasira-nai-de i-ru/taore-nai-de
 recently anyone-Q {run-NEG-GER be-PRS/fall-NEG-GER
 i-ru/nagur-are-nai-de i-ru}.
 be-PRS/hit-PASS-NEG-GER be-PRS}
 ‘No one has been {running/falling down/beaten} recently.’

The NPIs *dare-mo* and *nani-mo* in (20) are licensed due to the presence of negative *nai*. This is verified by the fact that the affirmative sentences in (22) are unacceptable.

- (22) a. *Imadani dare-mo hon-o yon-de i-ru.
 still anyone-Q book-ACC read-GER be-PRS
 ‘Still, anyone has been reading books.’
 b. *Imadani Ken-ga nani-mo yon-de i-ru.
 still Ken-NOM anything-Q read-GER be-PRS
 ‘Still, Ken has been reading anything.’

The examples in (22), which do not comprise any negator, make it clear that the NPIs *dare-mo* and *nani-mo* need to be licensed by a grammatical negator. This, in turn, suggests that the NPIs in (20) should be licensed falling under the scope of the negative *nai* located in the lower clause.

The behavior of an NPI like *dare-mo* in (20a) looks puzzling at first sight, but the fact falls into place if this type of NPI can occur in the embedded vP-internal position where the subject is first merged, behaving like a floating numeral quantifier, as represented in (23).

- (23) [_{FinP} [_{TP} SUBJ [_{vP} [_{FinP} [_{TP} [_{NegP} [_{vP} ~~SUBJ~~ **dare-mo** OBJ V-v]]] **NEG-T-Fin**] Be]]T-Fin]

In (23), the thematic subject of the main verb is first merged with the embedded vP (to receive a theta role) and then is moved to the matrix Spec-TP by the specifier (EPP) requirement of T. If the NPI *dare-mo* is placed in the embedded Spec-vP, as in (23), thanks to the presence of a copy of the subject left by A-movement, this NPI

is licensed by the negator appearing in the embedded clause. This analysis is reasonable, since this type of NPI does behave like a floating numeral quantifier, as observed by Kawashima and Kitahara (1992) (see also Aoyagi and Ishii 1994; Kato 1994).

- (24) *Gakusei-ga* {dare-mo/hito-ri-mo} *hon-o* *yoma-nai-de* *i-ru*.
 student-NOM {anyone-Q/single-CL-Q} book-ACC read-NEG-GER be-PRS
 ‘No student has been reading the books.’

Example (24) shows that a simple *wh*-NPI like *dare-mo* ‘anyone’, just like *hito-ri-mo* ‘a single’, can occur with an argument (i.e. the thematic subject). As argued by Miyagawa (1989) and others, floating numeral quantifiers can be placed in theta-marking position where their associated hosts are first merged. If the NPI *dare-mo* can be positioned in vP-internal position, as illustrated in (23), the acceptability of (20a) and (21) is naturally expected.

In contrast, a sentence like (25), where *dare-mo* precedes the subject (rather than follows it), is degraded.

- (25) ?**Imadani dare-mo* *gakusei-ga* *hon-o* *yoma-nai-de* *i-ru*.
 still anyone-Q student-NOM book-ACC read-NEG-GER be-PRS
 ‘Still, no student has been reading the books.’

This fact also falls out naturally under the present analysis. In (25), since *dare-mo* appears to the left of the subject *gakusei* located in the matrix Spec-TP, it cannot be associated with the copy of the subject in the lower vP. Accordingly, *dare-mo* is not licensed, lying outside the scope of negation.¹³

The present proposal gains further support from the fact that a genitive-marked NPI like *nan(i)-no* ‘any-GEN’ gives rise to the same asymmetry in NPI licensing as does the NPI *amari ooku-no* ‘very many’. In the first place, (26) shows that *nan-no senmonka* ‘any specialist’ is licensed under the scope of negation.

¹³ The NPI *amari ooku* ‘very many’ can be used as an adverb. When used as an adverb, the NPI specifies the quantity of an internal argument, but not an external argument (see Kageyama 1993; Kishimoto 2005). This property of *amari ooku* differs from that of numeral quantifiers, but this adverb behaves like an NPI of the ‘floating quantifier’ type in the *nai-de iru* construction, as shown in (i).

- (i) a. *Doryoku si-te-mo ii kekka-ga amari ooku de-te i-na-i*.
 try do-GER-even good result-NOM very many come.out-GER be-NEG-PRS
 ‘Even if I tried hard, not very many good results are being obtained.’
 b. *Doryoku si-te-mo ii kekka-ga amari ooku de-nai-de i-ru*.
 try do-GER-even good result-NOM very many come.out-NEG-GER be-PRS
 ‘Even if I tried hard, not very many good results have been obtained.’

In (i), the NPI adverb, which specifies the quantity of the unaccusative subject, is licensed regardless of whether *nai* precedes or follows the aspectual verb. This fact would be expected if the NPI adverb is linked to a copy of the internal argument (i.e. the unaccusative subject) in the embedded clause.

- (26) Imadani nan-no senmonka-mo kono syorui-o yon-de
 still any-GEN specialist-Q this document-ACC read-GER
 {*i-ru/i-na-i}.
 {be-PRS/be-NEG-PRS}
 ‘Still, {any/no} specialist has read this document.’

Secondly, the examples in (27) show that in the *nai-de iru* construction, the subject, but not a non-subject argument, falls outside the scope of negation.

- (27) a. *Imadani nan-no senmonka-mo kono syorui-o
 still any-GEN specialist-Q this document-ACC
 yoma-nai-de i-ru.
 read-NEG-GER be-PRS
 ‘Still, any specialist has not read this document.’
 b. Imadani ano kyoozyu-wa nan-no syorui-mo
 still that professor-TOP any-GEN document-Q
 yoma-nai-de i-ru.
 read-NEG-GER be-PRS
 ‘Still, that professor has not read any document.’

The data suggest that the DP including the NPI *nan-no* ‘any’ must count as an argument, unlike simple *wh*-NPIs like *dare-mo* and *nani-mo*. In fact, (28) shows that the NPI *nan-no senmonka-mo* does not behave like a floating modifier.

- (28) *Kyoozyu-ga nan-no senmonka-mo kono syorui-o yon-de
 professor-NOM any-GEN specialist-Q this document-ACC read-GER
 i-na-i.
 be-NEG-PRS
 ‘The professor, any specialist, has not read this document.’

The example in (28) shows that the NPI *nan-no senmonka-mo* is an argument raised to the matrix Spec-TP, which gives rise to the contrast in acceptability observed between (27a) and (27b). This fact in turn suggests that (20a) and (21) should be acceptable, on the grounds that *dare-mo*, which counts as an NPI of the ‘floating modifier’ type, appears in the vP-internal subject position.¹⁴

¹⁴ *Wh*-NPIs falling into the ‘floating modifier’ type, but not the ‘argument modifier’ type, behave as “negative concord items” (see e.g. Watanabe 2004). Thus, the following contrast is observed.

- (i) a. Q: Dare-o mi-ta no? A: Dare-mo.
 who-ACC see-PST Q anyone-Q
 ‘Who did you see?’ ‘No one.’
 b. Q: Dare-no tomodati-o mi-ta no? A: *Dare-no tomodati-mo.
 who-GEN friend-ACC see-PST Q anyone-GEN friend-Q
 ‘Whose friend did you see?’ ‘No one’s friend.’

The fact suggests that only when *wh*-NPIs fall into the ‘floating modifier’ type do they behave as negative concord items, which can be licensed without an overt negator in certain contexts.

It is worth noting at this point that topicalization does not change the possibility of NPI licensing. The sentences in (29), where the topic phrases are used contrastively, display the same asymmetry that is observed in (12).

- (29) a. *Kon-kai amari ooku-no hito-wa hon-o yoma-nai-de i-ru.
 this-time very many-GEN man-TOP book-ACC read-NEG-GER be-PRS
 ‘As for very many people, they have not been reading books this time.’
 b. Kon-kai amari ooku-no hon-wa John-ga yoma-nai-de i-ru.
 this-time very many-GEN book-TOP John-NOM read-NEG-GER be-PRS
 ‘As for very many books, John has not been reading them this time.’

As argued by Hoji (1985), contrastive topics should involve movement to a topic position rather than base-generation in that position. Kishimoto (2009) argues that topicalized phrases can be moved either overtly or covertly to TopP, which is located in a higher position than TP. The data in (29) suggest that whether or not the NPI *amari ooku-no* is legitimate is determined with reference to the pre-topicalized A-position of the argument it modifies.¹⁵ (29b) is acceptable, because the NPI object appears in a structural position falling under the scope of negation, prior to topicalization. On the other hand, (29a) is deemed unacceptable, on the grounds that the NPI appearing in subject position (before topicalization) lies outside the scope of negation.

3.2 The control construction

In this section, I will turn to the discussion of the control construction with the auxiliary verb *oku* ‘put’. The control construction headed by *oku* comprises inaudible PRO in its complement clause, and this makes the two types of NPIs behave differently from those NPIs appearing in the raising construction with *iru* ‘be’. (30) is a representative example of the control construction, where the main verb in the *te*-form is combined with the control verb *oku* ‘put’.

¹⁵ The reconstruction effect is observed in topicalization but not relativization and clefting. DPs that have undergone relativization and (pseudo-)clefting are not interpreted in their thematic A-position for the purpose of NPI licensing. Thus, the following examples are not well-formed.

- (i) a. *[Ken-ga t_i awa-nakat-ta] {amari ooku-no hito/dare-mo_i}
 Ken-NOM meet-NEG-PST {very many-GEN man/anyone-Q}
 ‘{very many people/anyone} that Ken did not meet’
 b. *[[Ken-ga t_i awa-nakat-ta] no] wa {amari ooku-no
 Ken-NOM meet-NEG-PST COMP TOP {very many-GEN
 hito-ni_j/dare-ni-mo_i} da.
 man-DAT/anyone-DAT-Q COP
 ‘It was {very many people/anyone} that Ken did not meet.’

Relativization and clefting may invoke A'-movement, and possibly the same holds true for topicalization. The facts raise the question of why these operations give rise to differences with regard to the licensing of NPIs. Since this discussion would take us far away from the main thesis of this paper, the question is left open.

- (30) John-ga hon-o yon-de oi-ta.
 John-NOM book-ACC read-GER put-PST
 'John has read the books.'

The control construction in (30) can be assumed to have the syntactic structure in (31), where the thematic subject is placed in the matrix clause, with PRO appearing in the complement clause.

- (31) [_{FinP} [_{TP} SUBJ [_{VP} ~~SUBJ~~ [_{FinP} [_{TP} PRO [_{VP} ... V-v]]T-FIN] PUT]]T-FIN]

By way of confirming the syntactic structure of the *-te oku* construction, observe that this construction does not allow temporal adverbs to be iterated, which shows that only one finite tense appears in the construction.

- (32) a. *Kyoo Ken-ga [kinoo hon-o yon-de] oi-ta.
 today Ken-NOM yesterday book-ACC read-GER put-PST
 'Today, Ken read books yesterday.'
 b. *Ken-ga [Mari-ga hon-o yon-de] oi-ta.
 Ken-NOM Mari-NOM book-ACC read-GER put-PST
 'Ken, Mari read books.'

(32a) suggests that the past tense marker in the matrix clause is finite, while *-te* in the embedded clause is not. If *-te* represents a non-finite tense marker, possessing infinitival properties, it follows that an overtly realized subject cannot appear in the embedded TP, as shown in (32b). Nevertheless, the embedded TP can be filled by invisible PRO, because the higher verb is a control verb.

In this type of control construction, just like the raising construction with the aspectual verb *iru*, negative *nai* can either precede or follow the auxiliary verb, as shown in (33).

- (33) a. Kare-ga sono koto-o hanasi-te oka-nakat-ta.
 he-NOM that matter-ACC talk-GER put-NEG-PST
 'He did not talk about that matter.' (V-*oku*-NEG)
 b. Kare-ga sono koto-o hanasa-nai-de oi-ta.
 he-NOM that matter-ACC talk-NEG-GER put-PST
 'He did not talk about that matter.' (V-NEG-*oku*)

The fact that neither inanimate subjects nor clausal idioms can be embedded under *oku*, as in (34), shows that the verb *oku* takes a control complement.

