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On the Nature of Neg in Japanese

Koji Hoshi

Abstract

This article addresses some issues concerning the interactions between Neg and Tense in Japanese: (i) Does *aru*-support (= *be*-support) exist?; (ii) does *su*-support (= *do*-support) exist in tensed negative sentences?; and (iii) does Neg-to-T movement exist? It is pointed out that none of these questions can be answered in an affirmative way and proposed that all the relevant properties on Neg and Tense in Japanese fall out from a simple fact: Neg in English and its counterpart in Japanese possess morphologically different properties, although both of them are syntactically independent lexical items taken from the lexicon. Some implications of the proposal to the grammar of Japanese and UG are also briefly discussed.

1. INTRODUCTION

In the tradition of generative grammar, the functional category Neg and its projection NegP have emerged and gained prominence in the analysis of negation in natural language (see Pollock 1989, Chomsky 1991 among many others). Recently, in the field of Japanese syntax, Watanabe (2009) and Kishimoto (2005, 2007, 2008, 2009a) have put forth the following both theoretically and empirically intriguing proposals with regard to the interactions between Neg and Tense in Japanese, as summarized, respectively, in (1a) and (1b) below.

(1)   (a) The dummy verb *ar(u)* 'be' is inserted into T due to the intervention of Neg between (v-)V and T in Japanese on a par with *do*-insertion in English.

(b) Neg always overtly moves to T in tensed negative sentences in Japanese.

The main purpose of this article is to critically reexamine the above claims and point out some empirical facts which cannot be explained by them as well as to note that there is in fact no *su*-support (= *do*-support) operation in tensed negative sentences in Japanese. It is argued that all of those properties in Japanese will cease to be puzzles once we pay attention to morphological properties of Neg in Japanese, which crucially differ from those in English.
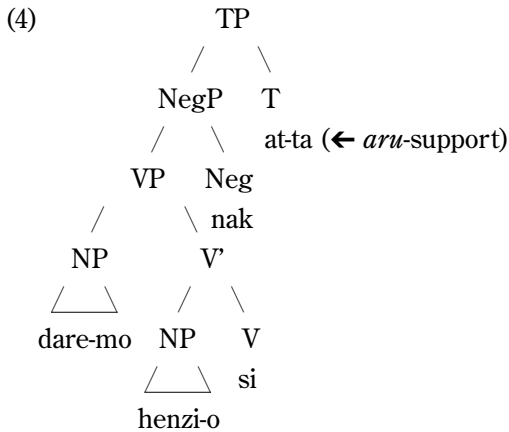
The present article is structured as follows. Section 2 discusses the relevant issues on the interactions between Neg and Tense in Japanese. Section 3 puts forward a proposal on the nature of Neg in Japanese. Section 4 accounts for the relevant properties on Neg and Tense in Japanese on the basis of the proposal in Section 3. Section 5 teases out some implications of the proposal to the grammar of Japanese and UG. Section 6 concludes this article.

2. SOME ISSUES ON NEG AND TENSE IN JAPANESE

2.1. *Does aru-support (= be-support) exist?*

In analyzing a negative sentence in Japanese as in (2), Watanabe (2009) proposes that the past form of negation *nakatta* 'NEG-PAST' in Japanese is to be derived by inserting the dummy verb *–ar(u)* into T (PAST) *–ta* in order to rescue the otherwise stranding past tense morpheme *–ta* in T by virtue of the intervention of Neg *nak* 'not' between the main verb *si* 'do' and the past tense element on a par with *do*-support in English in (3), as illustrated in (4).[1), 2), 3), 4)]

(2)   Dare-mo henzi-o   si-nakatta.
       anybody reply-ACC do-NEG-PAST
       'Nobody answered.'
(3)   John did not read any books.

(4)
```
                    TP
                  /    \
              NegP     T
              /  \     at-ta (← aru-support)
           VP    Neg
          /    \  nak
       NP       V'
      /__\      /  \
   dare-mo    NP    V
             /__\   si
           henzi-o
```

Although this line of analysis seems to be quite attractive from a general linguistic point of view, there are cases which cannot be covered by such an analysis. First, observe the following example in (5).[5]

(5) John-wa Mary-o   kyoositu-ni   hai-re-**naku**-sae si-ta.
     John-TOP Mary-ACC   classroom-into enter-can-NEG-even make-PAST
     'John made Mary not able to enter the classroom.'
                              (= adapted from Kishimoto 2005: 77, (170b))

As shown in (5), the Neg form *naku* per se can be attached with a focus particle such as *sae* 'even' on its right in Japanese. Therefore, it is predicted that the focus particle *sae* 'even' can be attached to the Neg in (4) as well independently of *aru*-insertion into T. However, this expectation is not fulfilled, as illustrated by the following contrast in (6) ((6a, b) are originally observed by Kishimoto 2005: 75).[6, 7]

