

Title	単一サイクルシステムに於ける日本語焦点連結現象の導出について
Sub Title	Deriving association with focus in Japanese within the single-cycle system
Author	星, 浩司(Hoshi, Koji)
Publisher	慶應義塾大学日吉紀要刊行委員会
Publication year	2006
Jtitle	慶應義塾大学日吉紀要. 言語・文化・コミュニケーション No.37 (2006. 9) ,p.47- 80
JaLC DOI	
Abstract	
Notes	
Genre	Departmental Bulletin Paper
URL	https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN10032394-20060930-0047

慶應義塾大学学術情報リポジトリ(KOARA)に掲載されているコンテンツの著作権は、それぞれの著作者、学会または出版社/発行者に帰属し、その権利は著作権法によって保護されています。引用にあたっては、著作権法を遵守してご利用ください。

The copyrights of content available on the KeiO Associated Repository of Academic resources (KOARA) belong to the respective authors, academic societies, or publishers/issuers, and these rights are protected by the Japanese Copyright Act. When quoting the content, please follow the Japanese copyright act.

Deriving Association with Focus in Japanese within the Single-Cycle System*

Koji Hoshi

Keywords: association with focus, derivationality, (un)interpretable focus-features, Agree, single-cycle system

1. Introduction

Kuroda (1965) is the first attempt to provide a formal syntactic analysis of the nature of association with focus in Japanese concerning (quasi-)quantificational focus particles such as *wa* ‘topic, contrast’, *mo* ‘also’, *dake* ‘only’, and *sae* ‘even’ in the generative grammatical tradition (see also Kuroda 1969, 1970). Recasting Kuroda’s (1965) attachment transformation analysis of association with focus in Japanese within the framework of principles-and-parameters approach, Aoyagi (1998, 1999, 2006) propounds an LF-movement-based analysis, in which focus particles (, or Q-particles in his terms) move covertly to a licensing functional head like T or v at LF, from where they are associated with the focused element in their c-command domain.

From the perspective of the recent development of the Minimalist Program (Epstein et al. 1998, Epstein and Seely 2006, Chomsky 2001b, 2004, Lasnik and Uriagereka 2005 *inter alia*.), the very existence of the LF component and its various types of covert LF movement in the faculty of language (FL) are to be called into question and should be subject to critical scrutiny (see also Watanabe 2005).¹⁾ Extending and modifying Kayne (1998, 2000), Hoshi (2004, 2006a) proposed a derivational analysis of association with focus in Japanese without recourse to any LF-movement, as an alternative to Aoyagi (1998, 1999, 2006).

This article points out some potential problems with Hoshi (2004, 2006a) and makes an attempt to secure a foundation for an alternative derivational analysis of

association with focus in Japanese. It will be shown that there is another way of recapturing Kuroda's (1965) insight into association with focus in Japanese in the system of the single-cycle syntactic computation (Chomsky 2001b, 2004) at least in its core cases without recourse to any covert LF movement, in the spirit of Kayne (1998, 2000) but with crucial modifications of it.²⁾

More specifically, while keeping to Aoyagi's (1998, 1999, 2006) original insight that association with focus involves "focus feature agreement or sharing," I will demonstrate that the relevant phenomenon in Japanese can be best analyzed as involving overt movement to [Spec,Foc] triggered by Agree with reference to two focus-sensitive particles in Japanese, i.e., *mo* 'also,too' and *dake* 'only.' It will be proposed that *mo* 'also' and *dake* 'only' occupy different syntactic positions and different patterns of Agree. To the extent that this approach is on the right track, it provides another support for the single-cycle computational system in the Minimalist Program (Chomsky 2001b, 2004).

The present article is organized as follows. Section 2 briefly discusses Kayne's (1998, 2000) derivational theory and its application to the analysis of association with focus in Japanese by Hoshi (2004, 2006a), pointing out some potential problems. Then, in section 3, in making an attempt to eschew those problems, I will put forward an alternative derivational analysis of the phenomenon in question, proposing an articulated clausal configuration in Japanese and the relevant mechanism of Agree. Then, based on this mechanism, it is demonstrated that at least core cases of association with narrow focus in Japanese are to be derivable within the system of single-cycle computation in narrow syntax in the sense of Chomsky (2001b, 2004). Section 4 concludes this article.

2. A Previous Derivational Analysis

2.1. Kayne's (1998, 2000) Theory

Kayne (1998, 2000) advances a derivational syntactic analysis of association with focus, whereby (some instances of) the phenomena of association with focus are viewed as involving overt movement to the Spec of a focus-sensitive operator in all languages. In his analysis, the focus-sensitive operators like *only*, *even*, *too* in English and their analogues in other languages will always attract a phrase to their Spec overtly, being subject to the following licensing condition on association with focus (cf. Kayne 1998: 156, 2000: 243):³⁾

(1) Licensing Condition on Association with Focus:

Focus-sensitive operators such as *only*, *even*, *too*, *also* or their counterparts in other languages can only associate with either the phrase or its subpart that has moved to their Spec overtly.

Let me illustrate Kayne's (1998, 2000) analysis of association with focus with reference to the focus-sensitive operator *only* below. Consider the following paradigm (in what follows, the focus-associated element in a sentence is indicated in bold-faced italics):

- (2) John read only *Aspects*.
- (3) Only *John* came to the party. (= adapted from Kayne 1998: 156, 2000: 243, (119))
- (4) a. John only *gave Bill a book*.
b. John only *gave* Bill a book.
c. John only gave *Bill a book*.
d. John only gave Bill *a book*.

(= Kayne 1998: 157, 2000: 243, (121))

In (2), at surface, the focus-sensitive operator *only* is located between the main verb *read* and the direct object *Aspects*. Kayne (1998, 2000) claims that *only* cannot be merged with a DP like *Aspects* directly in (2).⁴ Instead, he derives (2) from a structure resembling (5) along the line of (6) (note that the derivation in (6) shows the point before the subject *John* is merged):

- (5) John only read *Aspects*.
 (6) ... only read *Aspects* → (attraction by *only*)
 ... [*Aspects*_i only] read t_i → (raising of *only* to W)
 ... only_j+W [*Aspects*_i t_j] read t_i → (VP-preposing to [Spec, W])
 ... [[read t_i]_k only_j+W] [*Aspects*_i t_j] t_k

In (6), *only* attracts *Aspects* to [Spec,*only*] in the first step. Then, in the second step, the focus operator *only* is raised to an abstract functional head W. Finally, the VP is preposed to [Spec,W] in deriving the correct surface word order. Then, in accordance with the condition in (1) the focus-associate turns out to be the direct object *Aspects*.

How about the derivation of (3)? Kayne (1998, 2000) proposes the one in (7):

- (7) ... only [John came to the party] → (attraction by *only*)
 ... [John_i only] [t_i came to the party] → (raising of *only* to W)
 ... only_j+W [John_i t_j] [t_i came to the party]

In (7), *only* takes a TP as its complement, attracting *John* to [Spec,*only*] in the first step. Then, just as in (6), the focus operator *only* is raised to W in the second step. Note that the subject *John* is correctly licensed as the focus-associate, in accordance with the condition in (1).

Finally, let us look at the cases in (4). The relevant derivation is as follows:

- (8) ... only gave Bill a book → (attraction by *only*)
 ... [gave Bill a book]_i only t_i → (raising of *only* to W)
 ... only_j+W [gave Bill a book]_i t_j t_i

Notice that in the second step in (8) the whole VP is situated at [Spec,*only*], which accounts for the fact that the focus-associate can be the main verb *gave*, either the indirect object *Bill* or the direct object *a book*, or the whole VP *gave Bill a book*, as predicted by the condition in (1).

2.2. Application of Kayne (1998, 2000) to Japanese: Hoshi (2004, 2006a)

Hoshi (2004, 2006a) attempts to put forth an articulate derivational analysis of association with focus in Japanese, extending and modifying Kayne's (1998, 2000) idea discussed in section 2.1, with special reference to two focus-sensitive particles like *mo* 'also, too' and *dake* 'only'.⁵⁾ Just for expository purposes, I will present the core cases of relevant basic paradigms of association with narrow focus involving *mo* 'also, too,' as illustrated in (9):⁶⁾

- (9) a. *John-mo* Mary-ni hon-o watasita.
 John-also Mary-Dat book-Acc handed to
 'Lit.Also John handed a book to Mary.'
 = In addition to someone else's handing a book to Mary,
 John handed a book to Mary.
 b. John-ga *Mary-ni-mo* hon-o watasita.
 John-Nom Mary-Dat-also book-Acc handed to

‘Lit.John handed a book also to Mary.’

= In addition to John’s handing a book to someone else,
he handed a book to Mary.

c. John-ga Mary-ni *hon(-o)*-mo watasita.

John-Nom Mary-Dat book-also handed to

‘Lit.John handed also a book to Mary.’

= In addition to John’s handing something else to Mary,
he handed a book to her.

This paradigm indicates that any type of arguments could participate in the phenomena of association with focus with respect to the focus particle *mo* in Japanese.