- (34) a. *Sora-ga {hare-te oka-nakat-ta/hare-nai-de oi-ta}.
 sky-NOM {clear-GER put-NEG-PST/clear-NEG-GER put-PST}
 ‘The sky was not cleared.’
 b. *Kono mise-de-wa kankodori-ga {nai-te
 this shop-at-TOP cuckoo-NOM {sing-GER
 oka-nakat-ta/naka-nai-de oi-ta}.
 put-NEG-PST/sing-NEG-GER put-PST}
 ‘There were many customers at this shop.’

Importantly, the verb *oku* ‘put’ takes a control complement, irrespective of whether *nai* follows or precedes *oku*. Thus, both variants of the *-te oku* construction can be assumed to have the control structure depicted in (31).

In the control construction, NPIs display syntactic behavior different from what is observed in the raising construction, owing to the fact that the overt subject is not merged in the embedded clause. To be concrete, when the negator precedes the verb *oku*, NPIs in subject position are not licensed, regardless of whether they belong to the ‘argument modifier’ or the ‘floating modifier’ type.¹⁶

- (35) a. *Kon-kai amari ooku-no hito-ga maemotte
 this-time very many-GEN man-NOM in.advance
 kyookasyo-o kawa-nai-de oi-ta yooda.
 textbook-ACC buy-NEG-GER put-PST seem
 ‘It seems that very many people did not buy textbooks in advance
 this time.’
 b. *Kon-kai dare-mo kyookasyo-o maemotte kawa-nai-de
 this time anyone-Q textbook-ACC in.advance buy-NEG-GER
 oi-ta.
 put-PST
 ‘Anyone did not buy a textbook in advance this time.’

Both types of NPIs are licensed when they appear in object position in the control construction where *nai* precedes *oku*, as seen in (36).

- (36) a. Kon-kai karera-wa amari ooku-no mono-o
 this-time they-TOP very many-GEN thing-ACC
 kawa-nai-de oi-ta yooda.
 buy-NEG-GER put-PST seem
 ‘It seems that they did not buy very many things this time.’
 b. Kon-kai Ken-wa nani-mo kawa-nai-de oi-ta.
 this-time Ken-TOP anything-Q buy-NEG-GER put-PST
 ‘Ken did not buy anything this time.’

¹⁶ The control construction makes an assertion about the subject’s intentional action. When *amari ooku-no* modifies the subject, the sentence asserts the proportion of intentions held by a large number of people. Since it is hard to imagine a situation where the speaker is familiar with all of their intentions, the sentence often sounds pragmatically odd if it is simply asserted. This oddity can be avoided if the clause occurs with a modal like *yooda* ‘seem’, which signifies the speaker’s conjecture.

The fact that the ‘floating modifier’ NPI *dare-mo* is not legitimate in the control constructions in (35b) falls out naturally, given that it can be associated with a copy of the subject in the matrix clause, but not with PRO in the embedded clause, as illustrated in (37).

(37) [_{FinP} [_{TP} NPI-SUBJ [_{VP} ~~SUBJ~~ dare-mo [_{FinP}[_{TP} PRO [_{NegP} [_{VP}V-v]]]]NEG-T-FIN] PUT]]T-FIN]

In the control construction at issue, NPIs associated with the subject can appear only in the matrix clause, since the subject is not originated from within the embedded clause. Thus, the NPIs in (35) are not licensed, falling outside the scope of negation, irrespective of whether they are construed as argument modifiers (appearing in the matrix Spec-TP) or as floating modifiers (appearing in the matrix Spec-VP). In the present perspective, the syntactic behavior of the subject NPIs in (35) is derived from the fact that PRO and its controller are the members of distinct chains, the former being related to the latter via control.

In addition, observe that in the control construction, both ‘argument modifier’ and ‘floating modifier’ NPIs are allowed to appear in subject position when the upper verb *oku* is negated.

- (38) a. Kon-kai amari ooku-no hito-ga maemotte
 this-time very many-GEN man-NOM in.advance
 kyookasyo-o kat-te oka-nakat-ta yooda.
 textbook-ACC buy-GER put-NEG-PST seem
 ‘This time, it seems that not very many people bought textbooks
 in advance.’
- b. Kon-kai dare-mo kyookasyo-o maemotte kat-te oka-nakat-ta.
 this-time anyone-Q textbook-ACC in.advance buy-GER put-NEG-PST
 ‘This time, no one bought a textbook in advance.’

The acceptability of the sentences in (38) is naturally expected, since the negative *nai*, which follows *oku*, resides in the matrix Fin, as (39) illustrates.

(39) [_{FinP}[_{TP} NPI-SUBJ [_{NegP} [_{VP} ~~SUBJ~~ dare-mo [_{FinP} [_{TP} PRO [_{VP} ... V-v]]T-FIN]PUT]]]]NEG-T-FIN]

If Neg-head raising takes place, as in (39), the scope of negation extends over the matrix TP, with the result that both types of NPIs in the matrix clause are licensed.

The proposed analysis that takes the failure of licensing the NPI in (35b) to come from a control structure draws on the assumption that NPIs that behave like floating numeral quantifiers cannot be associated with PRO. One piece of evidence in support of this view may be adduced from the object control construction in (40).¹⁷

¹⁷ In (40), the embedded clause has been fronted via scrambling. This makes it easier to see whether the floating numeral quantifier *san-nin* appears in the matrix or embedded clause.

- (40) a. [Asita PRO_i soko-ni iku yooni] sensei-ga
 tomorrow there-to go COMP teacher-NOM
 gakusei_i-o san-nin settoku-si-ta.
 student-ACC three-CL persuade-do-PST
 (lit.) ‘To go there tomorrow, the teacher persuaded three students.’
- b. #[Asita PRO_i san-nin soko-ni iku yooni]
 tomorrow three-CL there-to go COMP
 sensei-ga gakusei_i-o settoku-si-ta.
 teacher-NOM student-ACC persuade-do-PST
 (lit.) ‘To go there tomorrow, the teacher persuaded (three) students.’

In (40a), the floating partitive quantifier *san-nin* ‘three’ appears in the main clause, and can be linked to the object, specifying the number of the students. In this case, the sentence is interpreted as meaning that the teacher persuaded the three students that they (i.e. all of the three students) should go there. When the partitive quantifier *san-nin* occurs in the embedded clause, as in (40b), however, this interpretation is not available. The sentence invokes an irrelevant ‘independent argument’ interpretation that the teacher persuaded the students that three people, possibly out of the students being persuaded, should go there (i.e. by this interpretation, there should be more than three students who are persuaded). In the latter case, *san-nin* behaves as an independent subject argument, the sentence possessing a complement structure like (41a) rather than the construal in (41b).

- (41) a. [Subj ... [[three will go] COMP] the students persuaded]
 b. [Subj ... [[PRO (three) will go] COMP] the students persuaded]

In (40b), the partitive quantifier *san-nin* cannot be hosted by PRO, so it must be construed as a thematic argument, i.e. the subject (whose case marking is dropped). In fact, there is good reason to believe that *san-nin* in the complement clause of (40b) stands as a thematic subject, because the complement clause can accommodate a nominative subject, as in (42).

- (42) [Asita karera-ga soko-ni iku yooni] sensei-ga
 tomorrow they-NOM there-to go COMP teacher-NOM
 gakusei-o settoku-si-ta.
 student-ACC persuade-do-PST
 ‘The teacher persuaded the students that they should go there tomorrow.’

The interpretive facts of (40) follow if controlled PRO does not serve as a host for a floating NPI launched off its controller.¹⁸

The facts of the object control construction suggest that the failure of licensing the NPI of the floating modifier type observed in (35b) emerges on the grounds that PRO cannot serve as a host for a numeral quantifier launched off its controller. In effect, the unacceptability of (35b) follows, given that the NPI *dare-mo* does not serve as an embedded subject argument. The assumption about the status of *dare-mo* here is reasonable, because an overt subject is not allowed to appear in the embedded clause.

- (43) *Gakusei-ga [karera-ga kyookasyo-o maemotte kat-te] oka-nakat-ta.
 student-NOM they-NOM textbook-ACC in.advance buy-GER put-NEG-PST
 ‘The students did not buy a textbook in advance.’

In (35b), a phonetically null PRO subject, but not an overt subject, is allowed to appear in the embedded clause. Since the floating NPI *dare-mo* ‘anyone’ cannot be associated with PRO, it can appear only in the matrix clause, as represented in (37). Therefore, in (35b), the NPI *dare-mo* falls outside the scope of *nai* located in the embedded clause, and the sentence is unacceptable.

3.3 Summary

NPIs are divided into the ‘argument modifier’ type and the ‘floating modifier’ type. The two types of NPIs show distinct behavior in raising and control constructions. A subject-object asymmetry found with regard to the licensing of ‘argument modifier’

¹⁸ The interpretive discrepancy arises with partitive numeral quantifiers like *san-nin* ‘three’, but not universal quantifiers like *zen’in* ‘all’ (in positive clauses) or *dare-mo* ‘no one’ (in negative clauses). This is because the independent argument interpretation is not semantically distinct from the floating quantifier interpretation when universal quantifiers are involved, owing to their semantic properties. This can be easily confirmed by (i).

- (i) [Asita zen’in soko-ni iku yooni] sensei-ga gakusei-o settoku-si-ta.
 tomorrow all there-to go COMP teacher-NOM student-ACC persuade-do-PST
 ‘The teacher persuaded the students that all should go there tomorrow.’

When *zen’in* appears in the subordinate clause, as in (i), the sentence must have the clause structure in (ii), if PRO cannot host a floating quantifier launched off its controller.

- (ii) [Subj ...[[all/none ... go] COMP] the students persuaded]

The sentence in (i) has the interpretation that the number of students persuaded matches the number of people that will actually go. Despite the fact that (i) does not involve floating quantification, the interpretation in (i) is essentially the same as the one obtained in (iii), where *zen’in* is floated from the DP *gakusei* ‘student’.

- (iii) [Asita PRO soko-ni iku yooni] sensei-ga gakusei-o zen’in settoku-si-ta.
 tomorrow there-LOC go COMP teacher-NOM student-ACC all persuade-do-PST
 ‘The teacher persuaded all the students that they should go.’

Therefore, when a universal quantifier is used, it is not possible to tell whether the interpretation is derived based on a control structure or a structure without PRO.

NPIs in the raising construction where *nai* ‘not’ precedes the aspectual verb *iru* ‘be’ comes from the fact that the negator takes scope only over the embedded TP. The data pertaining to the two types of NPIs provide evidence that nominative subjects undergo raising to TP in Japanese.

4 Subjects with various markings

In Japanese, subjects are most typically marked with nominative case, but other types of case marking are also possible. This section shows that the possibility of subject raising differs according to how subjects are case marked: Nominative and dative subjects are susceptible to subject raising, whereas oblique subjects (marked with *de* ‘with’ or *kara* ‘from’) are not when they appear in clauses where no nominative argument is included. I will argue that, at least in Japanese, the EPP is correlated with the question of whether T enters into a Case-agreement relation with a nominative argument. The data from oblique-subject constructions suggest that the specifier requirement (i.e. the EPP requirement) of T is derived when T is identified as an ordinary type, which carries a Case feature to value the Case feature of a nominative argument—which has the most prominent morphological case marking in Japanese (as a nominative-accusative language).

4.1 Subject raising and the EPP

Let us begin by observing that, in Japanese, subjects are most typically marked with nominative case, but that they can be associated with other types of case marking (Inoue 1998; Kishimoto 2005).