(6) (a) John-wa hon-o   yomi-sae/-mo   si-nakat-ta.
         John-TOP book-ACC   read-even/-also do-NEG-PAST
         'John did not even/also read books.'
     (b) *John-wa hon-o   yom-anaku-sae/-mo at-ta.
         John-TOP book-ACC   read-NEG-even/-also be-PAST
         'John did not even/also read books.'
                                 (= Kishimoto 2005: 75, (167))
     (c) *Dare-mo henzi-o   si-naku-sae-at-ta.
         anybody   reply-ACC do-MEG-even-be-PAST
         'Even nobody answered.'

Under the relevant non-stative interpretation, (6b, c) are unacceptable. Notice that, in principle, since the putative *aru*-support should take place due to the intervention of Neg between the main verb *si* 'do' and the past tense morpheme *–ta* under Watanabe's (2009) analysis, the focus particle *sae* 'even' would be predicted to occur between Neg and T, contrary to fact. Thus, the facts in (6) are at variance with the analysis illustrated in (4). This indirectly suggests that the very existence of *aru*-support as an operation in Japanese grammar should not be taken for granted.

Furthermore, if *aru*-insertion into T is triggered by non-adjacency between the main verb *si* 'do' and T because of the intervention of Neg *nak* on a par with *do*-support in English, it seems quite mysterious why another dummy verb insertion, *su*-support (= *do*-support), is needed in Japanese, as illustrated in the following contrast in (7).

(7) (a) Dare-mo henzi-o   si-sae si-nak-at-ta.
        anybody reply-ACC do-even-do-NEG-be-PAST
        'Nobody even answered.'
     (b) *Dare-mo henzi-o   si-sae nak-at-ta.
        anybody   reply-ACC do-even-NEG-be-PAST
        'Nobody even answered.'

Note that the main verb *si* 'do' and T are not adjacent with each other by virtue of the intervention of the focus particle *sae* 'even' and Neg in (7b), triggering *aru*-support under the analysis in (4). Thus, the additional insertion of the dummy verb *su* 'do' in (7a) would not be necessitated by the analysis in (4), contrary to fact.

In this connection, one might argue that *aru*-support is needed in Japanese independently of negative sentences, alluding to the adjectival predication construction in Japanese, as illustrated by the following paradigms in (8)-(9).

(8) (a) Kesiki-ga utukusi-i.
        scenery-NOM beautiful-PRES
        'The scenery is beautiful.'
     (b) Kesiku-ga utukusiku-sae **ar**-u.
        scenery-NOM beautiful-even be-PRES
        'The scenery is even beautiful.'
(9) (a) Kesiki-ga utukusi-katta.
        scenery-NOM beautiful-PAST
        'The scenery was beautiful.'

(b) Kesiki-ga utukusiku-sae **at**-ta.
scenery-NOM beautiful-even be-PAST
'The scenery was even beautiful.'

It has been claimed in the literature that the intervention of focus particles like *sae* 'even' between an adjectival stem such as *utukusiku* 'beautiful' and T (PRES/PAST) triggers insertion of the putative dummy verb *ar* 'be' under T to support the otherwise dangling tense morphemes (see Miyagawa 1998, Nakayama 1998, Kubo 1992, Urushibara 1993 *inter alia.*). However, there is a piece of empirical evidence suggesting a different view. Consider the following examples in (10).

(10)   (a) Kesiki-ga utukusiku-sae ari-mo su-ru.
scenery-NOM beautiful-even be-also do-PRES
'The scenery is also even beautiful.'
(b) Kesiki-ga utukusiku-sae ari-mo si-ta.
scenery-NOM beautiful-even be-also do-PAST
'The scenery was also even beautiful.'

If the putative dummy verb *ar* 'be' is inserted into T to rescue its otherwise dangling morpheme, it is predicted that no focus particle can be inserted between *ar* and T, since no focus particles could break into a (complex) X^0-level element (Kishimoto 2005). Nevertheless, this prediction is not fulfilled, as illustrated in (10). Note that the focus particle *mo* 'also' can intervene between *ar* and T with the help of *su*-insertion (= *do*-insertion) under T.

In addition, if *ar* is a dummy verb to be inserted to carry the otherwise stranded tense morphemes under T in (8b) and (9b), the presence of another dummy verb *su* 'do', which picks up the tense morphemes, remains quite puzzling.

These considerations strongly suggest that *ar* in (8b) and (9b) is not a dummy verb to be inserted into T by the putative *aru*-support (= *be*-support) operation in the adjectival predication construction in Japanese. As such, I will follow Nishiyama (1998, 1999) and Aoyagi (1998b, 2001, 2006) *inter alia.* in assuming that *ar* in Japanese is a kind of copular verb roughly corresponding to "be" in English, which heads an independent verbal projection (VP (or vP)) from the beginning. If this line of analysis is on the right track, it is not necessary to postulate the existence of *aru*-support in Japanese.