In what follows, I will assume that the nominative Case particle projects an independent functional projection *ga*P in Japanese, following Hoshi (2004, 2006a, b) and references cited therein and further that the overt nominative Case particle head not only carries [u ϕ] feature, which enters into Agree/Match with [ϕ] feature in DP, with [uCase] feature in DP being valued and deleted, but also possesses [EPP] feature, while the null nominative Case particle head lacks [EPP] feature. Suppose further that Japanese has an independent functional head for a nominative Case particle *ga*, which is (optionally) selected by T and independent functional head for a focus particle such as *mo*, which is generated either TP-internally or TP-externally, as claimed by Hoshi (2004, 2006a, b).^{7), 8)} In the case of (9a), the nominative Case particle projection is null, and either the focus particle *mo* takes TP as its complement or the null nominative Case particle takes the projection headed by the focus particle *mo*. In addition, following Hoshi (2004, 2006a, b), I will suppose that the focus head *mo* carries an EPP feature which attracts the focus-associate DP to [Spec,*mo*].

Let us consider the derivation for (9a) as an illustration. Under these assumptions, the derivation at hand should proceed as follows:

- (10) [mo [_{VP} John [v [_{VP} Mary-ni watasi hon-o]]]]
 (→ *John* attracted to [Spec,*mo*], *W* merged, the whole FocP attracted to
 [Spec,*W*])
 [[*John*_i-mo [_{VP} t_i [v [_{VP} Mary-ni watasi hon-o]]]]_j [W t_j]]
 (→ *Oga* merged, T merged)
 [_{TP} -ta [*Oga* [[*John*_i-mo [_{VP} t_i [v [_{VP} Mary-ni watasi hon-o]]]]_j [W t_j]]]
 (→ V-v-T movement applied)⁹⁾
 [_{TP} watasi_k-ta [*Oga* [[*John*_i-mo [_{VP} t_i [t_l [_{VP} Mary-ni t_k hon-o]]]]_j [W t_j]]]]

($\rightarrow$ ØgaP attracted to [Spec,T])

$$[_{TP} [_{\emptyset ga} [[\textbf{John}_i\text{-}mo [_{VP} t_i [t_i [_{VP} Mary\text{-}ni t_k hon\text{-}o]]]]_j [W t_j]]]_m$$

$$[_{T'} [_{T'} watasi_{k-l}\text{-}ta t_m]]$$

 $\rightarrow$ Since the DP *John* is the only element in [Spec,*mo*], it will be licensed as the associate of *mo* in accordance with the licensing condition in (1).

Note that under this analysis the reasons for the non-existence of sequences such as *John-ga-mo* or *John-mo-ga* are straightforward: in order to derive the sequence *John-ga-mo*, the DP *John* must first move to [Spec,*ga*] and then [*DP-ga*] must be put into [Spec,*mo*]. But, the movement of [*DP-ga*] to [Spec,*mo*] is impossible due to the non-constituency of [*DP-ga*] in addition to the general ban on lowering. Likewise, for the sequence *John-mo-ga*, the DP *John* must first be raised to [Spec,*mo*] and then [*DP-mo*] must be raised to [Spec,*ga*]. But, the movement of [*DP-mo*] to [Spec,*ga*] is illicit by virtue of the non-constituent status of [*DP-mo*].

2.3. Potential Problems

Kayne (1998, 2000) suggests that basically the same analysis can be applied to languages such as Japanese, but he does not spell out such an extension of his idea into the case of Japanese. While I agree with Kayne (1998, 2000) in that association with focus in natural language should be captured in derivational syntax, there seem to be at least two theoretical problems with the particular implementation of derivational analysis in Kayne (1998, 2000) and Hoshi (2004, 2006a). First, the status of the purely abstract functional head *W* is not well-grounded given that it plays only a role of adjusting word order in narrow syntax to yield the correct surface word order, without any movement-inducing formal features being made explicit. If word order does not play any role in C_{HL} in narrow syntax, as has been assumed and claimed in the current Minimalist Program (Chomsky 1995, 2000, 2001a,b, 2004, 2005a,b), postulating such a syntactic category to affect ordering in narrow syntax becomes rather bizarre (cf. Y. Ogawa 2003: 331-333). Second, since the Spec-head relation does not play any role in the recent development of the Minimalist Program (Chomsky 2000, 2001a,b, 2004, 2005a,b), it is not clear why such a licensing condition in (1) holds at all in the first place.

In the next section, I will put forth an alternative derivational theory of association with focus in Japanese, which is free from the above-mentioned theoretical drawbacks (see Hoshi 2006b for a full-blown treatment of the phenomena in connection to the second theoretical problem).

3. An Alternative Derivational Analysis

3.1. TP-internal and TP-external Focus Phrases

In this section, it is demonstrated that an independently well motivated functional element Focus (Foc) can handle the phenomena of association with focus in Japanese without recourse to a theoretically obscure functional element W (see Rizzi 1997 and references cited therein among others for discussion of the functional head Focus).

First of all, I will look into various scope facts in Japanese, which provide empirical motivation to postulate both TP-internal and TP-external focus phrases (FocP) in the clausal architecture of Japanese. Let us first consider the interaction between the focus particles and negation, as illustrated in (11)-(12) below:

- (11) a. Hanako-mo hataraka-nakat-ta. (also > not, *not > also)
 Hanako-also work-Neg-Past
 ‘Hanako also didn’t work (and there is someone else who didn’t work.)’
 b. Hanako-ga susi-mo tabe-nakat-ta. (also > not, *not > also)
 Hanako-Nom sushi-also eat-Neg-Past
 ‘Hanako also didn’t eat sushi (and there is something else she didn’t eat.)’
 (= Hasegawa 2005, 54, (22a,b))
- (12) a. Hanako-dake hataraka-nakat-ta. (only > not, *not > only)
 Hanako-only work-Neg-Past
 ‘Only Hanako didn’t work (and there is someone else who worked.)’
 b. Hanako-ga susi-dake tabe-nakat-ta. (only > not, *not > only)
 Hanako-Nom sushi-also eat-Neg-Past
 ‘Hanako didn’t eat only sushi (and there is something else she ate.)’

Given the standard assumption that the (optional) projection of Neg is located between TP and vP, the facts in (11)-(12) reveal the following. First, (11a) and (12a) show that both *mo*-marked and *dake*-marked focus phrases must be located outside of NegP and so outside of vP. In principle, the relevant focus phrase could be either TP-internal or TP-external in (11a) and (11b). Second, (11b) and (12b) indicate that both *mo*-marked and *dake*-marked focus phrases could be positioned between TP and vP, given the assumptions that the nominative Case particle projection is (optionally) selected by T and the (optional) NegP takes vP as its sister (see also Hasegawa 1994 for the claim that the functional head attracting *mo*-phrase is above NegP but below

CP).

Based on the above considerations on scope facts in Japanese, I would like to postulate the following clausal configuration in Japanese, incorporating both TP-internal and TP-external Focus Phrase positions:

- (13) [_{CP} C [_{FocP} Foc [_{TP} T [_{gaP} ga [_{FocP} Foc [_{VP} DP [_{vP} [_{VP} DP-ni [_{v'} [V DP-o]]]]]]]]]]]]]

Furthermore, I will propose that K-particles like *mo* ‘also’ and F-particles like *dake* ‘only’ will be generated as schematically represented below (see Aoyagi 1998, 1999, 2006 and references therein for the distinction between K-particles (= *kakari-joshi* “agreement particles”) and F-particles (= *huku-joshi* “adverbial particles”):

- (14) a. K-particles:

[_{CP} [_{FocP} wa/mo/(sae) [_{TP} [_{CaseP} [_{FocP} wa/mo/(sae) [_{VP} . . .]]]]]]

- b. F-particles:

[_{CP} [_{FocP} ∅ [_{TP} [_{CaseP} [_{FocP} ∅ [_{VP} . . . XP . . .]]]]]]

(XP = [_{F-particleP} dake/made/bakari/(sae) [YP . . .]]

The functional element Foc is an optional element to be introduced in lexical (sub)array/numeration and can be merged either TP-externally or TP-internally, taking a “propositional-like unit excluding a force-indicator” as its domain (see Rizzi 1977, Poletto 2000, Yanagida 2003 *inter alia*. for TP-external Focus(P) and Ndayiragije 1999, Belletti 2001, S. Ogawa 2003, 2004, Yanagida 1996 *inter alia*. for TP-internal Focus(P)).¹⁰ Notice that in the case of K-particles the Foc head in the clausal projection is morphologically realized as a focus particle, whereas in the case of F-particles it is phonetically null with the focus particle itself being merged to the focus associate directly.

In this connection, let us consider Hasegawa’s (2005:55, (23)) claim that the *mo*-phrase as a whole undergoes overt movement to [Spec,TP] based on the following contrast:

- (15) a. Hanako-ga [Taro-ga sono hon-mo yon-da to] it-ta.

Hanako-Nom Taro-Nom the book-also read-Past that say-Past

‘Hanako said that Taro also read the book . (i.e., there is something else he read.)

- b. Sono hon-mo_i [Hanako-ga [Taro-ga t_i yon-da to] it-ta.

the book-also Hanako-Nom Taro-Nom read-Past that say-Past

‘*the reading on (15a) (= her (23a))’

‘Also about that book, Hanako said that Taro read it. (i.e., there is something else about which Hanako said that Taro read.)’