- (44) a. Gakusei-ga ronbun-o kai-ta.
 student-NOM paper-ACC write-PST
 ‘The student wrote a paper.’
- b. Mari-ni sono koto-ga wakar-u.
 Mari-DAT that matter-NOM understand-PRS
 ‘Mari understands that matter.’
- c. Watasi-kara sono koto-o hanasi-ta.
 I-from that matter-ACC talk-PST
 ‘I talked about that matter.’
- d. {Kodomo-tati-de/*Ken-de} hanasi-ta.
 {child-PL-with/Ken-with} talk-PST
 ‘{The children/Ken} talked.’

The subject is marked with nominative case in (44a). In (44b), the subject is assigned dative case. In (44c), the subject bears ablative *kara* ‘from’, since it is thematically conceived as a source (as well as an agent).¹⁹ The subject in (44d) can

¹⁹ The oblique *kara* ‘from’ can be used to specify a starter. The starter-specifying use of *kara* differs from the ‘source’ use, in that a nominal with *kara* shows behavior akin to a floating quantifier. It is important to note that the starter-specifying use is not compatible with the NPI *amari ooku-no*

be assigned *de* ‘with’, when an agent argument refers to a group of people; the sentence is not acceptable if the *de*-marked subject refers to a single individual like *Ken* (Kishimoto 2005; Takubo 2010).

The underlined arguments bearing different markings in (45) all count as subjects. This can be confirmed by the fact that they can be the antecedents of subject-oriented reflexive *zibun* ‘self’.

- (45) a. Ken_i-ga zibun_i-no ronbun-o kai-ta.
 Ken-NOM self-GEN paper-ACC write-PST
 ‘Ken wrote his own paper.’
- b. Mari_i-ni-wa zibun_i-no tatiba-ga wakat-te i-na-i.
 Mari-DAT-TOP self-GEN situation-NOM understand-GER be-NEG-PRS
 ‘Mari does not understand her situation.’
- c. Ken_i-kara-wa zibun_i-no koto-o hanasa-nakat-ta.
 Ken-from-TOP self-GEN fact-ACC talk-NEG-PST
 ‘Ken did not talk about his own matter.’
- d. Kodomo-tati_i-de zibun_i(-tati)-no nimotu-o hakon-da.
 child-PL-with self(-PL)-GEN luggage-ACC carry-PST
 ‘The children carried their own luggage.’

Subject honorification provides another kind of corroboration. The examples in (46) show that the underlined arguments in (44) can be targeted for subject honorification.

- (46) a. Sensei-ga ronbun-o o-kaki-ni-nat-ta.
 teacher-NOM paper-ACC HON-write-DAT-become-PST
 ‘The teacher wrote a paper.’
- b. Sensei-ni sono koto-ga o-wakari-ni-nat-ta.
 teacher-DAT that matter-NOM HON-understand-DAT-become-PST
 ‘The teacher understood that matter.’
- c. Sensei-kara sono koto-o o-hanasi-ni-nat-ta.
 teacher-from that matter-ACC HON-talk-DAT-become-PST
 ‘The teacher talked about that matter.’
- d. Sensei-tati-de o-atumari-ni-nat-ta.
 teacher-PL-with HON-gather-DAT-become-PST
 ‘The teachers got together.’

Given that both subject honorification and reflexivization have subject orientation (see e.g. Shibatani 1978), it is fair to state that the underlined arguments (with various case markings) in (44) all serve as subjects.²⁰ It is plausible to assume here

Footnote 19 continued

semantically (for it is not possible to indicate a starter out of an indefinite number of entities or individuals). Accordingly, the *kara*-marked DP with *amari ooku-no* can only be used as an argument.

²⁰ In the literature, these two diagnostics are reported to have subject orientation (see Harada 1976; Hasegawa 2006). Nevertheless, speaker variations are sometimes observed, in particular, when obliquely-marked subjects are involved.

that both subject honorification and reflexivization target a subject located in Spec-vP rather than Spec-TP, in view of the fact that they can pick out the subject arguments that cannot possibly occupy Spec-TP, as exemplified in (47).

- (47) a. Ken_i-ga [Hanako_j-o zibun_{i/j}-no ie-de hatarak]-ase-ta.
 Ken-NOM Hanako-ACC self-GEN home-at work-CAUS-PST
 ‘Ken made Hanako work at self’s home.’
 b. Watasi-wa [Abe-sensei-o totemo o-utukusiku] omo-u.
 I-TOP Abe-teacher-ACC very HON-beautiful think-PRS
 ‘I think Mrs. Abe very beautiful.’

In (47a), the accusative argument *Hanako* in the embedded clause (as well as the nominative argument *Ken*) can be the antecedent of *zibun*. The embedded clause in the causative construction does not have tense, so it is plausible to say that it does not include TP (Saito 2009). In (47b), the accusative subject appearing in the small clause, which arguably lacks TP (Takezawa 1987), is targeted for subject honorification. Given these facts, it is plausible to state that both reflexivization and subject honorification do not pick out an argument located at Spec-TP. I thus assume that these operations can target a subject argument merged with Spec-vP (to receive a theta role) or moved through Spec-vP by A-movement (Kishimoto 2012).

Before proceeding, note that there are cases where obliquely-marked subjects occur with *wa*-marked topic phrases, as exemplified in (48).

- (48) a. Watasi-wa watasi-kara sono koto-o sensei-ni hanasi-ta.
 I-TOP I-from that matter-ACC teacher-to talk-PST
 ‘I talked to the teacher about that matter by myself.’
 b. Kodomo-tati-wa kodomo-tati-de atumat-ta.
 child-PL-TOP child-PL-with gather-PST
 ‘As for the children, they gathered.’

In light of examples like (48), one reviewer suggests that the real subjects in the oblique-subject constructions might be the initial topic phrases (rather than the alleged oblique subjects), taking the sentences to involve some kind of doubling. Nevertheless, there is good reason to believe that the oblique phrases, but not the initial *wa*-marked phrases, should be the thematic subjects of the predicates.

In the examples in (48), the topics and the PPs refer to the same individual(s), and thus, it is not easy to discern which phrase counts as a real thematic subject. But when their referents are not the same, it is possible to determine which phrase serves as the thematic subject of the predicate. To make this point, consider the examples in (49).

- (49) a. Gakusei-wa dansi-gakusei-kara sono koto-o
 students-TOP male-student-from that matter-ACC
 sensei-ni hanasi-ta.
 teacher-to talk-PST
 ‘As for the students, the male students talked to the teacher
 about that matter.’
- b. Kodomo-tati-wa onnanoko-tati-de atumat-ta.
 child-PL-TOP girl-PL-with gather-PST
 ‘As for the children, the girls gathered.’

In (49a) and (49b), the participants of the events described by the verbs are ‘the male students’ and ‘the girls’, but not ‘the students’ and ‘the children’, i.e. the male students talked, and the girls gathered. This fact shows that in examples like (49), where topic and oblique-subject phrases occur in a single clause, the initial topics are not the thematic subjects of the predicates, but are major subjects—i.e. non-thematic arguments licensed with an ‘aboutness’ relation to the arguments on their right. Given that the sentences in (49) have essentially the same syntactic configurations as those in (48), the interpretive facts of (49) suggest that in (48), the thematic subjects of the predicates should be the oblique phrases rather than the initial *wa*-marked phrases.

Returning now to the issue of subject raising, recall, first of all, that nominative subjects in Japanese undergo raising to the matrix Spec-TP, and the raising of nominative subjects gives rise to a subject-object asymmetry in the licensing of the NPI *amari ooku-no* in the variant of aspectual constructions where the negator precedes the aspectual verb *iru*.

- (50) a. *Saikin amari ooku-no hito-ga ronbun-o
 recently very many-GEN man-NOM paper-ACC
 kaka-nai-de i-ru.
 write-NEG-GER be-PRS
 ‘Recently, very many people have not been writing papers.’
- b. Saikin Ken-wa amari ooku-no ronbun-o
 Recently Ken-TOP very many-GEN paper-ACC
 kaka-nai-de i-ru.
 write-NEG-GER be-PRS
 ‘Recently Ken has not been writing very many papers.’

In dative-subject constructions, dative subjects rather than nominative objects undergo raising to TP. Thus, the NPI *amari ooku-no* modifying the dative subject is not legitimate, as in (51a), but the same NPI is legitimate when it modifies a nominative object, as in (51b).²¹

²¹ One reviewer, who detects the second position effect on the NPI *amari ooku-no*, reports that (51a) seems to improve if the nominative object is moved before the dative subject. Presumably, this improvement is due to the second position condition to which this reviewer is sensitive.

- (51) a. *Mada amari ooku-no hito-ni happyoo-no
 still very many-GEN man-DAT presentation-GEN
 zyunbi-ga deki-nai-de i-ru (koto)
 preparation-NOM can.do-NEG-GER be-PRS fact
 ‘(the fact that) very many people still have not been able to engage in preparation for their presentations’
- b. Mada karera-ni amari ooku-no zyunbi-ga
 still they-DAT very many-GEN preparation-NOM
 deki-nai-de i-ru (koto)
 can.do-NEG-GER be-PRS fact
 ‘(the fact that) they still have not been able to engage very much in preparation’

The subject-object asymmetry in (51) comes from the fact that the negative *nai* occurring to the left of the aspectual verb *iru* extends its scope only over the embedded TP. If *nai* follows the aspectual verb, no subject-object asymmetry arises, because the scope of *nai* extends over the matrix TP.

- (52) a. Mada amari ooku-no hito-ni happyoo-no
 still very many-GEN man-DAT presentation-GEN
 zyunbi-ga deki-te i-na-i (koto)
 preparation-NOM can.do-GER be-NEG-PRS fact
 ‘(the fact that) not very many people still have not been able to engage in preparation for their presentations’
- b. Mada karera-ni amari ooku-no zyunbi-ga
 still they-DAT very many-GEN preparation-NOM
 deki-te i-na-i (koto)
 can.do-GER be-NEG-PRS fact
 ‘(the fact that) they still have not been able to engage very much in preparation’

In light of the fact that the dative subject patterns with the nominative subject, it can be concluded that the dative subject is amenable to raising to Spec-TP motivated by the EPP requirement of T.

In contradistinction, the NPI *amari ooku-no* modifying *kara*-marked and *de*-marked subjects falls under the scope of negative *nai* occurring to the left of the aspectual verb *iru*. In the *kara*-subject construction in (53), the NPI *amari ooku-no* added to the subject, just like the one modifying the object, is licensed by the negative *nai* located in the subordinate clause.

- (53) a. Saikin amari ooku-no hito-kara kare-ni hanasi-o
 recently very many-GEN man-from he-to talk-ACC
 si-nai-de i-ru.
 do-NEG-GER be-PRS
 ‘Recently, not very many people have been talking to him.’
- b. Saikin watasi-kara kare-ni amari ooku-no hanasi-o
 recently I-from he-to very many-GEN talk-ACC
 si-nai-de i-ru.
 do-NEG-GER be-PRS
 ‘Recently, I have not been talking to him very much.’

The fact that the ‘argument modifier’ NPI in subject position is licensed by *nai* in (53) suggests that the *kara*-marked subject does not undergo raising to the matrix TP. Moreover, in (54) the NPI *amari ooku-no* modifying the subject marked with the oblique *de* ‘with’ is licensed by *nai*, in the same way as the NPI *amari ooku-no* appearing with the object.

- (54) a. Saikin amari ooku-no hito-tati-de hanasi-o
 recently very many-GEN man-PL-with talk-ACC
 si-nai-de i-ru.
 do-NEG-GER be-PRS
 ‘Recently, not very many people have been talking.’
- b. Saikin watasi-tati-de amari ooku-no hanasi-o
 recently I-PL-with very many-GEN talk-ACC
 si-nai-de i-ru.
 do-NEG-GER be-PRS
 ‘Recently, we have not been talking very much.’

In (54), *amari ooku-no* can appear in either subject or object position, showing that both the subject and the object fall under the scope of negation. Needless to say, the occurrence of *amari ooku-no* with *kara*- and *de*-marked subjects is also licensed when the negator *nai* follows the aspectual verb, as in (55).