2.2. *Does su-support (= do-support) exist in tensed negative sentences?*
Given the conclusion in the preceding section that the putative operation of *aru*-support does not exist in Japanese, it is quite interesting and instructive to observe that tensed negative sentences in Japanese do not trigger *su*-support (= *do*-support) in contradistinction to English, as illustrated in (11)-(12).

(11) Mary did not eat rice.
(12) (a) Mary-ga   gohan-o tabe nakat-ta
           Mary-NOM rice-ACC   eat NEG-PAST
           'Mary did not eat rice.'
       (b) *Mary-ga   gohan-o   tabe nakari/ru-si-ta.
           Mary-NOM rice-ACC   eat NEG-do-PAST
           'Mary did not eat rice.'
       (c) *Mary-ga   gohan-o tabe si-nakat-ta.
           Mary-NOM rice-ACC   eat do-NEG-PAST
           'Mary did not eat rice.'

As shown in (11), the tensed negative sentence in English involves *do*-support because of the intervention of the Neg, which blocks morphological merger between T and the main verb. In contrast, as witnessed in (12), the Neg of the tensed negative sentence in Japanese does not trigger *su*-support in T (note that *su*-support does not take place even before the Neg as in (12c)).

2.3. *Does Neg-to-T movement exist?*
In a series of seminal works, Kishimoto (2005, 2007, 2008, 2009a) argues that Neg always moves up to T in a tensed sentence in Japanese unlike in English on the basis of the fact that an NPI(= negative polarity item) can occur as the subject as well as the object in Japanese unlike in English, as illustrated by the contrast between (13) and (14).

(13) (a) John did not admire anyone.
       (b) *Anyone did not admire Mary.
                         (= Kishimoto 2005: 77-78)
(14) (a) John-wa   dare-mo   home-nakat-ta.
           John-TOP anybody   praise-NEG-PAST
           'John did not praise anyone.'
       (b) Dare-mo Mary-o   home-nakat-ta.

anybody Mary-ACC praise-NEG-PAST
(Lit.) 'Anybody did not praise Mary.'
(= Kishimoto 2005: 78)

Assuming that the subject NPI *dare-mo* 'anybody' occurs at the Spec of TP on a par with the English equivalent *anyone*, he claims that the subject NPI is licensed in (14b) because the Neg in Japanese has moved up to T in tensed sentences, extending its scope to influence the Spec of TP as well, in contrast to the Neg in English in (13).

Kishimoto (2005, 2007) further observes that the Neg in the non-tensed clause in Japanese does not license the subject NPI unlike the case of the tensed clause in Japanese, as demonstrated in (15).

(15)　(a) Dare-mo　Mary-o　　home-nakat-ta.
　　　　anybody　Mary-ACC　praise-NEG-PAST
　　　　'Nobody praised Mary.'
　　　　　　　　　　　(= Kishimoto 2005: 78, (173b))
　　　(b) *Dare-mo　Mary-o　　kyoositu-ni　　haire-naku-si-ta.
　　　　anybody　　Mary-ACC　classroom-to　enter-NEG-make-PAST
　　　　'Nobody made Mary enter the classroom.'
　　　　　　　　　　　(= Kishimoto 2005: 79, (174c))

He claims that the subject NPI is licensed in (15a) because Neg has moved up to T, extending its scope to affect the Spec of TP; whereas, the subject NPI is not sanctioned in (15b) because Neg stays in-situ in the "small clause NegP" embedded under the matrix causative verb *su(ru)* 'make'.

In fact, however, the contrast between (14) and (15) does not necessarily constitute empirical evidence in favor of the existence of Neg-to-T movement in tensed negative sentences in Japanese. First of all, the very premise that the subject NPI is located at the Spec of TP in Japanese does not seem to be the only possibility conceivable.

Watanabe (2009: 121) makes a good case for the view that the NPI *dare-mo* 'anybody' in the subject position as in (16) remains vP-internally without moving into the Spec of TP in Japanese, noting that the following sentence in (17) confirms his claim.

(16)　Dare-mo henzi-o　si-nakat-ta.

anybody reply-ACC do-NEG-PAST

'Nobody answered.'

(17) Gakusei-ga dare-mo henzi-o si-nakat-ta.

student-NOM anybody reply-ACC do-NEG-PAST

'No student answered.'

In (17), what has moved to the Spec of TP is the part *gakusei-ga* 'student-NOM', which has left the NPI *dare-mo* 'anybody' behind presumably at the Spec of vP.