Under my analysis, however, the K-particle *mo* in (15b) is merged TP-externally and the object DP *sono hon* rather than *sono hon-mo* is to be overtly moved to [Spec, FocP] in the matrix clause from within the complement clause. I believe that my analysis can naturally account for why the scope of *sono hon-mo* must be the matrix clause as equally as Hasegawa (2005). It seems that basically the same paradigm can be observed with respect to the *dake*-phrase, as illustrated below:

- (16) a. Hanako-ga [Taro-ga sono hon-dake yon-da to] it-ta.
 Hanako-Nom Taro-Nom the book-only read-Past that say-Past
 ‘Hanako said that Taro read only the book. (i.e., there is nothing else he read.)’
- b. Sono hon-dake_i [Hanako-ga [Taro-ga t_i yon-da to] it-ta.
 the book-only Hanako-Nom Taro-Nom read-Past that say-Past
 ‘*the reading on (16a)’
 ‘Only about that book, Hanako said that Taro read it. (i.e., there is nothing else about which Hanako said that Taro read.)’

This fact can also be nicely subsumed under my analysis of the F-particle *dake*, since the whole *dake*-phrase is overtly moved to [Spec, FocP] in the matrix clause from within the complement clause.

Furthermore, the multiple occurrences of focus particles as illustrated below are to be naturally accommodated given the TP-internal and TP-external Focus positions:

- (17) a. Hanako-mo susi-mo tabe-ta.
 Hanako-also sushi-also eat-Past
 ‘Hanako ate sushi and something else (and there is at least another person who ate sushi and something else.)’
- b. Watasi-mo New York-ni-mo it-ta.
 I-also New York-to-also go-Past
 ‘I went to New York and somewhere else (and there is at least another person who went to New York and somewhere else.)’

(= Hasegawa 2005, 56, (24))

Another motivation for the postulation of both TP-internal and TP-external Focus positions comes from facts on quantifier interaction discussed by Hasegawa (2005). Witness the contrast between the paradigms in (18) and (19):

- As Hoji (1985) observes, quantificational arguments do not yield scope ambiguity in the base word order as in (18a), whereas they exhibit scopal ambiguity once scrambling is applied as in (18b). In contrast, as shown in (19), Hasegawa (2005) makes an interesting observation that when the object is attached by the focus particle *mo* 'also', not only the base word order produces scope ambiguity but also the scrambled word order allows for only the scope relation also > or. The fact in (19a) receives a natural explanation if the subject DP [*Taro ka Hanako*] moves to [Spec, *ga*P] leaving behind its copy at the original site relative to the position of the TP-internal *mo*-phrase, yielding both wide and narrow scope of [*Taro ka Hanako*] with respect to *Mary-mo*. On the other hand, the fact in (19b) makes sense given that the Foc head *mo* is located TP-externally and the direct object DP *Mary* is moved to [Spec, *mo*P] past the nominative phrase, producing the relative scope relation also > or.

56

of the nominative Case particle *ga* and the functional head of the K-particle *mo* differ with respect to the relevancy for scope-marking. Observe the following paradigm cited from Hasegawa (2005):

- (20) a. Zen'in-ga sono tesuto-o uke-nakat-ta (koto)
all-Nom that test-Acc take-Neg-Past (fact)
‘(the fact that) all did not take that test.’ not > all, all > not
(originally due to Miyagawa 2001)
- b. Hanako-mo sono tesuto-o uke-nakat-ta (koto)
Hanako-also that test-Acc take-Neg-Past (fact)
‘(the fact that) Hanako, too, did not take that test.’ *not > also, also > not

Note that in (20a) the nominative subject can take either wide scope over negation or narrow scope under negation, while the *mo*-phrase must take scope over negation. Under my analysis of the clausal configuration in Japanese, both *zen'in* ‘all’ and *Hanako* have undergone overt movement from within the vP to [Spec, CaseP] and [Spec, FocP], respectively, leaving behind their copy at their original position. The crucial difference between (20a) and (20b) seems to be that although in the former case both of the copies at the launching site and the landing site count for scope relation with negation, in the latter case only the landing site matters for such a purpose. This can be related to the fact that the nominative Case particle *ga* does not carry any semantic features, playing no role at the semantic component while the K-particle *mo* does have relevant semantic features to yield an appropriate semantic interpretation at the semantic component. Hence, the nominative Case particle does not serve for scope-taking, but the K-particle head does.

Incidentally, Hasegawa (2005) cites Miyagawa’s (2005) observation concerning the scope interaction between multiple occurrences of *mo*-phrases and negation, as in (21):

- (21) a. Taro-mo (konpyuuta-to-doozi-ni) monitaa-mo kaw-anakat-ta.
Taro-also computer.at.the.same.time monitor-also buy-Neg-Past
‘Taro, too, didn’t buy also a monitor (at the same time as a computer).’
(i) Taro-also > Neg (ii) *Neg > Taro-also
(iii) Monitor-also > Neg (iv) Neg > Monitor-also
- b. Monitaa-mo_i Taro-mo (konpyuuta-to-doozi-ni) t_i kaw-anakat-ta.
monitor-also Taro-also computer.at.the.same.time buy-Neg-Past
‘Taro, too, didn’t buy also a monitor (at the same time as a computer).’

- (i) Taro-also > Neg (ii) *Neg > Taro-also
- (iii) Monitor-also > Neg (iv) *Neg > Monitor-also

Miyagawa (2005) judges that the scope relation Neg > Monitor-also is allowed in (21a), to which Hasegawa (2005) seems to agree with. However, I do not concur with their judgment on this fact. It seems to me that the relevant scope relation Neg > Monitor-also cannot obtain unless the second occurrence of *mo*-phrase is located within an embedded clause of the following sort:

- (22) Taro-mo [[(konpyuuta-to-doozi-ni) monitaa-mo kat-ta] wake-de-wa na-i].
 Taro-also computer.at.the.same.time monitor-also buy-Past it-is-not-the-case
 ‘As for Taro, too, it is not the case that he bought also a monitor (at the same time as a computer).’
- (i) Taro-also > Neg (ii) *Neg > Taro-also
 - (iii) *Monitor-also > Neg (iv) Neg > Monitor-also

Thus, my judgment on (21a,b) is that there is no difference with scopal relation, as indicated below:

- (21)’ a. Taro-mo (konpyuuta-to-doozi-ni) monitaa-mo kaw-anakat-ta.
 Taro-also computer.at.the.same.time monitor-also buy-Neg-Past
 ‘Taro, too, didn’t buy also a monitor (at the same time as a computer).’
- (i) Taro-also > Neg (ii) *Neg > Taro-also
 - (iii) Monitor-also > Neg (iv) *Neg > Monitor-also
- b. Monitaa-mo_i Taro-mo (konpyuuta-to-doozi-ni) _i kaw-anakat-ta.
 monitor-also Taro-also computer.at.the.same.time buy-Neg-Past
 ‘Taro, too, didn’t buy also a monitor (at the same time as a computer).’
- (i) Taro-also > Neg (ii) *Neg > Taro-also
 - (iii) Monitor-also > Neg (iv) *Neg > Monitor-also

This fact is also to be naturally accommodated under my analysis if it is assumed that Neg is located between the TP-internal FocP and the vP.

By the same token, if my analysis of association with focus concerning the F-particle *dake* is on the right track, *dake* must be associated with an element in its domain, while the *dake*-phrase per se takes scope at [Spec,FocP], which is located TP-internally or TP-externally.

A piece of empirical evidence in support of the abstract FocP projection for the

dake-phrase comes from the scopal interaction of the F-particle *dake* and the modal auxiliary verb *e* ‘can’ in Japanese. Shoji (1986), Harada and Noguchi (1992), and Futagi (2004) among others discuss an interesting contrast of the following sort in (23)-(24):

- (23) Taro-wa **Hanako-to-dake** asob-eru.
 Taro-Top Hanako-with-dake play-can
 “The only person Taro can play with is Hanako (he can’t play with others).”
 (dake > can)
- (24) Taro-wa **Hanako-dake-to** asob-eru.
 Taro-Top Hanako-dake-with play-can
 a. “The only person Taro can play with is Hanako (he can’t play with others).”
 (dake > can)
 b. “Taro can play with Hanako alone (without playing with others).”
 (can > dake)

(= adapted from Futagi 2004: 3, (1)–(2))

In (23), the only available reading is such that the focus particle *dake* takes scope over the modal auxiliary verb *e* “can,” whereas in (24) both scopal relations in (a) and (b) are permitted for interpretations. The facts in (23)–(24) suggest that whether the F-particle *dake* occurs PP-internally or PP-externally is related to the placement of the boldfaced element with respect to the modal auxiliary verb.

The relevant scopal patterns follow if we assume that the expression [DP-P-*dake*] in (23) is a *dake*P as a whole, but the one [DP-*dake*-P] is not, which makes sense since the former is headed by the focus particle *dake* while the latter is by the postposition *to* ‘with,’ and that the FocP headed by an abstract Foc is located above the modal auxiliary verb.

Under this analysis, the FocP *Hanako-to-dake* in (23) undergoes overt movement to [Spec,FocP] located above the modal auxiliary *e* ‘can,’ taking scope over it. On the other hand, since the PP *Hanako-dake-to* is a regular PP, it does not have to be treated in the same fashion. Recall that the F-particle *dake* per se does not enter into Agree with the Foc head but that association with focus takes place by direct merger between *dake* and its associate element. Thus, in principle, the regular PP like *Hanako-dake-to* containing *dake* can occur in a clausal configuration without any Foc projections unlike the case involving the quantificational phrase *Hanako-to-dake* in Japanese (note that Foc projections are optional).