- (55) a. Saikin amari ooku-no hito-tati-kara kare-ni hanasi-o
 recently very many-GEN man-PL-from he-to talk-ACC
 si-te i-na-i.
 do-GER be-NEG-PRS
 ‘Recently, not very many people have been talking to him.’
- b. Saikin amari ooku-no hito-tati-de hanasi-o si-te
 recently very many-GEN man-PL-with talk-ACC do-GER
 i-na-i.
 be-NEG-PRS
 ‘Recently, not very many people have not been talking.’

Given that the scope of *nai* located in the embedded clause does not extend over the matrix clause, it is feasible to conclude that the obliquely-marked subjects remain in vP in the lower clause where they are merged, with no raising to the matrix Spec-TP.²²

The NPI data considered thus far suggest that oblique subjects (marked with either *kara* ‘from’ or *de* ‘with’) do not undergo A-movement to TP, while dative and nominative subjects do. A question that immediately arises is why subjects behave differently in regard to subject raising, depending on how they are marked. I suggest that the difference is reduced to the question of whether T includes a Case feature to participate in Agree with arguments.

To make this point, first observe that one crucial difference that distinguishes the dative/nominative-subject constructions from the oblique-subject constructions lies in applicability of the ‘nominative-case’ constraint—the constraint that at least one nominative argument is necessary per finite clause (Shibatani 1978). The nominative-case constraint applies to both nominative-subject and dative-subject constructions. The nominative-case constraint is trivially satisfied in nominative-subject constructions, which include nominative subjects. Dative-subject constructions also need to include a nominative argument by virtue of the nominative-case constraint, as in (56).

- (56) Ken-ni sono koto- $\{ga/*o\}$ wakara-na-i.
 Ken-DAT that matter- $\{NOM/ACC\}$ understand-NEG-PRS
 ‘Ken does not understand that matter.’

Ordinary transitive predicates allow their objects to be marked with accusative case, but as seen in (56), nominative case on the object in the dative-subject construction cannot be replaced by accusative case, owing to the nominative-case constraint.

Note, however, that the presence of a nominative argument is not required for the *de*-marked and *kara*-marked subject constructions. (57) is acceptable, despite the fact that it does not include any nominative argument.

²² When an NPI object is scrambled across a nominative subject in the aspectual construction where the negator *nai* precedes the aspectual verb *iru*, the sentence is degraded, though not totally ungrammatical, as shown in (i).

- (i) ^{??}Kyoo-wa amari ooku-no hon-o_i Ken-ga t_i yoma-nai-de i-ru.
 today-TOP very many-GEN book-ACC Ken-NOM read-NEG-GER be-PRS
 ‘Today, very many books, Ken has not been reading.’

This seems to suggest that the scrambled object is interpreted in the surface position outside the scope of negation, which can presumably be attributed to the fact that scrambling shows some A-properties (see e.g. Miyagawa 2001, 2005). When the subject is obliquely marked, no deterioration is detected.

- (ii) Kyoo-wa amari ooku-no hon-o_i kodomo-tati-de t_i yoma-nai-de i-ru.
 today-TOP very many-GEN book-ACC child-PL-with read-NEG-GER be-PRS
 ‘Today, very many books, the children have not been reading.’

In (ii), since the *de*-marked subject does not undergo raising to the matrix Spec-TP, the scrambled object is not extracted from the scope domain of *nai*, even if it appears to the left of the subject.

- (57) Watasi-tati-{kara/de} sono koto-o hanasi-ta.
 I-PL-{with/from} that matter-ACC talk-PST
 ‘We talked about that matter.’

In the oblique-subject construction in (57), the oblique marker *de* or *kara* is assigned to the subject, which would otherwise bear nominative case, and the object is marked with accusative case rather than nominative case. The acceptability of (57) shows that the nominative-case constraint does not apply to the oblique-subject construction. Furthermore, given that nominative and dative subjects, but not oblique subjects, undergo subject raising, the fact suggests that in clauses where the presence of at least one nominative argument is required, subject raising takes place. (The discussion of why the dative-subject and the oblique-subject constructions differ in applicability of the nominative-case constraint is deferred until Sect. 4.2.)

Given that subject raising is instantiated in clauses comprising a nominative argument, it is reasonable to say that when T carries the Case feature [+Nom] to value the (unvalued) Case feature on a nominative argument, an EPP feature is assigned to T.²³ In nominative-subject constructions like (44a), the nominative subject is the only argument with which T enters into an Agree relation, and hence is raised to Spec-TP to meet the EPP requirement, as shown in (50). In dative-subject constructions like (44b), T establishes an Agree relation with both dative subject and nominative object (see Sect. 4.2), but since the dative subject is structurally closer to T, it is raised to Spec-TP to satisfy the EPP requirement on T, as shown in (51). In oblique-subject constructions, such as (44c) and (44d), by contrast, no nominative argument appears in the clause, so that T without a nominative Case feature is merged. This signals that T does not include an EPP feature, which motivates subject raising. Accordingly, in the oblique-subject constructions, which are exempt from the nominative-case constraint, no subject raising takes place, as confirmed by (53) and (54).

Under the present analysis taking finite tense to determine whether or not subjects undergo raising, it is further predicted that the raising of an oblique-marked subject to TP will be instantiated if the clause has a nominative argument. This prediction is in fact borne out, as seen in the examples in (58), where the subject is marked with *kara* ‘from’.

²³ Pesetsky and Torrego (2001) suggest that nominative Case should be an unvalued tense feature on D, so that it is deleted in association with tense. In Chomsky (2000, 2001), manifestation of structural Case depends on the probe, and T values the Case feature on an argument as nominative, and v as accusative, etc. (see also Chomsky 2008). But the Japanese facts show that finite tense does not necessarily value the Case feature of a nominative argument. Thus, in the present analysis, it is assumed that a Case feature contained in the probe determines the Case value of an argument, and that in a transitive clause taking a nominative subject and an accusative object, finite T and v contain [+Nom] and [+Acc], respectively. I also assume that finite T can enter into a multiple Agree relation (Hiraiwa 2005).

- (58) a. ?*Saikin amari ooku-no hito-kara kare-ni
 recently very many-GEN man-from he-to
 hanasi-ga deki-nai-de i-ru.
 talk-NOM can.do-NEG be-PRS
 ‘Recently, not very many people have been able to talk to him.’
- b. Saikin watasi-kara kare-ni amari ooku-no hanasi-ga
 recently I-from he-to very many-GEN talk-NOM
 deki-nai-de i-ru.
 can.do-NEG be-PRS
 ‘Recently, I have not been able to talk to him very much.’

In (58), while the NPI object, which is marked with nominative case, is licensed by *nai*, the NPI subject marked by *kara* is not. This suggests that the *kara*-marked subject should occupy the matrix TP via subject raising.

The same holds true for the oblique-subject construction whose subject receives *de* marking. As seen from (59), the subject marked with *de* is not licensed, falling outside the scope of negation, whereas the nominative object is licensed.

- (59) a. ?*Saikin amari ooku-no hito-tati-de hanasi-ga
 recently very many-GEN man-PL-with talk-NOM
 deki-nai-de i-ru.
 can.do-NEG be-PRS
 ‘Recently, not very many people have been able to talk.’
- b. Saikin watasi-tati-de amari ooku-no hanasi-ga
 recently I-PL-with very many-GEN talk-NOM
 deki-nai-de i-ru.
 can.do-NEG be-PRS
 ‘Recently, we have not been able to talk very much.’

The fact suggests that the subject marked with *de* must be located in the matrix TP as a consequence of subject raising.²⁴

The failure of negative *nai* to license the NPI *amari ooku-no* ‘very many’ appearing on the oblique subjects in (58a) and (59a), where the negative takes scope only over its complement clause, gives us a good indication that oblique subjects are raised to the matrix Spec-TP when they occur in clauses comprising nominative objects, as illustrated in (60b).

- (60) a. [_{TP} [_{TP} [_{VP} SUBJ-*kara/de* OBJ-ACC V_v]]T]
 b. [_{TP} SUBJ-*kara/de* [_{TP} ~~SUBJ-*kara/de*~~ [_{VP} ~~SUBJ-*kara/de*~~ OBJ-NOM V_v]]T]

On the other hand, subject raising is not implemented on the oblique subject when an object is marked with accusative case, as illustrated in (60a). In light of this fact,

²⁴ The verb *dekiru* ‘can do’ in (58) and (59), which can sanction nominative case on its object, is a suppletive potential form of *suru* ‘do’. One reviewer finds examples like (58a) and (59b) not so bad. Although the judgments might be rather subtle, a group of speakers finds a clear contrast between a clause with a nominative argument and a clause without it.

it can be concluded that subject raising is induced when tense bears the Case feature [+Nom] to value the Case feature on a nominative argument.

In regard to the oblique-subject constructions in (44c) and (44d), one reviewer suggests an alternative analysis taking the oblique phrases to remain in situ, due to the presence of an empty category *pro* (serving as a real subject) that undergoes raising to TP by the EPP requirement of T. This analysis, plausible as it seems at first sight, leads to the prediction that the oblique subjects will never be raised to TP via subject raising. Nevertheless, in (58) and (59), where a nominative argument appears in the clause, the NPI *amari ooku-no* modifying the oblique subjects is not licensed by the negative *nai* that precedes the aspectual *iru*. This shows that the oblique subjects do undergo raising to TP when they appear in clauses where a nominative argument is present. In light of this fact, it is reasonable to state that in (44c) and (44d), which do not include any nominative argument, the raising of the oblique subjects to TP is not implemented, because T does not contain the Case feature [+Nom].²⁵

As discussed above, subject raising should be motivated by the EPP requirement for filling Spec-TP. Since the EPP was formulated by Chomsky (1982), a number of different theoretical implementations have been proposed (see Landau 2007), but it is important to note here that the EPP requirement is often taken to work in tandem with, or closely to, some grammatical features such as Case and agreement. Researchers such as Bošković (2002) and Martin (1999) propose that the EPP should be motivated by Case. In contrast, Kuroda (1988), Pesetsky and Torrego (2001), and Miyagawa (2010) provide a view to the effect that agreement dictates the EPP, and hence, the possibility of subject raising.²⁶ The non-raising view of subjects in Japanese is often motivated by the fact that the language lacks morphological agreement, as discussed by Fukui (1986) and Kuroda (1988). For Kuroda (1988), subjects remain in vP-internal position in Japanese, due to the absence of morphological agreement.²⁷ If agreement signals the presence of an EPP

²⁵ A contrast obtains between (ia) and (ib) with regard to the licensing of the NPI *amari ooku-no* occurring with the *kara*-phrases, because the grammatical status of the *kara*-phrases is not the same.

- (i) a. *Kon-kai amari ooku-no hito-kara purezento-ga watas-e-nai-de i-ru.
 this-time very many-GEN man-from gift-NOM hand-POTEN-NEG-GER be-PST
 'This time, very many people have not been able to give gifts.'
 b. Kon-kai amari ooku-no hito-kara purezento-ga mora-e-nai-de i-ru.
 this-time very many-GEN man-from gift-NOM get-POTEN-NEG-GER be-PRS
 'This time, (I) have not been able to get gifts from very many people.'

In (ia), the NPI *amari ooku-no* modifying the *kara*-phrase in (ia) is not licensed since it appears in the position lying outside the scope of *nai* as a consequence of subject raising. In (ib), the *kara*-phrase can accommodate the same NPI, because it is a non-subject to which subject raising does not apply. In (ib), what undergoes subject raising to TP should be an unexpressed subject, i.e. the recipient.

²⁶ In Miyagawa (2010), topic/focus features are counterparts of agreement features in languages like Japanese.

²⁷ Although predicates do not inflect for agreement in Japanese, some researchers claim that the language manifests subject agreement in some abstract form. For discussion on this point, see Nitta (1991, 1997) and Ueda (2007), among others.

requirement, this view might be plausible. Nevertheless, this analysis cannot be maintained, for subjects do undergo raising when a nominative argument is included in the clause, as discussed above.