Given Watanabe's (2009) analysis, the facts in (14b) and (15a) can be accounted for even under the assumption that Neg invariably does not move to T in Japanese as follows. Suppose that the subject NPI *dare-mo* stays at the Spec of vP in Japanese. In (14b) and (15a), the subject NPI *dare-mo* is licensed by the c-commanding Neg *nakat* at the head of NegP. On the other hand, in (15b), the subject NPI *dare-mo* is located at the Spec of the matrix vP headed by the causative verb *su(ru)* 'make', so it is not c-commanded by the Neg *naku* at the head of the NegP embedded under the matrix causative verb. Therefore, the contrast observed between (15a) and (15b) can be accounted for without appealing to the presence vs. absence of Neg-to-T movement in Japanese.

Interestingly enough, if the raising verb *na(ru)* 'become, turn out' is used instead of the causative verb *su(ru)* 'make' as the matrix predicate, the subject NPI *dare-mo* can be licensed by the in-situ embedded Neg, as illustrated in (18) (see also Kishimoto 2007, 2008).[8]

(18) Dare-mo hon-o yom-anaku(-sae/-mo)-nat-ta.

anybody book-ACC read-NEG-(even/also)-become-PAST

'Nobody even/also turned out to read books.'

If the subject NPI *dare-mo* 'anybody' can remain in-situ at the Spec of the embedded vP even under the matrix raising predicate *na(ru)* 'become, turn out' in Japanese, the acceptability of (18) falls into place. Thus, the fact in (18) also seems to support the view that the subject NPI (non-)licensing has nothing to do with Neg-to-T movement in (15a) and lack thereof in (15b).

Furthermore, Kishimoto's (2005, 2007, 2008, 2009a) assumption that the Neg-to-T movement will extend the scopal domain of Neg to the whole TP, including the Spec of TP, does not seem to accommodate certain scope facts in Japanese. If the assumption at stake is on the right track, it is predicted that Neg will come to have scope over some scope-bearing element within the TP as a result of Neg-to-T

movement in Japanese. However, this prediction is not borne out, as illustrated by the following paradigms in (19)-(20).

(19) (a) Gakusei-ga itumo bentoo-o   motteko-nakat-ta (koto).
          student-NOM always lunchbox-ACC bring-NEG-PAST (the fact)
          (Lit.) '(the fact that) always students did not bring their lunchboxes.'
      (b) Gakusei-ga itumo bentoo-o motteki-ta wake-de-wa nakat-ta (koto).
          student-NOM always lunchbox-ACC bring-PAST be-the-case NEG-PAST (the fact)
          (Lit.) '(the fact that) it was not the case that always students brought their lunchboxes.'
(20) (a) Itumo gakusei-ga   bentoo-o   motteko-nakat-ta (koto).
          always student-NOM lunchbox-ACC bring-NEG-PAST (the fact)
          (Lit.) '(the fact that) always students did not bring their lunchboxes.'
      (b) Itumo gakusei-ga bentoo-o   motteki-ta wake-de-wa nakat-ta (koto).
          always student-NOM lunchbox-ACC bring-PAST be-the-case NEG-PAST (the fact)
          (Lit.) '(the fact that) it was not the case that always students brought their lunchboxes.'

If the scopal domain of Neg can be extended to encompass any element under the projection of T after Neg-to-T movement, it is expected that (19a) and (20a) could have an interpretation involving the scopal relation *not > always* on a par with (19b) and (20b), respectively, under the supposition that the adverb *itumo* 'always' is located within some projection in/of TP. However, this is not the case. (19a) and (20a) only has an interpretation with the scopal relation *always > not*. Accordingly, this fact seems to be incompatible with the Neg-to-T movement hypothesis in Japanese (see also Kato 2003 for placement of adverbs within the clausal structure in Japanese based on scopal interactions between adverbs and Neg in Japanese).[9]

3. PROPOSAL: MORPHOLOGICALLY DIFFERENT STATUSES OF NEG IN ENGLISH AND JAPANESE

The negative formative *not* in English has been assumed to be located at the head or the Spec of NegP in the literature (see Pollock 1989 for the former view and Rizzi 1990 for the latter). Regardless of the differences of such assumptions, *not* in English is clearly an independent element in both syntactic and morphological terms. Its placement/distribution within a sentence is strictly determined solely on the basis of the syntactic location within the functional projection NegP, which is

itself specified as taking vP as its sister by the functional selectional requirement [_vP].

By contrast, the Japanese counterpart Neg can be regarded as possessing distinct properties, although this important point has not been taken seriously in the treatment of Neg in Japanese in the literature. First of all, it is to be noted that there are two variants of Neg in Japanese in light of the preceding discussion: *nakar* (= the finite Neg form) and *nak* (= the "non-finite" Neg form). Although both of the two types of Neg function as a syntactically independent element on a par with *not* in English, they are not morphologically independent elements unlike *not* in English.