On the basis of this consideration, I will take the scopal ambiguity observed in

(24) as arising from optional application of PP scrambling. If the PP *Hanako-dake-to* is moved past the modal auxiliary verb *e* ‘can’ by scrambling, its scope can be wider than the modal; if not, the PP remains in-situ within the domain of the modal, yielding the scopal relation in (b) (see Futagi 2004 for a different approach to this issue).

3.2. Mechanism of Focus-related Agree and Move

Recall the dichotomy in (14) in section 3.2, which is reproduced as (25) below for ease of reference:

(25) a. K-particles:

$[_{CP} [_{FocP} \text{wa/mo/(sae)} [_{TP} [_{CaseP} [_{FocP} \text{wa/mo/(sae)} [_{vP} \dots]]]]]]$

b. F-particles:

$[_{CP} [_{FocP} \emptyset [_{TP} [_{CaseP} [_{FocP} \emptyset [_{vP} \dots XP \dots]]]]]]$

(XP = $[_{F\text{-particle}P} \text{dake/made/bakari/(sae)} [YP \dots]]$)

Given the configurations in (25), it seems reasonable to assume that the relevant Foc(P) is located at an A-bar position. In this connection, it is instructive to take into account the wh-movement construction, a representative A-bar construction here. Chomsky (2000) and Watanabe (2004, 2005) proposes the following mechanism of Agree and Move in (26) for overt wh-movement:

(26) Chomsky (2000) and Watanabe (2004, 2005): Overt Wh-movement

- a. $[\dots [C \dots \dots \text{Wh-phrase} \dots]]$
 [EPP] [uWh] (or [uF] in Watanabe (2004, 2005))
 [uQ] [Q]
- b. $[\dots [\text{Wh-phrase} \dots [C \dots \dots \text{Wh-phrase} \dots]]]]$
 ~~{uWh}~~ (or ~~{uFoc}~~) ~~{EPP}~~
 in Watanabe (ibid.)) ~~{uQ}~~
 [Q]

The interrogative C has [uQ] (= uninterpretable Q-feature) and [EPP] feature and the wh-phrase carries [Q] (= interpretable Q-feature) and [uWh] (= uninterpretable Wh-feature for Chomsky 2000) or [uFoc] (= uninterpretable Focus-feature for Watanabe 2004, 2005). [uQ] in C seeks down and matches with the [Q] in the wh-phrase and gets eliminated after receiving its value. On top of that, [EPP] in C identifies [uWh]/[uFoc] in the wh-phrase and attracts the whole wh-phrase to [Spec,CP] overtly, with [EPP] and [uWh]/[uFoc] being eliminated. This is more or

less the relevant mechanism behind overt wh-movement, overlooking the difference between Chomsky (2000) and Watanabe (2004, 2005).

Basically, I would like to propose to extend their mechanism of overt wh-movement into the domain of another A-bar construction in question, claiming that there is a kind of A-bar type overt movement process involved in the relation between the focus head Foc above vP and the associate element X(P) in its domain to be overtly attracted to [Spec,FocP]. More specifically, I will propose the computation in narrow syntax for association with focus in Japanese, as stated in (27) and as illustrated in (28)-(29) below (see also Hoshi and Miyoshi 2005 with respect to the mechanism of association with focus involving the F-particle *dake*).¹¹⁾

(27) Narrow Syntactic Computation for Association with Focus in Japanese:

mo (= a K-particle) ‘also, too’ undergoes association with focus by Agree between the Foc(us) head *mo* and its associate XP in its domain, with the XP being attracted to [Spec,FocP]. On the other hand, *dake* (= an F-particle) ‘only’ enters into association with focus by Merge between *dake* and its associate XP, with the resultant *dakeP* being overtly attracted to [Spec,FocP] via Agree.

(28) K-particle (e.g., *mo* ‘also, too’):

- a. Agree between Foc and X(P)

[... [Foc(= K-particle) X(P) ...]]	
[EPP]	[uFoc]
[ufocus]	[focus]

- b. Movement of XP to [Spec,FocP]

[... [X(P	[Foc(= K-particle) <u>X(P</u> ...)]]
[uFoc]	[EPP]
[focus]	[ufocus]

(29) F-particle (e.g., *dake* ‘only’):

- a. Merge between F-particle and XP

[_{F-particleP}	F-particle	X(P)]
[EPP]		[uFoc]
		[focus]

- b. Movement of XP to [Spec,F-particleP]

[_{F-particle} P X(P)	[F-particle <u>X(P)</u>]
[uFoc]	[FPP]
[focus]	

- c. Agree between Foc and X(P)

[... [Foc [_{F-particleP} X(P) [F-particle X(P)]] ...]]
 [EPP] [uFoc] [~~EPP~~]
 [~~ufocus~~] [focus]

d. Movement of F-particleP by Pied-piping to [Spec,FocP]

[... [_{F-particleP} X(P) [F-particle X(P)]] [Foc... [_{F-particleP} ...]]
 [~~uFoc~~] [~~EPP~~] [~~EPP~~]
 [focus] [~~ufocus~~]

The probe Foc with the EPP feature [EPP] and an uninterpretable focus feature [ufocus] seeks down a goal with an uninterpretable focus feature [uFoc] and interpretable focus feature [focus]. Matching between the [ufocus] at the probe and the [focus] at the goal will value the former, and the [EPP] at the probe and the [uFoc] at the goal will be satisfied after the goal is overtly moved to [Spec,FocP]. Notice that it is assumed that the [uFoc] at the goal cannot be satisfied only by matching between the [ufocus] at the probe and the [focus] at the goal on a par with the [uWh]/[uFoc] at the goal in overt wh-movement.^{12), 13)}

Notice that the difference between the K-particle and the F-particle is that, while the former enters into an Agree relation with its associate X(P), the latter does not participate in such an Agree relation with its associate X(P) per se. Thus, although the Foc head overtly realized as a K-particle is responsible for both association with focus and scope-marking, the abstract Foc head in the case of an F-particle is only relevant for scope-marking. With respect to an F-particle, for that matter, “association with focus” takes place within the projection of the F-particle overtly realized as an F-particle without any involvement of “focus-feature checking,” unlike in the case of K-particles. Notice further that, in the case of F-particles, since the Foc head is devoid of any semantic feature unlike the Foc head for K-particles, there would be no “association-with-focus” relation to be established over and above the one between the F-particle and its sister element via direct merger.

3.3. Deriving Core Cases of Association with Narrow Focus in Japanese

In this section, I will attempt to derive the core cases of association with narrow focus in Japanese. Observe the relevant paradigms in (30)-(31) below ((30) = (9)):

(30) a. *John*-mo Mary-ni hon-o watasita.

John-also Mary-Dat book-Acc handed to

‘Lit.Also John handed a book to Mary.’

= In addition to someone else’s handing a book to Mary,

John handed a book to Mary.

- b. John-ga **Mary-ni**-mo hon-o watasita.

John-Nom Mary-Dat-also book-Acc handed to

‘Lit. John handed a book also to Mary.’

= In addition to John’s handing a book to someone else, he handed a book to Mary.

- c. John-ga Mary-ni **hon(-o)**-mo watasita.

John-Nom Mary-Dat book-Acc-also handed to

‘Lit. John handed also a book to Mary.’

= In addition to John’s handing something else to Mary, he handed a book to her.

- (31) a. **John**-dake Mary-ni hon-o watasita.

John-only Mary-Dat book handed to

‘Lit. Only John handed a book to Mary.’

= Nobody other than John handed a book to Mary.

- b. **John**-dake-ga Mary-ni hon-o watasita.

John-only-Nom Mary-Dat book handed to

‘Lit. Only John handed a book to Mary.’

= Nobody other than John handed a book to Mary.

- c. John-ga **Mary**-dake-ni hon-o watasita.

John-Nom Mary-only-Dat book-Acc handed to

‘Lit. John handed a book only to Mary.’

= John handed a book to nobody other than Mary.

- d. John-ga **Mary-ni**-dake hon-o watasita.

John-Nom Mary-Dat-only book-Acc handed to

‘Lit. John handed a book only to Mary.’

= John handed a book to nobody other than Mary.

- e. John-ga Mary-ni **hon**-dake watasita.

John-Nom Mary-Dat book-only handed to

‘Lit. John handed only a book to Mary.’

= John handed nothing other than a book to Mary.

- f. John-ga Mary-ni **hon**-dake-o watasita.

John-Nom Mary-Dat book-only-Acc handed to

‘Lit. John handed only a book to Mary.’

= John handed nothing other than a book to Mary.

- g. *?John-ga Mary-ni **hon-o**-dake watasita.¹⁴⁾

Now, let us consider the derivation for (30a). There are two possible derivations for (30a). First, consider the case where the K-particle *mo* is merged TP-internally: (In the following discussion, I will suppress the C head and its projection just for the purpose of expository simplicity, unless mentioning of them is in order for the explanation in the text.)