In Japanese, finite T can be divided into two types; one type that participates in Case licensing of a nominative argument via Agree, and the other type that does not. The EPP requirement is imposed on a finite clause which comprises a nominative argument, i.e. when finite T is active with regard to Case licensing. Conversely, when finite T is inert, it lacks an EPP feature, and hence, does not attract a subject. This suggests that the EPP should be a grammatical requirement of T working in alliance with some prominent morphological properties of the language: In Japanese, the verb does not show morphological agreement with its subject, but the absence of agreement does not point to the lack of the EPP requirement on T, contrary to claims advanced by Fukui (1986), Kuroda (1988) and others. Rather, the status of the EPP requirement on finite T in Japanese is determined according to whether T participates in structural Case licensing, i.e. the EPP is correlated with Case rather than agreement. That case marking signals the status of the EPP on T in Japanese is not too surprising, because Japanese is a language where the grammatical relation of arguments is indicated by morphological case, but not agreement.

To summarize, the data regarding NPIs show that the EPP requirement is not always imposed on finite T in Japanese; nominative and dative subjects undergo A-movement to Spec-TP, because they appear in clauses which include a nominative argument. Oblique subjects are not raised to Spec-TP when they appear in clauses which do not comprise any nominative argument. Nevertheless, even the oblique subjects undergo raising to Spec-TP when a nominative argument is included elsewhere in the clause. The fact leads to the conclusion that the EPP requirement on T is motivated when tense bears the Case feature [+Nom] to value the Case feature of a nominative argument.

4.2 The nature of the nominative-case constraint

As argued previously, the EPP requirement is imposed on finite T bearing the Case feature [+Nom] to value the Case feature of a nominative argument. Oblique-subject constructions can have T without [+Nom]. On the other hand, in dative-subject constructions, the nominative-case constraint is operative, so that T must have [+Nom]. In this section, I will address the question of why the nominative-case constraint is enforced in dative-subject constructions, but not in oblique-subject constructions.

To begin, recall that in dative-subject constructions, the presence of a nominative object is required; dative-subject constructions do not allow nominative case on an object to be replaced by accusative case (i.e. a structural case marker) (cf. (56)). In oblique-subject constructions, by contrast, the subject—which would otherwise be marked with nominative case—bears either the *de* or *kara* marking, showing that

when nominative case on the subject is replaced by an oblique marker, the nominative-case constraint does not apply (cf. (57)). Given this, it is tempting to say that whenever nominative *ga* can be replaced by an “oblique” marker (satisfying the semantic conditions imposed on the oblique marking), the nominative-case constraint can be voided.

This analysis looks promising at first sight, but it turns out that it does not correctly capture the facts pertaining to the nominative-case constraint. To understand this point, observe first that in (61a), the nominative case on the source argument can be replaced by *kara* without affecting acceptability, but that in (61b), the same replacement results in unacceptability.

- (61) a. Kodomo-ga kono heya-{ga/kara} de-rare-nakat-ta.
 child-NOM this room-{NOM/from} leave-POTEN-NEG-PST
 ‘The child was unable to leave this room.’
 b. Kodomo-ni kono heya-{ga/*kara} de-rare-nakat-ta.
 child-DAT this room-{NOM/from} leave-POTEN-NEG-PST
 ‘The child was unable to leave this room.’

The sole difference between the two examples lies in the fact that the subject is marked with nominative case in (61a), while the subject is marked with dative case in (61b). In (61a) and (61b), the argument *heya* ‘room’ can potentially be marked with *kara*, since it is identified as a source argument, satisfying the semantic condition on *kara*-marking. If the nominative-case constraint is voided due to oblique marker replacement, both sentences in (61) are expected to be acceptable when the source argument is marked with *kara*. This expectation is not fulfilled, however, for (61b) has a grammatical status comparable to that found in (62).

- (62) Kodomo-ni kono heya-{ga/*o} de-rare-nakat-ta.
 child-DAT this room-{NOM/ACC} leave-POTEN-NEG-PST
 ‘The child was unable to leave this room.’

In (62), nominative case on the locative argument cannot be replaced by accusative case, due to the nominative-case constraint. Since the oblique *kara* cannot replace the nominative case in (61b) as well, it should be apparent that owing to the nominative-case constraint, the dative-subject sentence in (61b) is excluded as unacceptable when the object is marked by *kara*.

The data show that clauses with no nominative argument derived by replacing nominative case with an oblique case marker are not automatically rendered legitimate (by virtue of the nominative-case constraint). A paradox arises here. The nominative-case constraint does not apply when *kara*-replacement takes place on subjects, as in (63).

- (63) Watasi-{ga/kara} sono koto-o hanasi-ta.
 I-{NOM/from} that matter-ACC talk-PST
 'I talked about that matter.'

Nevertheless, in (61b), the same kind of replacement, which substitutes *kara* for the nominative case (on the object), cannot void the nominative-case constraint.

The question is: what gives rise to the difference in applicability of the nominative-case constraint? Note that (61b) is one type of dative-subject construction. Then, the peculiar fact is that the nominative-case constraint is always imposed on dative-subject constructions (but not other constructions). In light of this fact, I suggest that the nominative-case constraint is necessarily imposed on the dative-subject construction on the grounds that T establishes an Agree relation with the dative subject, and that the oblique-subject constructions are exempt from the nominative-case constraint, because T does not have to enter into an Agree relation with any argument.

To make the point, let us note that, as observed by many researchers (see e.g. Butt 2006), dative subjects have properties crosscutting arguments with inherent Case and arguments with structural Case. This holds true for Japanese as well. On the one hand, dative subjects in Japanese look like arguments bearing inherent Case, since their thematic relations are restricted; they are construed as either experiencer or possessor arguments. On the other hand, the dative subjects show properties typical of arguments forming DPs, since they allow quantifier floating.

- (64) a. ^(?)Gakusei-ni zen'in sore-ga mie-ta.
 student-DAT all that-NOM see-PST
 'All the students saw that.'
- b. *Gakusei-kara zen'in kekka-o tuge-ta.
 student-from all result-ACC tell-PST
 'All the students told the results.'
- c. *Gakusei-tati-de zen'in sono hon-o yon-da.
 student-PL-with all that book-ACC read-PST
 'All the students read that book.'

Abstracting away from certain irrelevant details, Miyagawa (1989) suggests that in Japanese, quantifier floating should be possible from an argument forming a DP, but not from a DP contained in a PP. A comparison of the data in (64) then suggests that, while the oblique *kara* and *de* serve as postpositions, which project to PP, the dative case marker *ni* does not. This being the case, it is plausible to state that the

dative subject constitutes a DP, which needs to be Case-licensed by an external licensing head.²⁸

Note that the dative-subject construction is a kind of transitive stative-predicate construction; dative case marking can appear on the subject when its predicate is stative, or to be more precise, the tense associated with the predicate is stative, because the stativity is a property of tense. This suggests that a dative-subject predicate is paired with stative T (in the Numeration), and that T sanctions dative case marking on the subject in dative-subject constructions. In regard to the nature of dative Case, Chomsky (2001) suggests that dative case on the dative subject is a marker of inherent Case with structural properties. This provides a key to solving the paradox mentioned above. I claim that the facts regarding the peculiar syntactic behavior of the dative-subject construction, which stands in contrast to the behavior of the oblique-subject constructions, follow naturally on the assumption that the formal dative Case feature on the dative subject is inherently valued as [Dative], but needs to be deleted by instantiating Agree with an external licenser of T. It is suggested below that the nominative-case constraint necessarily applies to the dative-subject construction, owing to this special property of inherent dative Case on the subject.

As shown previously, in Japanese, a nominative argument, whose Case feature is valued by T, is not required for all clauses. In view of this fact, I propose that

²⁸ (64a) might be a little less than perfect, but is much better than (64b-c), in which *zen'in* can in no way be associated with the oblique subjects. The argument here is based on a universal numeral quantifier like *zen'in* 'all'. Although it is beyond the scope of this paper to discuss the details of the facts on universal quantifier floating, the following examples suggest that *zen'in* can neatly distinguish between dative *ni* and postpositional *ni*.

- (i) a. Gakusei-ni (^{(?)zen'in/*san-nin}) kyoodai-ga i-ru.
 student-DAT all/three-CL brother-NOM have-PRS
 '[All/Three] students have brothers.'
- b. Ken-ga gakusei-ni (^{?*zen'in/*san-nin}) nahuda-o take-ta.
 Ken-NOM student-DAT all/three-CL name.tag-ACC attach-PST
 'Ken attached name tags to {all/three} students.'
- c. Booru-ga gakusei-ni (^{*zen'in/*san-nin}) atat-ta.
 ball-NOM student-at all/three-CL hit-PST
 'The ball hit {all/three} students.'
- d. Ken-ga gakusei-ni (^{(?)zen'in/(?)san-nin}) at-ta.
 Ken-NOM student-at all/three-CL meet-PST
 'Ken met {all/three} students.'

As seen in (i), *zen'in* cannot be launched off from (genuine) locative arguments forming PPs. Miyagawa (1989) observes that partitive numeral quantifiers are not allowed to float out of dative subjects, so that he draws the conclusion that dative subjects are PPs. If dative subjects were PPs, as suggested by Miyagawa (1989), the two types of numeral quantifiers would not be expected to behave differently, however. The question that arises here is how partitive and universal numeral quantifiers are distinguished. As an answer to this question, I propose that the extraction of partitive numeral quantifiers is sensitive to the inherent Case property of dative marking.

- (ii) [[DP t_i]_[DAT]] *PNQ_i/UNQ_i]

The dative DPs bear inherent Case. Thus, partitive numeral quantifiers are prevented from floating out of dative subject arguments even if they constitute DPs, i.e. the dative marking does not project to PP. On the other hand, universal quantifiers are not susceptible to the condition on inherent Case, so that they can be launched off from the dative-marked DP subjects.

Japanese makes two kinds of finite Ts available—one is ‘ordinary’ finite T comprised of a full set of formal features, i.e. [+Nom], agreement features ((unvalued) ϕ -features) and an EPP feature, and the other is ‘inert’ finite T without any formal features to license arguments. Needless to say, if all formal features are eliminated via Agree and Case valuation, the derivation converges. Thus, the present proposal entails that if finite T instantiates Agree with an argument, the clause must include a nominative argument in it, and that if finite T does not induce Agree (due to the absence of formal features), a nominative argument does not appear in the clause. On this proposal, the facts regarding the nominative-case constraint follow on the premise that ordinary finite T, but not inert T, is comprised of a full set of formal features.

To be more concrete, in the nominative-subject construction, finite T comprises [+Nom], as in $T_{[+NOM]}$, and the Case feature on T is deleted after valuing the Case feature on the nominative subject. When T enters into an Agree relation with the subject, ϕ -features on T are also valued by ϕ -features on the subject. If the subject is raised to Spec-TP, the EPP feature is eliminated. If the clause comprises an accusative object, the Case feature of the object is valued as accusative by v , and their Case features (as well as other formal features, e.g. the ϕ -features on v) are deleted after valuation. Thus, the derivation of the nominative-subject construction in (65a) converges.

- (65) a. [SUBJ_[+NOM] OBJ_[+ACC] V_[+ACC] T_[+NOM]]
 b. [SUBJ_{ABL/INSTR} OBJ_[+ACC] V_[+ACC] T]

By contrast, the oblique markers *de* and *kara* serve as postpositions, which do not require an external licenser, and if the nominative case on the subject is replaced by an oblique marker, inert finite T without the Case feature [+Nom] can be merged, as in (65b). In (65b), the Case feature on v is deleted in agreement with the Case feature on the accusative object (and other formal features related to them are deleted as a consequence of Agree). Since inert T does not include formal features in (65b), it does not enter an Agree relation with any argument. Accordingly, (65b) is legitimate even if it does not comprise any nominative argument.