I propose to analyze those two variants of Neg in Japanese as being affixal elements and having the following morphological selectional properties in (21) along with the functional selectional requirement [vP__] in syntax (here I am assuming that V and v make up a single unit V-v as a result of morphological merger, as argued by Takano 1996, 2002, 2004; Fukui & Takano 1998; Sakai 1998, 2000; Aoyagi 1998a,b, 2001, 2006; Fukui & Sakai 2003; Fukushima 2004; Kishimoto 2005 among others).

(21)　(a) –*nakar*-: [V-v_T] (= the finite Neg form)[10]
　　　(b) –*nak*: [V-v_] (= the "non-finite" Neg form)[11]

The morphological selectional requirements of the two variants of Neg in Japanese embodied in (21) are empirically motivated by the facts illustrated in (22)-(23).[12]

(22)　(a) John-wa　hon-o　　yom-anakat-ta.
　　　　　John-TOP book-ACC read-NEG-PAST
　　　　　'John did not read books.'
　　　(b) John-wa　hon-o　　yomi-sae si-nakat-ta.
　　　　　John-TOP book-ACC read-even do-NEG-PAST
　　　　　'John did not even read books.'
　　　(c) *John-wa　hon-o　　yomi-sae nakat-ta.
　　　　　John-TOP　book-ACC read-even NEG-PAST
　　　　　'John did not even read books.'
　　　(d) *John-wa　hon-o　　yom-anakari-sae ta.
　　　　　John-TOP　book-ACC read-NEG-even PAST
　　　　　'John did even not read books.'
(23)　(a) *John-wa　hon-o　　yom-anaku-ta.

      John-TOP book-ACC read-NEG-PAST

      'John did not read books.'

(b) John-wa hon-o   yom-anaku(-sae) nat-ta.

      John-TOP book-ACC read-NEG(-even) become-PAST

      'John turned out (even) not to read books.'

(c) *John-wa hon-o   yomi-sae naku nat-ta.

      John-TOP book-ACC read-even NEG become-PAST

      'John did not turn out even to read books.'

(d) John-wa hon-o   yomi-sae si-naku nat-ta.

      John-TOP book-ACC read-even do-NEG become-PAST

      'John turned out not even to read books.'

Since the finite form of Neg *nakar* must satisfy the morphological requirement in (21a), the Neg form is sandwiched between V-v and T as in (22a). If the V-v is detached from the finite form of Neg *nakar* by a focus particle such as *sae* 'even', *su*-support has to be applied to comply with the requirement in (21a), as seen in the contrast between in (22b) and (22c). Also, (22d) clearly shows that the focus particle *sae* 'even' cannot intervene between the Neg and T in violation of the requirement in (21a).

On the other hand, since the "non-finite" form of Neg *nak* must meet the morphological requirement in (21b), the Neg form is not attached with T on its right, as shown in the contrast between (23a) and (23b), but must be attached with V-v on its left, as illustrated in the contrast between (23b) and (23c). As demonstrated in (23d), if the V-v is detached from the "non-finite" Neg by a focus particle such as *sae* 'even', *su*-support is called for in accordance with the requirement in (21b).

4. ACCOUNTS FOR THE PROPERTIES ON NEG AND TENSE IN JAPANESE

4.1. *Non-existence of aru-support (= be-support)*

First of all, the lack of the putative operation of *aru*-support (= *be*-support) in Japanese can receive a straightforward account under my analysis of Neg in Japanese in (21). It is to be noted that, with respect to the finite form of Neg in (21a), *ar* is morphologically part of the single lexical item *nakar* to be selected from the lexicon as a whole. Thus, it is impossible to break the single lexical item *nakar* in syntax by a focus particle like *sae* 'even' in the first place, as seen in (6).

4.2. *Non-existence of su-support (= do-support) in tensed negative sentences*

Next, the non-existence of *su*-support (= *do*-support) in tensed negative sentences in Japanese also readily follows to the extent that the finite form of Neg –*nakar*- in tensed sentences in Japanese has the morphological selectional property [v-V__T] as in (21a) and that *su*-support in Japanese is also a last resort operation to be applied in the phonological component in which morphological selectional properties are checked on a par with *do*-support in English. Notice that, since the morphological selectional specification of the finite Neg form –*nakar*- [v-V__T] in (21a) indicates that T can be separated from v-V with the Neg intervening between them due to the affixal nature of the Neg in Japanese, it is correctly predicted that *su*-support does not have to be invoked to rescue T in such a case.