- (32) [$\emptyset$ _{ga} [_{Foc} **mo** [_{VP} **John** [_v [_{VP} Mary-ni watasi hon-o]]]]]
- (→ [ufocus] in *mo* matches with [focus] in *John* and gets valued, yielding association with focus between *mo* and *John*. *John* with [uFoc] is attracted to [Spec,*mo*P] due to [EPP] in *mo*, with the [uFoc] and [EPP] being satisfied)
- [$\emptyset$ _{ga} [**John**_i [_{Foc} **mo** [_{VP} _i [_v [_{VP} Mary-ni watasi hon-o]]]]]]]
- (→ the nominative Case head $\emptyset$ _{ga} enters into Agree with *John* with respect to ϕ -features, with [uCase] in *John* being valued. T is merged.)
- [_{TP} -ta [$\emptyset$ _{ga} [**John**_i [_{Foc} **mo** [_{VP} _i [_v [_{VP} Mary-ni watasi hon-o]]]]]]]
- (→ V-v-T movement is applied.)
- [_{TP} watasi_{jk}-ta [$\emptyset$ _{ga} [**John**_i [_{Foc} **mo** [_{VP} _i [_{t_k} [_{VP} Mary-ni _j hon-o]]]]]]]
- (→ *ga*P is attracted to [Spec,TP])
- [_{TP} [$\emptyset$ _{ga} [**John**_i [_{Foc} **mo** [_{VP} _i [_{t_k} [_{VP} Mary-ni _j hon-o]]]]]]]_k [_T [_T watasi_{jk}-ta _i]]]

Next, let us examine the case in which the K-particle *mo* is merged TP-externally.

- (33) [$\emptyset$ _{ga} [_{VP} John [_v [_{VP} Mary-ni watasi hon-o]]]]]
- (→ the nominative Case head $\emptyset$ _{ga} enters into Agree with *John* with respect to ϕ -features, with [uCase] in *John* being valued. T is merged.)
- [_{TP} -ta [$\emptyset$ _{ga} [_{VP} John [_v [_{VP} Mary-ni watasi hon-o]]]]]
- (→ V-v-T movement is applied.)
- [_{TP} [_T watasi_{ij}-ta [$\emptyset$ _{ga} [_{VP} John [_{t_j} [_{VP} Mary-ni _i hon-o]]]]]]]
- (→ *ga*P is attracted to [Spec,TP].)
- [_{TP} [$\emptyset$ _{ga} [_{VP} John [_{t_j} [_{VP} Mary-ni _i hon-o]]]]]_k [_T [_T watasi_{ij}-ta _k]]]
- (→ Foc is merged.)
- [_{FocP} **mo** [_{TP} [$\emptyset$ _{ga} [_{VP} **John** [_{t_j} [_{VP} Mary-ni _i hon-o]]]]]_k [_T [_T watasi_{ij}-ta _k]]]
- (→ [ufocus] in *mo* matches with [focus] in *John* and gets valued, yielding association with focus between *mo* and *John*. *John* with [uFoc] is attracted to [Spec,*mo*P] due to [EPP] in *mo*, with the [uFoc] and [EPP]

being satisfied.)

$[_{FocP} \text{John}_i [_{mo} [_{TP} [\emptyset ga [_{vP} t_i [t_j [_{VP} \text{Mary-ni } t_i \text{ hon-o}]]]]]_k [_T [_T \text{watasi}_{i,j}\text{-ta } t_k]]]]]$

Second, let us turn to the case in (30b). Here, the K-particle *mo* is merged as the Foc head TP-internally, taking vP as its complement. The derivation for (30b) should go as follows:

- (34) $[_{FocP} \text{mo} [_{vP} \text{John} [v [_{VP} \text{Mary-ni } \text{watasi } \text{hon-o}]]]]]$
 (→ [ufocus] in *mo* matches with [focus] in *Mary-ni* and gets valued, yielding association with focus between *mo* and *Mary-ni*. *Mary-ni* with [uFoc] is attracted to [Spec,*moP*] due to [EPP] in *mo*, with the [uFoc] and [EPP] being satisfied.)
 $[_{FocP} \text{Mary-ni}_i [_{Foc} \text{mo} [_{vP} \text{John} [v [_{VP} t_i \text{ watasi } \text{hon-o}]]]]]]]$
 (→ the nominative Case particle *ga* is merged.)
 $[_{gaP} ga [_{FocP} \text{Mary-ni}_i [_{Foc} \text{mo} [_{vP} \text{John} [v [_{VP} t_i \text{ watasi } \text{hon-o}]]]]]]]]]$
 (→ the nominative Case head *ga* enters into Agree with *John* with respect to ϕ -features, with [uCase] in *John* being valued. *John* is attracted to [Spec,*gaP*] due to [EPP] in *ga*, T is merged.)
 $[_{TP} \text{-ta} [_{gaP} \text{John-ga} [_{FocP} \text{Mary-ni}_i [_{Foc} \text{mo} [_{vP} t_j [v [_{VP} t_i \text{ watasi } \text{hon-o}]]]]]]]]]]]$
 (→ V-v-T movement is applied.)
 $[_{TP} \text{watasi}_{k,l}\text{-ta} [_{gaP} \text{John-ga} [_{FocP} \text{Mary-ni}_i [_{Foc} \text{mo} [_{vP} t_j [t_l [_{VP} t_i t_k \text{ hon-o}]]]]]]]]]]]$
 (→ *gaP* is attracted to [Spec,TP])
 $[_{TP} [_{gaP} \text{John-ga} [_{FocP} \text{Mary-ni}_i [_{Foc} \text{mo} [_{vP} t_j [t_l [_{VP} t_i t_k \text{ hon-o}]]]]]]]]]_m$
 $[_T [_T \text{watasi}_{k,l}\text{-ta } t_m]]]$

Notice that the ungrammaticality of the sequence *Mary-mo-ni* can be naturally accounted for under the present analysis: the sequence *Mary-mo-ni* cannot be simply created because [*Mary-ni*] must be moved as a unit to [Spec,*moP*], due to the general ban on P-stranding in Japanese.

Third, what about the cases in (30c)? They can also be analyzed as the K-particle *mo* taking vP as its complement. The relevant derivation should be something like the following:¹⁵⁾

- (35) $[_{FocP} \text{mo} [_{vP} \text{John} [v [_{VP} \text{Mary-ni } \text{watasi } \text{hon}(-o)]]]]]$
 (→ [ufocus] in *mo* matches with [focus] in *hon(-o)* and gets valued, yielding association with focus between *mo* and *hon(-o)*. *hon(-o)* with [uFoc] is attracted to [Spec,*moP*] due to [EPP] in *mo*, with the [uFoc]

and [EPP] being satisfied.)

$[_{\text{FocP}} \text{hon(-o)}_i [_{\text{Foc}} \text{mo} [_{\text{vP}} \text{John} [_{\text{v}} [_{\text{VP}} \text{Mary-ni watasi } t_i]]]]]$

(→ *Mary-ni* is scrambled to FocP)

$[_{\text{FocP}} \text{Mary-ni}_j [_{\text{Foc}} \text{hon(-o)}_i [_{\text{Foc}} \text{mo} [_{\text{vP}} \text{John} [_{\text{v}} [_{\text{VP}} t_j \text{ watasi } t_i]]]]]]]$

(→ the nominative Case particle *ga* is merged. The nominative Case head *ga* enters into Agree with *John* with respect to ϕ -features, with [uCase] in *John* being valued.)

$[_{\text{gaP}} \text{ga} [_{\text{FocP}} \text{Mary-ni}_j [_{\text{Foc}} \text{hon(-o)}_i [_{\text{Foc}} \text{mo} [_{\text{vP}} \text{John} [_{\text{v}} [_{\text{VP}} t_j \text{ watasi } t_i]]]]]]]]]$

(→ *John* is attracted to [Spec,*gaP*] due to [EPP] in *ga*, T is merged.)

$[_{\text{TP}} \text{-ta} [_{\text{gaP}} \text{John}_k\text{-ga} [_{\text{FocP}} \text{Mary-ni}_j [_{\text{Foc}} \text{hon(-o)}_i [_{\text{Foc}} \text{mo} [_{\text{vP}} t_k [_{\text{v}} [_{\text{VP}} t_j \text{ watasi } t_i]]]]]]]]]]]$

(→ V-v-T movement is applied.)

$[_{\text{TP}} \text{watasi}_{l-m}\text{-ta} [_{\text{gaP}} \text{John}_k\text{-ga} [_{\text{FocP}} \text{Mary-ni}_j [_{\text{Foc}} \text{hon(-o)}_i [_{\text{Foc}} \text{mo} [_{\text{vP}} t_k [_{t_m} [_{\text{VP}} t_j t_i]]]]]]]]]]]$

(→ *gaP* is attracted to [Spec,TP])

$[_{\text{TP}} [_{\text{gaP}} \text{John}_k\text{-ga} [_{\text{FocP}} \text{Mary-ni}_j [_{\text{Foc}} \text{hon(-o)}_i [_{\text{Foc}} \text{mo} [_{\text{vP}} t_k [_{t_m} [_{\text{VP}} t_j t_i]]]]]]]]]]_n [_{\text{T}} \text{watasi}_{l-m}\text{-ta } t_n]]]$

Now, let us turn our attention to the paradigm for the F-particle *dake* in (31).¹⁶⁾ First, consider the case in (31a). Here, the Foc head is merged TP-internally and the F-particle *dake* is directly merged with the DP *John*. The derivation for (31a) would go as follows:

(36) $[_{\text{FocP}} \text{Foc} [_{\text{vP}} [_{\text{dakeP}} \text{dake} [\text{John}]] [_{\text{v}} [_{\text{VP}} \text{Mary-ni watasi hon-o}]]]]]$

(→ The F-particle *dake* takes *John* as its complement and “association with focus” takes place without Agree. *John* is attracted to [Spec,*dakeP*] due to [EPP] in *dake*. [ufocus] in Foc matches with [focus] in *John* and gets valued.)