The nominative-case constraint cannot be voided when the subject is marked with dative case. The dative Case feature on the dative subject has the inherent value of [Dative], but it needs to Agree with finite T. In dative-subject constructions, T enters into an Agree relation with the dative subject. This being the case, T must be of the ordinary type with a full set of formal features. In this case, ϕ -features on T are valued by the dative subject via Agree, but T does not value the dative Case, for the Case feature on the dative subject has the inherent value of [Dative]. The dative Case feature on the dative subject can be deleted, by virtue of the subject’s establishing an Agree relation with T. Since the dative subject is the closest argument to T, it is attracted to TP by virtue of an EPP feature on T. Note, however, that the Case feature on T is not used for valuing the Case feature on the dative subject, so T needs to seek another goal to eliminate its Case feature via Agree and Case valuation. If its object is marked with nominative case, as in (66a), the

nominative Case feature on T can be deleted by the Case feature on the nominative object upon Case valuation. Then, the derivation in (66a) converges.

- (66) a. [SUBJ_{DAT} OBJ_[+NOM] v T_[+NOM]]
 b. *[SUBJ_{DAT} OBJ-ABL v T_[+NOM]]
 c. *[SUBJ_{DAT} OBJ_[+ACC] V_[+ACC] T_[+NOM]]

Crucially, in dative-subject constructions, even when nominative case on an object is replaced by an oblique marker, T must establish an Agree relation with the dative subject. This means that T is comprised of [+Nom], which needs to be deleted for the derivation to converge. Thus, the derivation in the dative-subject construction in (66b) does not converge, since the clause does not have a nominative argument, i.e. [+Nom] on T remains undeleted in the absence of a nominative argument. The same holds true of (66c), where an accusative object appears instead of a nominative object.

In essence, the nominative-case constraint is enforced when finite T bears Case/agreement features to be deleted via Agree plus Case valuation, but it is not when finite T does not carry any formal feature for Case/agreement. It should be apparent then that in dative-subject constructions, since finite T must bear [+Nom], a violation of the nominative-case constraint is incurred if nominative case is replaced by the ablative *kara*, as in (61b) or accusative case, as in (62). The dative-subject constructions where T enters into an Agree relation with the dative subject cannot be well-formed unless a nominative argument is included in the clause. By contrast, in oblique-subject constructions where nominative case on the subject is replaced by *kara*, inert finite T without [+Nom] can be merged. Thus, the sentence in (63) is acceptable even if the subject is marked by oblique *kara*.

The present analysis differs from Ura's (1999, 2000) analysis taking dative Case to represent (genuine) inherent Case. In Ura's analysis, ϕ -features on T enter Agree relation with ϕ -features on dative subjects, but inherent Case on the dative subject remains intact, because it can survive without deletion. However, given that finite T without formal features can appear in finite clauses, his analysis predicts that the dative-subject construction will be well-formed without a nominative argument. If the dative case marker represents a genuine inherent Case that does not have to be deleted in agreement with T, as Ura assumes, inert finite T without [+Nom] can be merged in the dative-subject construction. If the clause has inert T, it is not constrained by the nominative-case constraint. If so, the derivation of the dative-subject construction without any nominative argument should be legitimate, contrary to fact. To obtain the desired results, then, Ura must assume that finite T is always equipped with the full set of formal features, including the [+Nom] Case feature. Nevertheless, since inert finite T without [+Nom] can appear in oblique-subject constructions, it is fair to state that the proposed analysis that takes dative subjects to bear inherent Case equipped with structural properties is favored over Ura's analysis.

Moreover, there are cases where finite T does not enter into an Agree relation with a dative argument. In such cases, nominative case marker can be replaced by

an oblique marker without affecting acceptability even in the presence of the dative argument. For instance, the ditransitive predicate *ataeru* ‘give’ allows the nominative case marking of the source subject to be replaced by *kara*, as in (67).

- (67) Haha-{ga/kara} kodomo-ni hon-o atae-ta.
 mother-{NOM/from} child-DAT book-ACC give-PST
 ‘The mother gave her child a book.’

In (67), when the subject receives the oblique *kara*, no nominative argument shows up in the clause, but still, the sentence is acceptable, due to the fact that T does not enter into an Agree relation with the dative-marked indirect object. Evidence in support of this view can be adduced from (68).

- (68) a. Kodomo-ga hon-o atae-rare-ta.
 child-NOM book-ACC give-PASS-PST
 ‘The child was given the book.’
 b. Hon-ga kodomo-ni atae-rare-ta.
 book-NOM child-DAT give-PASS-PST
 ‘The book was given to the child.’

The examples in (68) show that the dative-marked object of the verb *ataeru* can be promoted to a passive subject via direct passivization, in much the same way as the accusative object. Given that passivization is made available when (some) Case/agreement features of the verb are removed by the addition of the passive morpheme, this fact suggests that the dative argument establishes an Agree relation with *v*, but not T. Thus, in (67), when the nominative case on the subject is replaced by *kara*, inert T without formal features can be merged. Since the inert T does not contain [+Nom], the nominative-case constraint does not apply to (67).

In a nutshell, the nominative-case constraint comes from the properties of tense. Japanese has two types of finite T—ordinary finite T comprised of formal features, including [+Nom], ϕ -features and an EPP feature, and inert finite T that lacks them entirely. When a clause has ordinary finite T bearing [+Nom], it needs to include at least one nominative argument, which carries a Case feature that can be used for deleting [+Nom] on finite T via Agree. When ordinary T is merged, the derivation cannot be legitimate unless [+Nom] on T is deleted in agreement with the Case feature of a nominative argument. In the oblique-subject constructions derived by replacing nominative case on the subject with the oblique *de* ‘with’ or *kara* ‘from’, inert finite T without [+Nom] can be merged. Thus, the nominative-case constraint is not enforced in this type of construction, i.e. the sentence can be legitimate without a nominative argument. In dative-subject constructions, by contrast, T necessarily enters into an Agree relation with the dative subject. Thus, T must be of the ordinary type, which carries [+Nom], and the nominative-case constraint cannot be rendered inapplicable. Hence, in dative-subject constructions, nominative case on an object (or a non-subject argument) cannot be replaced by oblique markers such as *de* ‘with’ and *kara* ‘from’.

5 Subject–object asymmetry in simple clauses

As discussed in Sect. 3, when a nominative or dative subject appears in the raising construction in which the negator *nai* ‘not’ precedes the aspectual verb *iru* ‘be’, a subject-object asymmetry arises with regard to the licensing of an NPI like *amari ooku-no*, which belongs to the ‘argument modifier’ type. This asymmetry comes from the fact that the negator embedded in the subordinate clause extends its scope over the embedded TP, but not over the matrix TP. On the other hand, in simple verbal clauses, the subject-object asymmetry in NPI licensing does not obtain, because the negative head takes scope over the entire clause, i.e. TP.

Under the present perspective, negative *nai* takes clause-wide scope (in simple clauses) when it counts as a category that undergoes Neg-head raising to T (and further to Fin). Then, the present analysis leads to the prediction that if *nai* does not undergo Neg-head raising, a subject-object asymmetry in the licensing of NPIs of the ‘argument modifier’ type will be observed even in simple clauses. This prediction is in fact borne out. One case confirming the correctness of the prediction is found in a clause with *ira-nai* ‘do not need’.²⁹ As seen in (69), a subject-object asymmetry in NPI licensing is observed when the clause is headed by *ira-nai*.

- (69) a. *Tugi-wa amari ooku-no gakusei-{ga/ni} yosyuu-ga
 next-TOP very many-GEN student-{NOM/-DAT} preparation-NOM
 ira-na-i.
 need-NEG-PRS
 ‘Very many students do not need preparation for lessons next time.’
- b. Tugi-wa gakusei-{ga/ni} amari ooku-no yosyuu-ga
 next-TOP student-{NOM/DAT} very many-GEN preparation-NOM
 ira-na-i.
 need-NEG-PRS
 ‘The students do not need very much preparation for lessons next time.’

The NPI *amari ooku-no* belonging to the ‘argument modifier’ type is not licensed by *nai* when it appears in subject position, as in (69a).³⁰ But when the same NPI appears in object position, it is licensed, as in (69b). Furthermore, when NPIs like *dare-mo* and *nani-mo*, which serve as floating modifiers, are used instead of the NPI *amari ooku-no*, no subject-object asymmetry arises.

²⁹ The verb *iru* ‘need’ in the present form happens to have the same morphological shape as the aspectual/existential verb *iru* ‘be’. Nevertheless, the former is a consonant-stem verb (that can be segmented into *ir* + *u* [need + PRS]) and the latter, a vowel-stem verb (that can be segmented into *i* + *ru* [be + PRS]).

³⁰ The dative-marked DP of the necessity predicate *iru* ‘need’ counts as a non-subject argument when it specifies a goal, rather than an experiencer. In such cases, *ni* can be replaced by the complex preposition *ni-taisite* ‘for’, and the dative-marked NPI is licensed by the negator *nai*, as in (i).

- (i) Kyoo-wa amari ooku-no gakusei-{ni/ni-taisite} obentoo-ga ira-na-i.
 today-TOP very many-GEN student-{DAT/for} lunch.box-NOM need-NEG-PRS
 ‘Lunch boxes are not necessary for very many students today.’

- (70) a. Tugi-wa dare-mo yosyuu-ga ira-na-i.
 next-TOP anyone-Q preparation-NOM need-NEG-PRS
 ‘No one needs preparation for lessons next time.’
- b. Tugi-wa gakusei-{ga/ni} (yosyuu-mo) nani-mo ira-na-i.
 next-TOP student-{NOM/DAT} preparation-Q anything-Q need-NEG-PRS
 ‘The students do not need anything (even preparation for lessons) next time.’

The presence of a subject-object asymmetry in the licensing of NPIs that fall into the ‘argument modifier’ type, and its absence in the licensing of NPIs of the floating modifier type can be taken as an indication that the subject of *iru* ‘need’ undergoes raising to Spec-TP, i.e. the failure of *nai* to license the NPI in subject position in (69a) should result from the absence of Neg-head raising, as illustrated in (71).

- (71) [_{FinP} [_{TP} **Amari ooku-no** SUBJ [_{NegP} [_{VP} ~~SUBJ~~ **dare-mo** ... V-V] Neg] **?**] T-FIN]

In (69a), *amari ooku-no hito* in subject position is not licensed, because the scope of negation does not extend over TP. In contrast, the ‘floating modifier’ NPI *dare-mo* in (70a) is licensed under the scope of negation, since it can appear with a copy of the subject in predicate-internal position. Note that the existence of subject raising to Spec-TP in the clause with the predicate *iru* ‘need’ is naturally expected, since the clause has a nominative argument whose Case feature is valued by T.

The reason Neg-head raising is not instantiated in the clause headed by *iru* ‘need’ is that *nai* is a lexical negator retaining properties of a lexical adjective. The existence of this type of lexical negative *nai* comes from the fact that negative *nai* has originated as an adjective (and thus it has adjectival inflection).³¹ While negative *nai* associated with ordinary verbal predicates acts as a functional negator due to its grammaticalization, it sometimes retains its original lexical properties under certain syntactic contexts, as found in *nai* combined with *iru* ‘need’. As discussed by Kishimoto (2008), a grammatical (or functional) negator undergoes Neg-head raising, in a way analogous to the English aspectual verb *have*, which can be assumed to arise by virtue of de-lexicalization of the lexical verb *have*. In English, the aspectual *have* undergoes head raising (as in *John has not come*), but the causative/experiential *have*, which is a lexical verb, does not (as in *John did not have his students examined*). If an analogous pattern is obtained in Japanese, it is expected that when negative *nai* retains properties of a lexical adjective, it will not undergo head raising. The negative *nai* associated with *iru* ‘need’ shows the type of behavior that is expected if it counts as a lexical adjective.

In point of fact, a lexical negator *nai* is paired with the verb *iru* ‘need’. The categorial status of the negator associated with *iru* can be readily confirmed by considering whether it can appear in the small-clause construction. Note first that a

³¹ Korean has a close genetic affinity to Japanese, but Korean negators have different origins from the Japanese negative *nai*, so that they do not show the type of behavior that is observed for *nai* (p.c. James Yoon). Note further that even if *nai* serves as a functional negator, there are a number of factors that prevent it from undergoing head raising. For discussion on this point, see Kishimoto (2007, 2008).

small-clause predicate embedded in the small clause selected by *omou* ‘think’ can be an adjective, while a grammatical/functional negator associated with a verbal predicate is not licensed, even if it inflects like an adjective, as shown in (72a).