4.3. *Non-existence of Neg-to-T movement*

Finally, the non-existence of Neg-to-T movement in Japanese falls out quite naturally as well under the specifications on the nature of Neg in Japanese as formulated in (21). It is to be noted that both the finite form of Neg –*nakar*- and the "non-finite" form of Neg –*nak* in (21) are overt affixal elements. If we extend Lasnik's (1995) theory of verbal morphology to include Neg in Japanese, it is predicted that not only an overt affixal T but also both forms of Neg in Japanese must undergo morphological merger with the verbal stem (V-v) due to their overt affixal nature and the bare status of the verbal stem in Japanese. As such, this would yield concatenation of Neg and T in the tensed sentence without head-movement, virtually rendering Neg-to-T movement unnecessary in Japanese.

In light of these considerations, I will put forward the following alternative analysis of Neg in Japanese.

(24)   Neg invariably does not move to T in Japanese. Instead, Neg in Japanese undergoes morphological merger as an affixal element in the phonological component in accordance with the morphological selectional properties in (21), depending upon the two types of realization forms of Neg.

5. SOME IMPLICATIONS

The findings on Neg in Japanese in this article have some theoretical implications to the grammar of Japanese and the theory of UG. As discussed in the previous sections, it has often been taken for granted in the literature that there are two types of dummy verb insertion in Japanese: *su*-support (= *do*-support) and *aru*-support (=

be-support). Nevertheless, if the foregoing discussion on Neg in Japanese is on the right track, there should be no such operation as *aru*-support in Japanese, contrary to the views in Kubo (1992), Urushibara (1993), Miyagawa (1998), Nakayama (1998), and Watanabe (2009) *inter alia*. This would make English and Japanese completely in line with respect to dummy verb insertion: there is only a single insertion operation of a dummy verb (= *su*-support/*do*-support). [13]

In addition, I have claimed that Neg in Japanese comes with two variants, i.e. *–nakar-* (= finite form) and *–nak* (= "non-finite" form), depending upon the presence/absence of morphological selection by T, which is quite distinct from the syntactically/morphologically invariant Neg *not* in English. Therefore, UG must allow for at least both T-dependent Neg and T-independent Neg for natural language. It seems that English has only the latter, while Japanese has both. [14]

6. CONCLUSION

In this article, I have pinned down some puzzles concerning the interactions between negation and tense in Japanese: (i) non-existence of *aru*-support (= *be*-support); (ii) non-existence of *su*-support (= *do*-support) in tensed negative sentences; and (iii) non-existence of Neg-to-T movement. It was proposed that all the relevant puzzles are to be solved once we notice a simple fact: Although both of them constitute syntactically independent lexical items taken from the lexicon, Neg in English and Neg in Japanese possess morphologically different properties: the former as a free morpheme vs. the latter as a bound morpheme.

NOTES

1) In this article, the following abbreviations are used in the examples: ACC(usative), COP(ula), DAT(ive), GEN(itive), NEG(ative), NOM(inative), PRES(ent), TOP(ic).

2) In modern standard Japanese, there are two kinds of negative formatives operative in syntax: (i) *nai* and its conjugated variants and (ii) *nu* and its conjugated variants. In this article, I will only address the former, putting aside the latter, as an instance of Neg in Japanese.

3) The verb stem of the dummy verb *aru* 'be' is *ar*, which ends with the consonant *r*. In concatenating with the past tense morpheme *–ta*, this consonant will become a moraic glottal stop due to assimilation, which is regularly written with the same consonant as the immediately following one (*t* in this case).

4) Sakai (1998, 2000) clearly demonstrates that V-to-T raising in syntax does not exist in Japanese. Observe the following example in (i).

(i) *[$_{TP}$ Takashi-ga [$_{VP}$ [$_{VP}$ t$_V$]-mo/dake/sae] [$_T$ [$_V$ hashit]-ta]]

   Takashi-NOM   -also/only/even   run-PAST

'Takashi also/only/even ran.'

<div align="center">(= adapted from Sakai 2000: 130, (19))</div>

In (i), V-to-T movement has taken place, leaving behind a focus particle, which is adjoined to VP. The resulting structure is flatly ungrammatical in Japanese. I will follow Sakai (1998, 2000) in assuming that Japanese lacks syntactic V-to-T movement in general, employing morphological merger in the service of verbal morphology instead (see also Takano 1996, 2002, 2004; Hoji 1998; Fukui & Takano 1998; Aoyagi 1998b, 2001, 2006; Fukui & Sakai 2003; Kuroda 2003; Fukushima 2004 *inter alia.* for arguments in favor of this view).

5) The underlying form of Neg *nak* becomes *naku* at surface due to an epenthesis operation inserting the vowel *u* in line with a phonological constraint which generally bans consonant-ending morphemes such as CVC in Japanese except for moraic nasals and a moraic glottal stop.