$[_{\text{FocP}} \text{Foc} [_{\text{vP}} [_{\text{dakeP}} \text{John}_i\text{-dake } t_i] [_{\text{v}} [_{\text{VP}} \text{Mary-ni watasi hon-o}]]]]]$

(→ [*dakeP* *John_i-dake t_i*] is attracted to [Spec,FocP] by pied-piping, since Foc has [EPP] and *John* has [uFoc], with the [uFoc] and [EPP] being satisfied. The null nominative Case particle *Øga* is merged.)

$[_{\text{Øga}} [_{\text{FocP}} [_{\text{dakeP}} \text{John}_i\text{-dake } t_i] \text{Foc} [_{\text{vP}} t_j [_{\text{v}} [_{\text{VP}} \text{Mary-ni watasi hon-o}]]]]]]]$

(→ the null nominative Case head *Øga* enters into Agree with *John* with respect to ϕ -features, with [uCase] in *John* being valued. T is merged, V-v-T movement is applied.)

$[_{\text{TP}} \text{watasi}_{kl}\text{-ta} [_{\text{Øga}} [_{\text{FocP}} [_{\text{dakeP}} \text{John}_i\text{-dake } t_i] \text{Foc} [_{\text{vP}} t_j t_i [_{\text{VP}} \text{Mary-ni } t_k \text{ hon-o}]]]]]]]$

$$\begin{aligned}
 & (\rightarrow gaP \text{ is attracted to } [Spec, TP]) \\
 & [_{TP} [\emptyset ga [_{FocP} [_{dakeP} \textbf{John}_i\text{-dake } t_i]_j \textbf{Foc} [_{vP} t_j t_i [_{vP} \text{Mary-ni } t_k \text{ hon-o}]]]]_m \\
 & \qquad \qquad \qquad [_{T'} [_{T'} \text{watasi}_{kl}\text{-ta } t_m]]]
 \end{aligned}$$

On the other hand, when the Foc head is merged TP-externally, the relevant derivation would proceed as follows:

- (37) $[_{vP} [_{dakeP} \text{dake } [John]] [v [_{vP} \text{Mary-ni watasi hon-o}]]]$
 (→ The F-particle *dake* takes *John* as its complement and “association with focus” takes place without Agree. *John* is attracted to $[Spec, dakeP]$ due to [EPP] in *dake*.)
- $[_{vP} [_{dakeP} \text{John}_i\text{-dake } t_i] [v [_{vP} \text{Mary-ni watasi hon-o}]]]$
 (→ The null nominative Case particle $\emptyset ga$ is merged. The null nominative Case head $\emptyset ga$ enters into Agree with *John* with respect to ϕ -features, with [uCase] in *John* being valued.)
- $[\emptyset ga [_{vP} [_{dakeP} \text{John}_i\text{-dake } t_i] [v [_{vP} \text{Mary-ni watasi hon-o}]]]]$
 (→ T is merged, V-v-T movement is applied.)
- $[_{TP} \text{watasi}_{jk}\text{-ta } [\emptyset ga [_{vP} [_{dakeP} \text{John}_i\text{-dake } t_i] [t_k [_{vP} \text{Mary-ni } t_j \text{ hon-o}]]]]]$
 (→ *gaP* is attracted to $[Spec, TP]$, Foc is merged. [ufocus] in Foc matches with [focus] in *John* and gets valued.)
- $[_{FocP} \textbf{Foc} [_{TP} [\emptyset ga [_{vP} [_{dakeP} \textbf{John}_i\text{-dake } t_i] [t_k [_{vP} \text{Mary-ni } t_j \text{ hon-o}]]]]] [_{T'} [_{T'} \text{watasi}_{jk}\text{-ta}]]]$
 (→ $[_{dakeP} \textbf{John}_i\text{-dake } t_i]$ is attracted to $[Spec, FocP]$ by pied-piping, since Foc has [EPP] and *John* has [uFoc], with the [uFoc] and [EPP] being satisfied.)
- $[_{FocP} [_{dakeP} \textbf{John}_i\text{-dake } t_i] \textbf{Foc} [_{TP} [\emptyset ga [_{vP} t_i [t_k [_{vP} \text{Mary-ni } t_j \text{ hon-o}]]]]] [_{T'} [_{T'} \text{watasi}_{jk}\text{-ta}]]]$

Similarly, the derivation for (31b) should run as follows:

- (38) $[_{FocP} \textbf{Foc} [_{vP} [_{dakeP} \text{dake } [John]] [v [_{vP} \text{Mary-ni watasi hon-o}]]]]$
 (→ The F-particle *dake* takes *John* as its complement and “association with focus” takes place without Agree. *John* is attracted to $[Spec, dakeP]$ due to [EPP] in *dake*. [ufocus] in Foc matches with [focus] in *John* and gets valued.)
- $[_{FocP} \textbf{Foc} [_{vP} [_{dakeP} \textbf{John}_i\text{-dake } t_i] [v [_{vP} \text{Mary-ni watasi hon-o}]]]]$
 (→ $[_{dakeP} \textbf{John}_i\text{-dake } t_i]$ is attracted to $[Spec, FocP]$ by pied-piping, since Foc has [EPP] and *John* has [uFoc], with the [uFoc] and [EPP] being

satisfied. The nominative Case particle *ga* is merged.)

- [ga [_{FocP} [_{dakeP} **John**_i-dake t_{i,j} **Foc** t_j [v [_{VP} Mary-ni watasi hon-o]]]]]
 (→ The nominative Case head *ga* enters into Agree with *John* with respect to ϕ -features, with [uCase] in *John* being valued. The nominative Case particle *ga* attracts *John-dake* to [Spec, *gaP*] by pied-piping, since *ga* has [EPP] and *John* has [uCase], with [EPP] and [uCase] being satisfied, T is merged, V-v-T movement is applied.)
- [_{TP} watasi_{kl}-ta [_{gaP} [_{dakeP} **John**_i-dake t_{i,j} *ga* [_{FocP} **Foc** t_j [_{VP} t_j t_i [_{VP} Mary-ni t_k hon-o]]]]]
 (→ *gaP* is attracted to [Spec,TP])
- [_{TP} [_{gaP} [_{dakeP} **John**_i-dake t_{i,j} *ga* [_{FocP} **Foc** t_j [_{VP} t_j t_i [_{VP} Mary-ni t_k hon-o]]]]]_m
 [_T [_T watasi_{kl}-ta t_m]]]

It is to be noted that the reason for the ungrammaticality of the sequence *John-ga-dake* is clear: the sequence *John-ga-dake* cannot be simply generated due to the non-constituency of *John-ga* in the first place under the present analysis.

Now, let us look at the derivation for (31c), in which the F-particle *dake* is directly merged with the DP *Mary*. Here, I am assuming that the dative Case marker *-ni* in Japanese is on a par with the accusative Case marker *-o* with respect to “transparency” for Agree.

- (39) [_{FocP} **Foc** [_{VP} John [v [_{VP} [ni [*dake* [*Mary*]]] watasi hon-o]]]]]
 (→ *dake* takes *Mary* as its complement and “association with focus” takes place without Agree, the *dakeP* is in turn selected by the dative Case particle, *Mary* is attracted to [Spec, *dakeP*]. [ufocus] in *Foc* matches with [focus] in *Mary* and gets valued.)
- [_{FocP} **Foc** [_{VP} John [v [_{VP} [ni [*Mary*_i-dake t_i]] watasi hon-o]]]]]
 (→ The whole *dakeP* is attracted to [Spec, *niP*] due to [EPP] at *ni*, the whole dative Case phrase is attracted to [Spec, *FocP*], with [EPP] at *Foc* and [uFoc] at *Mary* being satisfied, the nominative Case particle *ga* is merged.)
- [ga [_{FocP} [[*Mary*_i-dake t_{i,j}]-ni t_{j,k} **Foc** [_{VP} John [v [_{VP} t_k watasi hon-o]]]]]]]
 (→ The nominative Case head *ga* enters into Agree with *John* with respect to ϕ -features, with [uCase] in *John* being valued. *John* is attracted to [Spec, *gaP*], T is merged, V-v-T movement is applied.)
- [_{TP} watasi_{mn}-ta [_{gaP} John-*ga* [_{FocP} [[*Mary*_i-dake t_{i,j}]-ni t_{j,k} **Foc** [_{VP} t_j [t_n [_{VP} t_k t_m hon-o]]]]]]]