- (72) a. Ken-wa [Mari-o {kawaiku/*sira-naku}] omot-ta.
 Ken-TOP Mari-ACC {cute/know-NEG} think-PST
 ‘Ken thought Mari {cute/unknown}.’
- b. Ken-wa [kono hon-o ira-naku] omot-ta.
 Ken-TOP this book-ACC need-NEG think-PST
 ‘Ken thought this book unnecessary.’

The negative *nai* associated with ordinary verbs has its origin as a lexical adjective, but it now serves as a functional negator devoid of its original lexical properties, as a consequence of grammaticalization. When *omou* takes a functional negator as its complement, it causes a violation of the selectional restriction; accordingly, the small clause construction is not acceptable if the embedded predicate is *sira-nai*, ‘not know’ as in (72a). By contrast, when a negated verb *ira-nai* ‘not need’ occurs as a small-clause predicate, the sentence is acceptable, as in (72b). The acceptability of (72b) indicates that the selectional restriction imposed on *omou* is not violated by the negator *nai* appearing with *iru* ‘need’, because it acts as a lexical adjective. Further, if, as noted earlier, a lexical negative *nai* does not undergo Neg-head raising, it follows that the negative *nai* appearing with *iru* ‘need’ does not take scope over TP.

Incidentally, the data here suggest that negative *nai* projects its negative scope, and serves as an operator that can license NPIs, regardless of whether it is categorized as a lexical or a grammatical negator. This fact is not surprising, however, because the negative *nai*, regardless of its categorization, has the semantic function of reversing the polarity of a proposition.³² Owing to this semantic property, the negative *nai* can serve as an operator to license NPIs irrespective of whether it is a lexical adjective or a grammatical/functional negator (Kishimoto 2008).

³² Japanese negative verbs like *kakeru* ‘lack’ and *hitei-suru* ‘deny’ do not license NPIs.

- (i) *Kare-wa nani-mo {kake-te/hitei-si-te} i-ru.
 he-TOP anything-Q {lack-GER/deny-do-GER} be-PRS
 ‘He is {lacking/denying} anything.’

The predicates in (i) have a negative meaning plus additional lexical meanings, which can roughly be paraphrased as ‘not have’ and ‘not affirm’. Accordingly, these predicates, unlike *nai* ‘not’, do not act as operators to license NPIs. Note that in English, predicates like *lack* and *deny* do not license NPIs, but NPIs can be embedded in the complement clauses.

- (ii) a. *John denied anything.
 b. John denied that he would discuss anything.

Progovac (1994) argues that the NPI in (iib) is licensed not by the predicate *deny*, but by a null affective operator which appears in the complement clause. Indeed, the fact follows if the embedded clause comprises a null operator to license an NPI under c-command, as in [*John denied [OP that [he would discuss anything]]*]. Note that this type of distribution is not observed for NPIs like *nani-mo*, which are always required to be licensed by a clausal negator.

There are other cases where a negative head does not extend over TP due to the absence of Neg-head raising. Broadly speaking, negative *nai* associated with adjectives and nominal adjectives does not take scope over TP. The examples in (73) illustrate that *nai* associated with an intransitive adjective like *omosiroi* ‘interesting, enjoyable’ does not license the NPI *amari ooku-no* appearing in subject position, while it can license a floating NPI appearing in subject position.

- (73) a. *Kyoo-wa amari ooku-no bangumi-ga omosiroku nakat-ta.
 today-TOP very many-GEN program-NOM enjoyable NEG-PST
 ‘Very many programs are not enjoyable today.’
 b. Kyoo-wa nani-mo omosiroku nakat-ta.
 today-TOP anything-Q enjoyable NEG-PST
 ‘Nothing is enjoyable today.’

Furthermore, if *nai* associated with adjectives and nominal adjectives does not undergo Neg-head raising, it is predicted that transitive adjectives will display a subject-complement asymmetry in regard to the licensing of NPIs categorized into the ‘argument modifier’ type. This prediction is in fact correct.

- (74) a. *Saikin amari ooku-no hito-ga watasi-ni sinsetu-de
 recently very many-GEN person-NOM I-DAT kind
 nakat-ta.
 NEG-PST
 ‘Recently, very many people were not kind to me.’
 b. Saikin Ken-wa amari ooku-no hito-ni sinsetu-de
 recently Ken-TOP very many-GEN man-DAT kind
 nakat-ta.
 NEG-PST
 ‘Recently, Ken was not kind to very many people.’

Transitive adjectives like *sinsetu-da* ‘kind’ and *yasasii* ‘gentle’ take nominative subjects and dative complements, and a subject-complement asymmetry is observed in the licensing of the NPI *amari ooku-no*. In contrast, the NPI *dare-mo*, which belongs to the ‘floating modifier’ type, can be appended to a copy of the subject in its predicate-internal theta-marking position. Since this position lies within the scope of *nai* located in NegP, no subject-complement asymmetry arises in the licensing of this class of NPIs, as shown in (75).

- (75) a. Saikin dare-mo watasi-ni sinsetu-de nakat-ta.
 recently anyone-Q I-DAT kind NEG-PST
 ‘Recently, no one was kind to me.’
 b. Saikin Ken-wa dare-ni-mo sinsetu-de nakat-ta.
 recently Ken-TOP anyone-DAT-Q kind NEG-PST
 ‘Recently, Ken was not kind to anyone.’

The fact that the NPI *amari ooku-no* modifying the subject is not licensed under the scope of negation, as in (74a), follows straightforwardly, given that the subject is raised to Spec-TP, whereas the negative *nai* does not undergo Neg-head raising.

Interestingly, there are also some exceptional cases where negative *nai* appearing with adjectives is subject to Neg-head raising. Transitive adjectives like *hosii* ‘want’ and *suki-da* ‘be fond of’ allow Neg-head raising, so that in the clauses headed by these adjectives, negative scope spreads over TP, as illustrated by the acceptability of (76a).³³

- (76) a. Kon-kai amari ooku-no hito-ga biiru-ga
 this-time very many-GEN people-NOM beer-NOM
 hosiku-nakat-ta.
 want-NEG-PST
 ‘Not very many people wanted beer this time.’
- b. Kon-kai kare-wa amari ooku-no nomi-mono-ga
 this-time he-TOP very many-GEN drink-NOM
 hosiku-nakat-ta.
 want-NEG-PST
 ‘He did not want very many drinks this time.’

NPIs of the ‘floating modifier’ type appearing in subject position are also licensed, because they can be anchored to the lower predicate-internal subject position.

- (77) a. Dare-mo biiru-ga hosiku nakat-ta.
 anyone-Q beer-NOM want NEG-PST
 ‘No one wanted beer.’
- b. Gakusei-ga nani-mo hosiku nakat-ta.
 student-NOM anything-Q want NEG-PST
 ‘The students wanted nothing.’

The well-formedness of (76a) suggests that the negator associated with the predicate *hosii* ‘want’ undergoes Neg-head raising, despite the fact that the predicates fall into the adjective class.

The question to be addressed is why the negator associated with *hosii* is subject to head raising. To make this point, observe that *hosii* (as well as *suki-da*) allows a

³³ The same generalization applies to *suki-da* ‘be fond of’, as shown by the absence of a subject-complement asymmetry in the licensing of DPs with *amari ooku-no* in (i).

- (i) a. Zissai amari ooku-no hito-ga sono tenzihin-ga suki-de nakat-ta.
 in.fact very many-GEN man-NOM that display.article-NOM fond NEG-PST
 ‘In fact, not very many people liked that article on display.’
- b. Zissai kare-wa (koko-no) amaridoku-no tenzihin-ga suki-de nakat-ta.
 in.fact he-TOP here-GEN very many-GEN display.article-NOM fond NEG-PST
 ‘In fact, he did not like very many articles on display (here).’

verbal ‘nominative-accusative’ case pattern exceptionally, although semantic, pragmatic, or stylistic factors often govern the choice or preference of case marking for the theme argument.³⁴ With other transitive adjectives, this case-marking pattern is not available, as exemplified by the predicate *kanasii* ‘sad’.

- (78) a. Ken-wa sono hon-{ga/o} hosiku-nakat-ta (rasii).
 Ken-TOP that book-{NOM/ACC} want-NEG-PST seem
 ‘(It seems that) Ken did not want that book.’
 b. Ken-wa sono koto-{ga/*o} kanasikat-ta (rasii).
 Ken-TOP that matter-{NOM/ACC} sad-PST seem
 ‘(It seems that) Ken felt sad about that matter.’

Note, in this connection, that *hosii* and *suki-da* have close morphological affinity with their corresponding verbal forms (i.e. *hossu* ‘wish’ for *hosii* ‘want’, and *suku* ‘like’ for *suki-da* ‘be fond of’). It is suggested by Shimizu (2013) that some emotional predicates, including *hosii* and *suki-da*, have been derived from their verbal counterparts. If this is the case, it would not come as a surprise that *hosii*, falling into the adjectival class, somehow retains verbal properties (as its idiosyncrasies), which is reflected by the verbal case array that many speakers allow, as in (78a).

Note further that while negated adjectives are admitted as a small-clause complement to the verb *omou* ‘think’, the negated predicate *hosiku nai* ‘not want’ is not. (79) is a case involving an ordinary adjective.

- (79) ?Ken-wa [Mari-o kawaiiku naku] omo-u (koto-ga ar-u).
 Ken-TOP Mari-ACC cute NEG think-PRS fact-NOM be-PRS
 ‘(There are times when) Ken thinks Mari not cute.’

(79) is admittedly awkward when it stands alone, but acceptability increases significantly when it is followed by a phrase like *koto-ga aru* ‘there are times when’, while carrying the implication that the described situation holds rather exceptionally, i.e. the contrary situation is usually true. The acceptability of (79) suggests that the selectional requirement imposed on the small-clause complement is not violated by *nai* associated with the adjective *kawaii* ‘cute’. This suggests that this negator is a lexical adjective, and hence it is not amenable to Neg-head raising. By contrast, when the negated predicate *hosiku nai* ‘not want’ is embedded under *omou*, the sentence is not acceptable.

- (80) *Ken-wa [gohan-o hosiku naku] omo-u (koto-ga ar-u).
 Ken-TOP meal-ACC want NEG think-PRS fact-NOM be-PRS
 ‘(There are times when) Ken does not want meals.’

³⁴ It is often reported (e.g. Shibatani 1978; Sugioka 1984) that the predicates *hosii* and *suki-da* allow the nominative-accusative case-marking pattern, but there are speakers who do not tolerate this case-marking pattern.

Example (80) is much worse than (79). The unacceptability of (80) suggests that the negator associated with *hosii* is a functional negative marker that is subject to Neg-head raising.³⁵

The discussion shows then that a functional negator is associated either with regular lexical verbs or with adjectival predicates like *hosii* and *suki-da* allowing a verbal case-marking pattern (although there might be some factors that affect the possibility of this verbal case-marking pattern). In light of this consideration, it is plausible to postulate that a predicate is paired with a functional negator subject to Neg-head raising, if it is furnished with certain properties as a lexical verb. I surmise that lexical verbal predicates select a functional negator rather than an adjectival negator, to avoid a conflict with their verbal properties: Ordinary verbal predicates are associated with a functional negator devoid of lexical properties, which undergoes Neg-head raising, because they are predicates possessing full properties as lexical verbs. On the other hand, adjectival predicates are paired with adjectival negators, because they do not have verbal properties. Thus, in regular adjectival clauses, Neg-head raising does not take place. Nevertheless, the exceptional adjectival predicates *suki-da* and *hosii* have verbal properties, as detected by the fact that they have the potential to license a verbal case-marking pattern of ‘nominative-accusative’; accordingly, the predicates *suki-da* and *hosii* are associated with a functional negator, and Neg-head raising is implemented in their clauses.