6) Here, I will assume with Kuroda (1965), Aoyagi (1998a,b), and Sakai (1998, 2000) *inter alia.* that focus particles such as *sae* 'even', *mo* 'also' and *dake* 'only' are adjoined to an XP (see Kishimoto 2001, 2005 for a different view that focus particles are adjoined to an X).

7) Kishimoto (2007: 250, fn.4) reports a comment by a reviewer, which says that sentences like the following in (i) are acceptable if some kind of stative meaning is encoded.

(i) (a) John-wa konna-hon-o yoma-naku-sae/mo ar-u.

    John-TOP such-book-ACC read-NEG-even/also be-PRES

    (Lit.) 'John is in the state of not even/also reading such a book.'

  (b) John-wa konna-hon-o yoma-naku-sae/mo at-ta.

    John-TOP such-book-ACC read-NEG-even/also be-PAST

    (Lit.) 'John was in the state of not even/also reading such a book.'

One possibility is that in (i) the negative morpheme *–naku* functions as a negative adjectival element which takes VP/vP as its complement and is embedded under the copular verb *ar* 'be' on a par with the adjectival construction in general (see Kishimoto 2008 and 2009b for some discussion on negative adjectives in Japanese). On the other hand, it seems that, under the non-stative interpretation, the splitting of Neg and T by an intervening focus particle such as *sae* 'even' and *mo* 'also' is impossible, as originally observed by Kishimoto (2005, 2007, 2008, 2009a). Accordingly, in judging the relevant examples, this kind of stative interpretation must be disregarded as reflecting a distinct construction in Japanese.

In this vein, it is interesting to observe that a parallelism holds between regular adjectives such as *utukusiku* 'beautiful' and the negative adjective *(a)naku* 'not' with regard to the obligatory presence of the copular verb *ar* 'be' in the embedded clause under the aspectual verb *tuzuke* 'continue' in Japanese, as shown in the following paradigm in (ii) (see the relevant discussion on the adjectival predication construction in Japanese in section 2.1 in the text).

(ii) (a) Kesiki-ga utukusiku (*ari) tuzuke-ta.

    scenery-NOM beautiful be continue-PAST

    'The scenery continued to be beautiful.'

  (b) John-ga hon-o   yom-anaku (*ari) tuzuke-ta.

John-NOM book-ACC read-NEG be continue-PAST

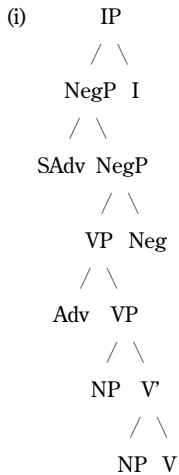'John continued to be in the state of not reading books.'

(c) Dare-mo henzi-o si-naku (*ari) tuzuke-ta.

anybody reply-ACC do-NEG be continue-PAST

'Nobody continued to be in the state of answering.'

This parallelism strongly suggests that sentences in (i) under the stative interpretation are a kind of adjectival constructions in Japanese.

8) The claim that the Japanese verb *naru* 'become, turn out' is a raising verb is based on the facts that it is compatible with weather predicates and sentential idioms (Kishimoto 2005, 2007, 2008, 2009a and references therein), as shown below.

(i) (a) Ame-ga hur-anaku-nat-ta.

rain-NOM fall-NEG-become-PAST

'It has stopped raining.'

(b) Kono mise-de-mo kankodori-ga nak-anaku-nat-ta.

this shop-at-also cuckoo-NOM cry-NEG-become-PAST

'At this shop also, it has become not out of business.'

9) Kato (2003: 161) assumes the following clausal structure in Japanese (see Pollock 1989, Chomsky 1991).

(i)
```
         IP
        /  \
     NegP   I
     /  \
  SAdv  NegP
         /  \
       VP   Neg
      /  \
   Adv    VP
         /  \
       NP    V'
            /  \
          NP    V
```

Kato (2003) observes that sentential adverbs (= SAdv) in Japanese are not under the scope of negation, as illustrated in (ii) and (iii).

(ii) (a) Taroo-ga <u>saiwainimo</u> sono kinoko-o tabe-nakat-ta.

Taro-NOM fortunately that mushroom-ACC eat-NEG-PAST

'Taro fortunately did not eat that mushroom.'

(b) Taroo-ga wazato Hanako-no yuukoto-o kika-nakat-ta

Taro-NOM deliberately Hanako-GEN say-thing-ACC listen-to-NEG-PAST

'Taro deliberately did not follow what Hanako said.'

(iii) Taroo-ga minna-no yosoodoori   ko-nakat-ta.

　　 Taro-NOM everyone-GEN expectation-as come-NEG-PAST

　　 'Taro as everyone expected did not come.'