(→ *gaP* is attracted to [Spec,TP])

$$[_{TP} [_{gaP} John_i-ga [_{FocP} [[Mary_i-dake t_i]_j-ni t_j]_k Foc [_{VP} t_i [t_n [_{VP} t_m t_l hon-o]]]]]]_o$$

$$[_T [_T watasi_{m-n}-ta t_o]]]$$

Similarly, the derivation for (31d) should go as follows.¹⁷⁾

- (40) $[_{FocP} Foc [_{VP} John [v [_{VP} [dake [ni [Mary]]] watasi hon-o]]]]]$
 (→ The dative Case particle takes *Mary* as its complement, *dake* in turn selects the dative PP and “association with focus” takes place without Agree, *Mary* is attracted to [Spec,*niP*], the result of which is attracted to [Spec,*dakeP*]. [ufocus] in Foc matches with [focus] in *Mary* and gets valued.)
 $[_{FocP} Foc [_{VP} John [v [_{VP} [[Mary_i-ni t_i]_j-dake t_j] watasi hon-o]]]]]$
 (→ *Mary-ni-dake* is attracted to [Spec,FocP] due to [EPP] at Foc and [uFoc] at *Mary*, with both of them being satisfied. The nominative Case particle *ga* is merged. The nominative Case head *ga* enters into Agree with *John* with respect to ϕ -features, with [uCase] in *John* being valued. *John* is attracted to [Spec,*gaP*], T is merged, V-v-T movement is applied.)
 $[_{TP} watasi_{m-n}-ta [_{gaP} John_i-ga [_{FocP} [[Mary_i-ni t_i]_j-dake t_j]_k Foc$

$$[_{VP} t_l [t_n [_{VP} t_k t_m hon-o]]]]]]]$$

 (→ *gaP* is attracted to [Spec,TP])
 $[_{TP} [_{gaP} John_i-ga [_{FocP} [[Mary_i-ni t_i]_j-dake t_j]_k Foc [_{VP} t_l [t_n [_{VP} t_k t_m hon-o]]]]]]_o$

$$[_T [_T watasi_{m-n}-ta t_o]]]$$

Next, let us turn to the derivations for (31e,f), which should look something like the following:

- (41) $[_{FocP} Foc [_{VP} John [v [_{VP} Mary-ni watasi [o [dake [hon]]]]]]]]]$
 (→ *dake* takes *hon* as its complement and “association with focus” takes place without Agree, the *dakeP* in turn is selected by the accusative Case particle, *hon* is attracted to [Spec,*dakeP*])
 $[_{FocP} Foc [_{VP} John [v [_{VP} Mary-ni watasi [o [hon_i-dake t_i]]]]]]]$
 (→ the whole *dakeP* is attracted to [Spec,*oP*]. [ufocus] in Foc matches with [focus] in *hon* and gets valued.)
 $[_{FocP} Foc [_{VP} John [v [_{VP} Mary-ni watasi [[hon_i-dake t_i]_j-o t_j]]]]]$
 (→ The whole *hon-dake-o* is attracted to [Spec,FocP] due to [EPP] at Foc

and [uFoc] at *hon*, with both of them being satisfied. The nominative Case particle *ga* is merged. The nominative Case head *ga* enters into Agree with *John* with respect to ϕ -features, with [uCase] in *John* being valued. *John* is attracted to [Spec,*ga*P], *Mary-ni* is scrambled to adjoin to FocP, T is merged, V-v-T movement is applied.)

$$\begin{aligned}
 & [_{TP} \text{ watasi}_{n-o} \text{-ta} [_{gaP} \text{ John}_m \text{-ga} [_{FocP} \text{ Mary-ni}_l [_{FocP} [[\text{hon}_i \text{-dake } t_{i,j}]_j \text{-o } t_{j,k}]_k \text{ Foc} \\
 & \quad \quad \quad [_{vP} t_m [t_o [_{vP} t_l t_n t_k]]]]]]] \\
 & \quad (\rightarrow \text{gaP is attracted to [Spec,TP]}) \\
 & [_{TP} [_{gaP} \text{ John}_m \text{-ga} [_{FocP} \text{ Mary-ni}_l [_{FocP} [[\text{hon}_i \text{-dake } t_{i,j}]_j \text{-o } t_{j,k}]_k \text{ Foc} [_{vP} t_m [t_o [_{vP} t_l t_n t_k]]]]]]]_p \\
 & \quad \quad \quad [_{T'} [_{T'} \text{ watasi}_{n-o} \text{-ta } t_p]]]
 \end{aligned}$$

In (41), if the accusative Case particle is dropped/phonologically null, the surface form in (31e) obtains. Now, the important question is why (31f) is ungrammatical. Although I cannot pin down the exact source of the ungrammaticality of (31f), I will tentatively follow Hoshi and Miyoshi (2005) in assuming that the order of [DP-*dake*-o] reflects the order of “licensing” of *dake* and the accusative Case. Recall that the F-particle *dake* is to be directly merged with its focus associate. Since the accusative Case is checked and licensed with *v* in the *v*P configuration first, the [DP-*o*-*dake*] order would force a derivation in which *dake* does not merge with its focus associate properly, which is not allowed under my system of association with focus for the F-particle.

4. Conclusion

As an alternative to Hoshi (1994, 2006a), which is based on Kayne’s (1998, 2000) theory of association with focus in English, I argued for a single-cycle computational analysis of association with focus in Japanese, modifying Hoshi (1994, 2006a) in a manner more fitting for the minimalist guidelines. More specifically, instead of postulating a theoretically obscure functional head like *W*, I motivated the existence of an independent functional head *Foc* in Japanese. Further, the mechanism of Agree and Move with respect to association with focus in Japanese was formulated for two types of focus particles, i.e., K-particle and F-particle, in Japanese. More specifically, it was proposed that, in either case of association with focus, overt movement of XP to [Spec,FocP] is involved, keeping to Aoyagi’s (1998, 1999, 2006) original insight that association with focus is mediated via “focus feature agreement or sharing.” To

the extent that the present approach to association with focus in Japanese is on the right track, it will provide another support for the system of single-cycle computation in narrow syntax in Chomsky (2001b, 2004).

Notes

*I would like to express my thanks to Kazumi Matsuoka and Nobuhiro Miyoshi for fruitful discussions during the gestation period of this article. I am indebted to Nobuhiro Miyoshi for insightful comments and suggestions on an earlier version of this article, which have been quite contributory in refining it. Needless to say, all remaining inadequacies and errors are solely my own. The research reported here is supported by Japan Society for the Promotion of Science Grant-in-Aid for Scientific Research (B) 16320062 (principal investigator: Kazumi Matsuoka).

1) Strictly speaking, this does not necessarily lead to the conclusion that something like “LF representation” as the input for semantic interpretation does not exist in FL.

2) See also Kayne (2003a,b) for some discussions of such an overt movement approach to the phenomenon in question and its refinement.

3) Aoyagi (1994, 1996), Ogino (1990) and Maki (1995) among others take the position that focus particles stand as heads that project. On the other hand, appealing to Sells (1995), Aoyagi (1998) argues that such an assumption on focus particles cannot account for “categorical transparency effects” of focus particles with respect to (categorical) selection. They reason that since an independent focus particle head intervenes between a selecting head and its selected (maximal projection of a) head, the relevant selectional relation will be broken by the focus particle. Based on this reasoning, Aoyagi (1998) proposes that focus particles be treated as adjunct clitics, with their adjunct status being the source for their categorical transparency effects. However, there is an alternative account for the effects in question. Suppose that such an intervening effect with respect to (categorical) selection is regulated by c-command in such a way that in (i) below X cannot select for Z(P) due to the intervening head Y c-commanding Z(P):

- (i) $[_{XP} X [_{YP} Y [_{ZP} Z \dots]]]$
(where X c-command Y(P), and Y c-command Z(P))

Under my analysis of focus particles in conjunction with the Kaynean head-initial structure in Japanese, a focus particle is a head Y which attracts an element, say, ZP in (i) to its Spec, as illustrated below:

- (ii) $[_{XP} X [_{YP} [_{ZP} Z \dots]_i [_Y Y t_i]]]$

Suppose that the relevant selectional relation between X and Z(P) is established at the stage in (ii). Notice that according to Kayne (1994) and Chomsky (1995) a Spec element cannot be c-commanded by its right-hand head. Thus, in (ii) although X c-commands Z(P), Y does not c-command Z(P). Hence, it can be correctly predicted that no intervention effects will occur. If this reasoning is on the right track, the “categorical transparency effects” argument against the focus particle head projection analysis in Sells

(1995) and Aoyagi (1998) does not necessarily hold water. Thus, I will assume in this article, following Aoyagi (1994, 1996), Ogino (1990) and Maki (1995) among others, that a focus particle can head its own functional projection FocP. See also Collins (2001) for the claim that a head can enter into a selectional relation or Agree with an element at the Spec of its sister in principle.

4) Kayne (1998, 2000) accounts for the following contrast (in his dialect of English) on the basis of the assumption that the focus operator *only* is not directly merged with the DP *Bill* (Kayne 1998, 2000 puts ? in front of (ia) just to indicate that speakers show a substantially different range of judgments from fully acceptable to fully unacceptable):

- (i) a. ?John spoke to only Bill.
- b. John spoke only to Bill.

Kayne argues that (ib) should have the following derivation:

- (ii) ... only spoke to Bill → (attraction by *only*)
- ... [to Bill_i only] spoke t_i → (raising of *only* to W)
- ... only_j+W [to Bill_i t_j] spoke t_i → (VP-preposing to [Spec, W])
- ... [[spoke t_i]_k only_j+W] [to Bill_i t_j] t_k

In comparison with (ib), Kayne points out that (ia) would be generated if the focus operator *only* could attract the DP *Bill*, stranding the preposition *to*. Then, he suggests that such a P-stranding under attraction to *only* is not available on a par with the cases in the middle or heavy-NP shift construction, as illustrated below:

- (iii) a. *That kind of person doesn't speak to very easily.
- b. *I was speaking to about linguistics the same person you were.