Finally, recall that the predicate *iru* ‘need’ is associated with a lexical negator that does not undergo Neg-head raising. The predicate *iru* ‘need’ looks like a verb, but the fact of the matter is that it behaves not as a lexical verb but as a deverbal predicate. This being the case, the fact that the lexical negator *nai* is paired with *iru* ‘need’ is expected under the present proposal. There are several kinds of empirical evidence that allow us to confirm the special categorical status of *iru* ‘need’ (which is associated with a lexical negator). In the first place, *iru* ‘need’ is a transitive

³⁵ The desiderative adjective *V-tai* ‘want’, which takes a verbal complement, qualifies as a small clause predicate, and the negated desiderative predicate *V-taku nai* ‘not want’ can be embedded in the small clause.

- (i) [?]Ken-wa [gohan-o tabe-taku naku] omo-u (koto-ga ar-u).
 Ken-TOP meal-ACC eat-want NEG think-PRS fact-NOM BE-PRS
 ‘(There are times when) Ken does not want to have meals.’

The fact suggests that the negator *nai* associated with *V-tai* counts as a lexical adjective. Since this type of negator does not undergo Neg-head raising, its scope does not extend over TP.

- (ii) *Zissai amari ooku-no gakusei-ga gohan-o tabe-taku na-i.
 in.fact very many-GEN student-NOM meal-ACC eat-want NEG-PRS
 ‘In fact, not very many students do not want to have meals.’

(ii) is excluded on the grounds that *nai* does not extend its scope over the subject located in Spec-TP. Note also that adjectives and nominal adjectives should in principle be allowed to appear as small-clause predicates (Takezawa and Whitman 1998), but there are adjectival expressions that do not qualify as small-clause predicates, due to certain semantic restrictions (p.c. Koichi Takezawa).

predicate with verbal inflection, but still cannot take a nominative-accusative case-marking pattern, as in (81a). Secondly, the predicate *iru* ‘need’ does not appear in the environment where a verbal predicate is allowed, as shown in (81b).

- (81) a. Ken-ga sore-{ga/*o} ir-u.
 Ken-NOM that-{NOM/ACC} need-PRS
 ‘Ken needs that.’
- b. Watasi-wa [kare-ni sore-ga
 I-TOP he-DAT that-NOM
 {wakat-te/deki-te/*it-te}] hosi-i.
 {understand-GER/can.do-GER/need-GER} want-PRS
 ‘I want him to {understand/be able to do/need} that.’

As discussed by Kishimoto (2007, 2008), *hosii* ‘want’ must take a verbal complement clause. Interestingly, the predicate *iru* ‘need’ cannot be embedded under *hosii*. In effect, (81b) suggests that the verb *iru* ‘need’ serves as a functional predicate, devoid of a lexical property as a verbal predicate.³⁶ The peculiarity of *iru* ‘need’ (which counts as a deverbal predicate) is also reflected in the fact that this predicate lacks the participial *nai-de* form.

- (82) a. Ken-ga {hasira-naku-te/hasira-nai-de} Eri-ga hasit-ta.
 Ken-NOM {run-NEG-GER/run-NEG-GER} Eri-NOM run-PST
 ‘Ken did not run, but Eri ran.’
- b. Ken-ni okane-ga {ira-naku-te/*ira-nai-de} Eri-ni
 Ken-DAT money-NOM {need-NEG-GER/need-NEG-GER} Eri-DAT
 okane-ga it-ta.
 money-NOM need-PST
 ‘Ken does not need money, but Eri needs money.’

When verbal *te*-clauses are used for coordinating clauses, both *nai-de* and *naku-te* forms of the verbs can appear, as in (82a) (see, e.g. Masuoka and Takubo 1989), but the predicate *iru* ‘need’ can have only the *naku-te* form, as shown in (82b). Since lexical verbs can derive both *nai-de* and *naku-te* forms in such syntactic contexts, the fact also suggests that *iru* ‘need’ does not possess categorical status as a lexical verb. Furthermore, *iru* ‘need’ does not allow a verbal case array for its arguments, either. Given that *iru* ‘need’ lacks properties of lexical verbs, as noted above, there

³⁶ One reviewer observes that English paraphrases of (81b) show a similar paradigm: [?]*I want him to need this* versus *I want him to {understand this/to be able to do this}*. Perhaps, the awkwardness of the first English sentence comes from the fact that *need* does not carry the subject control meaning. The same awkwardness obtains in [?]*Watasi-wa kare-ni sore-o hituyoo-to si-te hosii* ‘I want him to need this’, which contains the verbal predicate *hituyoo-to suru* ‘need’. By contrast, the sentence where *iru* ‘need’ is embedded under *hosii* is hopelessly bad, which substantially differs from the nature of clumsiness obtained for the sentences involving English *need* and Japanese *hituyoo-to suru* ‘need’.

is a sense in which this predicate should be paired with a lexical negator *nai* that does not undergo Neg-head raising.³⁷

The functional negator *nai* is homophonous with the lexical negator *nai*, and the predicate *iru* ‘need’, which looks like a verb on the surface, is associated with lexical negative *nai*. This raises the question of how children acquiring Japanese would discover that *iru* ‘need’ is associated with a lexical negator. Note here that the type of negative *nai* that occurs in a negated clause can be determined by the kind of predicate. If the host predicate is a lexical verb, it is associated with a functional negator. If the predicate neither licenses verbal case array nor possesses categorical properties as a lexical verb, a lexical negator appears in the negated clause. The signs indicating that the predicate *iru* ‘need’ lacks the verbal properties can be obtained in a number of different contexts. Given this, I surmise that the children would have no difficulty in finding out that the predicate *iru* ‘need’ does not have status as a full verb associated with lexical negative *nai*.

In essence, ordinary verbs are associated with a grammatical/functional negator undergoing Neg-head raising. By contrast, the negator associated with the verb *iru* ‘need’ is a lexical negator, which does not undergo Neg-head raising. Since Neg-head raising is not implemented in the clause headed by *iru* ‘need’, a subject-object symmetry is observed with regard to the licensing of NPIs belonging to the ‘argument modifier’ type. The negative *nai* that appears with adjectives (with the exception of *hosii* ‘want’ and *suki-da* ‘be fond of’) shows the same behavior as the negator paired with *iru* ‘need’, which behaves as a deverbal predicate, in that it does not take scope over TP. The data show that in Japanese, negative *nai* is head-raised to TP when it is associated with a predicate with certain verbal properties.

³⁷ One reviewer raises the question about the categorial status of the aspectual verb *iru* ‘be’. At first glance, the aspectual verb does not look like a lexical verb, but it falls into the class of lexical verbs. This can be confirmed by using an idiomatic predicate like *warikire-nai* ‘not satisfied’, which can have a *-te iru* form, as in *warikire-nai-de iru* ‘not being satisfied’. The idiomatic predicate *warikire-nai* ‘not satisfied’ serves as an adjective in its entirety. Thus, when this predicate is embedded under *hosii* ‘want’, unacceptability results. But if it is followed by the aspectual verb *iru*, it is possible to embed the predicate under *hosii*. This is illustrated in (i).

- (i) a. **Watasi-wa* [John-ni sono ketteig-ga warikire-nai-de] hosi-i.
 I-TOP John-DAT that decision-NOM satisfy-NEG-GER want-PRS
 ‘I want John not to be satisfied with that decision.’
 b. *Watasi-wa* [John-ni sono ketteig-ga warikire-nai-de *i-te*] hosi-i.
 I-TOP John-DAT that decision-NOM satisfy-NEG-GER be-GER want-PRS
 ‘I want John not to be being satisfied with that decision.’

Since *hosii* can take a lexical verb, but not an adjectival predicate or a deverbal predicate, as its complement, the fact shows that the aspectual verb *iru* ‘be’ has the status of a lexical verb categorically. This fact suggests that in the raising construction with the sequence [_{TP} NPI-NOM [... *V-te*] *i-na-i*], the aspectual verb *iru* ‘be’ is paired with a functional negator, which takes scope over TP as a consequence of Neg-raising (cf. Sect. 3.1).

6 Consequences and implications

NPIs are licensed under the scope negation. In Japanese, the structural position of negative *nai* may vary according to whether or not it undergoes Neg-head raising. If the exact position of *nai* is pinpointed, it is possible to evaluate where subjects are located by considering whether NPIs of the ‘argument modifier’ type (associated with the subjects) are licensed under the scope of negation. On the other hand, an NPI of the ‘floating modifier’ type can be linked to a copy of an argument in theta-marking position, thereby making it possible to evaluate where the argument associated with this type of NPI is first merged in a clause (for theta role assignment). Overall, the Japanese facts indicate that subjects are raised to Spec-TP if the clause comprises a nominative argument, but if not, subjects remain in vP-internal position. Since the Case feature on a nominative argument is valued by T, the presence or absence of an EPP requirement on T can be determined in Japanese by looking at whether a nominative argument is available in the clause.

With regards to the issue as to whether the EPP should work in tandem with Case or agreement, the discussion illustrates that the absence of morphological agreement on verbs does not tell us anything about the status of T, despite the claim that has been advanced by a number of comparative studies of English and Japanese in the 1980s (e.g. Fukui 1986; Kuroda 1988). In Japanese, in the absence of its overt manifestation, morphological agreement is obviously not an indicator of the status of T. Rather, whether or not T is comprised of formal features, including Case and EPP features, is determined by overt morphological case marking on arguments available in the clause, i.e. by the presence or absence of a nominative argument.

The discussion illustrates that in Japanese, whenever ordinary finite T (with a full set of formal features) appears in a clause, which is arguably an unmarked choice, the presence of a nominative argument is required and, at the same time, the EPP requirement is imposed on the clause.³⁸ Nevertheless, in Japanese, Spec-TP can sometimes be left empty, owing to the availability of inert finite T (lacking formal features entirely). It must be stressed that the appearance of inert T in finite clauses, which carries no formal features, would not be found in languages showing obligatory morphological (subject) agreement in tensed clauses (e.g. some Germanic and Romance languages), because the presence of overt subject agreement morphology signals that T cannot be inert. Theoretically, inert finite T can be found only in languages like Japanese, which entirely lacks overt subject agreement morphology (associated with tense).

³⁸ In Japanese, there is a tight correlation between the presence of a nominative argument and the EPP requirement of T, but logically, it is possible that there are languages which do not impose an EPP requirement on T even if T has Case/agreement features.

7 Conclusion

In this paper, it has been shown that Japanese has two types of NPIs—the ‘argument modifier’ type, which is licensed with reference to the surface A-position of the argument which it modifies (i.e. the position in which the argument appears after A-movement) and the ‘floating modifier’ type, which can be licensed in the theta-marking position where its host appears before A-movement. The limited extent of negative scope in the variant of the raising construction where negative *nai* precedes the aspectual verb *iru* ‘be’ provides a useful tool for assessing whether or not a subject is raised to Spec-TP. By considering how the two types of NPIs behave in the aspectual construction, it has been argued that in Japanese, subjects are moved into Spec-TP via A-movement when they are marked with either nominative or dative case. Oblique subjects (marked with either *kara* ‘from’ or *de* ‘with’) do not undergo subject raising when they appear in a clause in which no nominative argument is included. But when the clause comprises a nominative argument, subject raising applies even to the oblique subjects.

The data regarding the two types of NPIs lead to the conclusion that the specifier requirement (i.e. the EPP requirement) of finite T is derived when it belongs to the ordinary type. Ordinary finite T carries a full set of formal features, including the Case feature [+Nom] to value the Case feature of a nominative argument, as well as an EPP feature. Accordingly, when ordinary T appears in a clause, the nominative-case constraint is operative, and subject raising is instantiated. On the other hand, if finite T is inert, it does not carry formal features, in which case the clause does not require a nominative argument nor does it have an EPP requirement. In addition, it has been shown that the head raising of negative *nai* takes place when it is associated with a predicate possessing certain verbal properties, and brings about the consequence that the scope of *nai*, which is originally located in the head position of NegP, extends over TP. When *nai* does not undergo Neg-head raising, a subject-object (or subject-complement) asymmetry arises even in simple clauses, with regard to the licensing of ‘argument modifier’ NPIs, which are attached directly to their modifying arguments.

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