If sentential adverbs are adjoined to NegP, as analyzed by Kato (2003), Kishimoto's (2005, 2007, 2008, 2009a) Neg-to-T movement predicts that sentential adverbs are under the scope of negation by being c-commanded by Neg at T, contrary to fact.

10 I will assume that the finite Neg form *–nakar-* morphologically merges with T, undergoing relevant phonological adjustments as follows.

(i) Neg + Pres T: -nakar-(r)u ➜ -na-i (⬅ due to suppletion)

(ii) Neg + Past T: -nakar-ta ➜ -nakat-ta (⬅ due to assimilation)

It is to be noted that the finite Neg *nakar* seems to be morphologically decomposable into the "non-finite" Neg *nak* and the copular verb *ar(u)*. One possibility is that the latter has been adjoined to the former to create [$_{Neg}$ [$_{Neg}$ nak]-ar]] in the process of grammaticalization of the copular verb in question. I will leave diachronic investigation into the development of the finite Neg form in Japanese to future research (see Kishimoto 2009b for some discussion on the possibility of diachronic grammaticalization of Neg in Japanese).

11) It seems that the "non-finite" Neg form *nak(u)* can also function as a constituent negation element in adjectival negation in Japanese, as witnessed in (i).

(i) Sono kesiki-wa mohaya   utukusiku-mo naku-sae at-ta.

　　 that scenery-TOP any longer beautiful-also NEG-even be-PAST

　　 'That scenery was even not beautiful any longer, either.'

Notice that the presence of focus particles like *–mo* 'also' and *–sae* 'even' on the right of *utukusiku* and *naku* clearly indicates that the adjectival stem and the Neg are syntactically independent elements. It is also to be noted that the Neg occurs on the left of the copular verb *ar* 'be', so the Neg *naku* does not occupy the regular Neg position between T and v in Japanese. I will assume that in (i) the copular verb takes the NegP as its complement and the Neg in turn has the AP as its complement, instantiating a case of constituent negation rather than a case of regular clausal negation in Japanese. This assumption is compatible with the fact that, unlike the Neg form *–nak* in (21b), the Neg form *nak* in (i) does not satisfy the morphological selectional requirement [V-v_]. I speculate that the possibility of making up a "complex negative adjectival phrase "[$_{NegP}$ [$_{AP}$ A] Neg] has to do with the status of the Neg form *nak* in (i) as an "adjectival element".

12) The point that the "non-finite" Neg form *nak* is needed as specified in (21b) is also supported by the following example in (i).

(i) [$_{TP}$ Mary-ga [$_{NegP}$ [$_{vP}$ John-ni tabako-o suw]-**anaku**] sase-ta].

　　 Mary-NOM   John-DAT tobacco-ACC smoke-NEG make-PAST

　　 'Mary made John not smoke tobacco.'

According to the assumption in (21b), the Neg form *(a)nak(u)* is a syntactically independent element

and is only morphologically specified as to take a verbal element on its left, such as *suw* 'smoke' in (i). The syntactically independent status can be clearly shown by the fact that a focus particle such as *sae* 'even' can intervene between the Neg and the matrix causative predicate *sase* 'make' in (i), as illustrated in (ii).

(ii) [$_{TP}$ Mary-ga [$_{NegP}$ [$_{vP}$ John-ni tabako-o suw]-**anaku**]-sae sase-ta].

      Mary-NOM   John-DAT tobacco-ACC smoke-NEG-even make-PAST

      'Mary even made John not smoke tobacco.'

13 Incidentally, following Kato (1985) and Kishimoto (2005), I will assume that the copular verb *ar(u)* is deleted before Neg in Japanese by the deletion operation as formulated in (i).

(i) ar ➔ ∅ / _ Neg

Thus, (i) will be responsible for the following patterns of deletion.

(ii) (a) ar-(a)nak ➔ nak

     (b) ar-(a)nakar ➔ nakar

ar 'be' as the copular verb which could in principle occur in V-v for both (21a) and (21b) would obligatorily undergo deletion in V-v in accordance with the above deletion operation. Hence, *ar* 'be' as a copular verb cannot occur in negative sentences in Japanese, unless the contextual condition in (i) is disrupted by insertion of a focus particle, as illustrated in (iii).

(iii) (a) Kesiki-ga utukusiku nakat-ta.

       scenery-NOM beautiful NEG-PAST

       'The scenery was not beautiful.'

     (b) Kesiki-ga utukusiku **ari**-sae si-nakat-ta.

       scenery-NOM beautiful be-even do-NEG-PAST

       'The scenery was not even beautiful.'

14 Standard Arabic seems to have the former option (see Benmamoun 2000 for discussion of a variety of Neg forms in connection with tense properties in Standard Arabic).

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