If Kayne's reasoning is in the right direction, the assumption that the focus operator *only* does not merge with the DP *Bill* is tenable (see Kayne 1998, 2000 for more detailed explication on this point).

5) See Okutsu et al. (1986: chap.2) for a comprehensive non-generative grammatical treatment of various types of focus particles in Japanese.

6) I will refer to the kind of association with focus in which the focus associate is located within the c-command domain of a focus particle at surface as "association with narrow focus" and the one where such a c-command relation does not hold at surface as "association with wide focus," following Aoyagi's (1998, 1999, 2006) terms. In the present article, I will not address the phenomenon of association with wide focus in Japanese. See Hoshi (2004, 2006a, b) for a full-fledged treatment of both association with narrow focus and association with wide focus in Japanese, which is beyond the scope of this article.

7) Whitman (2001) alludes to several pieces of evidence in support of the nominative Case particle as a clausal head. Among them is the fact that *ga*-marked subject cannot undergo scrambling or clefting

(cf. Kuno 1973, Saito 1985, and Shibatani 1990 for the former and Hoji 1990 for the latter), as illustrated below:

- (i) *[sono hon-ga]_i [Taroo-ga [t_i ii to] omotteiru (koto)
 that book-Nom Taroo-Nom good Comp thinks (fact)
 ‘(... that) that book, Taroo thinks is good.’
- (ii) *Eri-o aisiteiru no-wa Mari-ga da
 Eri-Acc loves NL-Top Mari-Nom Cop
 ‘It is Mari who loves Eri.’

If the nominative Case particle *ga* is a clausal head, then it will not make up a constituent with the preceding DP. Hence, it is correctly predicted that the sequence of *DP_iga* cannot undergo any movement. Note in passing that if the analysis of the K-particle *mo* ‘also’ in the text is correct, it is predicted that *mo* cannot be attached to the focus element of the cleft construction on a par with the nominative Case particle. Fukui and Sakai (2003: 338) judges the following sentence as acceptable:

- (iii) ringo-o tabeta-no-wa Taroo-mo da
 apple-Acc ate-NL-Top Taroo-also Cop
 ‘It is also Taroo that ate apples.’

Does the apparent acceptability of (iii) pose any problem to the text analysis? Not exactly. Although I do not completely agree with Fukui and Sakai’s (2003) judgment on (iii), suppose that (iii) is acceptable. With regard to the apparent acceptability of (iii), I believe that the apparently acceptable surface form of (iii) is to be derived from the following underlying form with the deletion of the portion *na-no* by predicate ellipsis (Fukui and Sakai 2003):

- (iv) ringo-o tabeta-no-wa Taroo-mo ~~na-no~~ da.
 Apple-Acc ate-NL-Top Taroo-also Cop-NL Cop

Thus, if this possibility of derivation is removed when judging (iii), I believe that (iii) is ill-formed as a genuine cleft construction. In this connection, it is instructive to compare the following paradigm involving another K-particle *wa* ‘contrastive’:

- (v) a. *ringo-o tabeta-no-wa Taroo-wa da. (= cleft)
 apple-Acc ate-NL-Top Taroo-Cont Cop
- b. *ringo-o tabeta-no-wa Taroo-wa ~~na-no~~ da. (= predicate ellipsis)
 Apple-Acc ate-NL-Top Taroo-Cont Cop-NL Cop

Note that in this case both the cleft in (va) and the predicate ellipsis in (vb) are ill-formed. This fact seems

to give credence to my reanalysis of Fukui and Sakai's (2003) example in (iii) above.

8) I will assume that the nominative Case phrase projection is selected by T in the clausal architecture, since it is well-known that, in Japanese, the nominative Case-marked phrase is licensed by tense T (see, e.g., Shibatani 1977, Takezawa 1987, Ura 2000). On this assumption, although the English-type language forces the subject to move to [Spec,TP], the Japanese-type language does not. Rather, in the latter, the subject is moved to [Spec,*ga*P], which is optionally selected by T. (This difference might be related to the difference of (im)possibility of the multiple nominative construction in the two types of languages. I will leave this issue to future research, though.) However, I will not take the position that T will obligatorily select the nominative Case head projection, given the fact that Japanese allows for sentences without nominative subjects as pointed out by Inoue (1998), as illustrated below (also see Ueda 2002 for the claim that the *kara*-subject stays in a vP-internal position):

- (i) a. Watasi-kara renraku-o tor-anaku nat-ta.
 I-from contact-Acc make-Neg become-Past
 'I ceased to make contact from myself.'
- b. Zikka-kara kome-o okut-te ki-ta.
 home-from rice-Acc send-come-Past
 'My family sent me some rice.'
- c. Seifu-kara zaidan-ni enzyo-o okut-ta.
 government-from foundation-to financial support-Acc send-Past
 'The government sent financial support to the foundation.'
- (= Inoue 1998, (12c, d,e))

Therefore, it seems that the presence of T is a necessary condition for the occurrence of the nominative Case head, but it is not a sufficient condition for it. One possibility is to assume that, since the nominative Case head possesses [u ϕ] along with [EPP] under my analysis, it would require that an element to be attracted to its Spec have both [ϕ] and [uCase] as a set within its local search domain. In normal cases, a DP without any Case-marker would satisfy this requirement. Notice that in all the cases in (ia,b,c) there is no such an element: neither the PP nor the DP-Acc does not carry both [ϕ] and [uCase] as a set. Hence, the occurrence of the nominative Case head is not licensed despite the presence of T in the context in (i) above. In this article, I will restrict the discussion to the Japanese sentences with (null) nominative subjects, relegating an in-depth investigation into the cases as in (i) to future research.

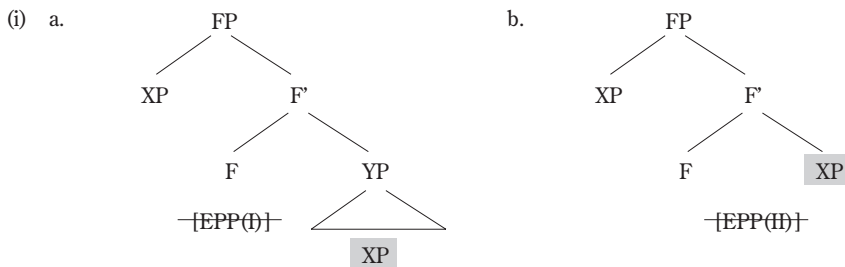
9) I will assume with Honda (1999, 2002, 2003) that there is V-to-T movement via v in Japanese under the Kaynean underlying SVO order. The obligatoriness of V-movement to T via v might be due to the suffixal properties of V, v, and T in Japanese (cf. Chomsky 2001b: 10). See Hoshi (in preparation) for some consequences of the theory of phrase structure that I am adopting in the text in connection with issues related to V-movement in Japanese.

10) This TP-external and TP-internal positioning of Foc head seems to be quite similar to the cross-linguistic pattern of Neg-head generation, or the so-called "Jespersen cycle" under the analysis by Zanuttini

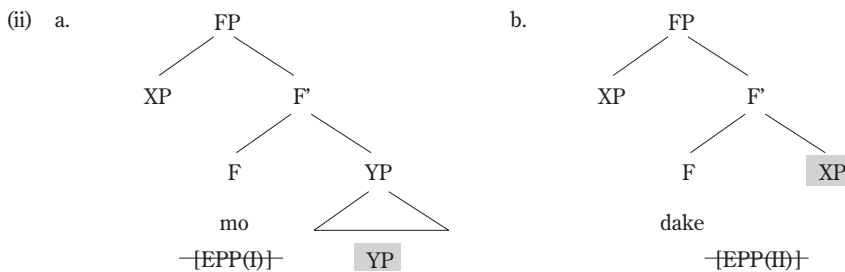
(1991, 1994, 1997) (see Ouhalla 1990, 1991 and Laka 1990 for a similar view). I am grateful to Nobuhiro Miyoshi for bringing this point into my attention.

11) I am basically following Watanabe (2005: 80) here in assuming that there are two types of focus features, viz., an interpretable focus feature and an uninterpretable focus feature, but am executing the idea in a different fashion.

12) Honda (2002) proposes two types of EPP: EPP (I) and EPP (II). The former EPP is responsible for attracting an XP within the domain YP of the head F to [Spec,FP] via feature-checking/Agree as in (ia) and the latter EPP is at work for attracting the domain XP of the head F to [Spec,FP] without any feature-checking/Agree as in (ib):



Although I adopt Honda's (2002) idea that two types of EPP are allowed by UG, I will not take the position that they are correlated with the SVO vs. SOV word order distinction. What the discussion in the text suggests is that within a single language both types of EPP can be crucially employed in explaining syntactic phenomena. The maximal projection of the two types of focus particles, viz. K-particle and F-particle, are to be realized in the following fashion in (iia, b), respectively:



13) One might wonder if the relation between the focus particles and their “associates” is mediated by some kind of operator-variable construction with the focus particles functioning as focus operators. However, this possibility can be discarded based on the following facts:

(i) a. John-wa [_{CP} Bill-ga Mary-o aisiteiru to] mo] omotteiru.

- John-Top Bill-Nom Mary-Acc loves Comp also thinks
 ‘Lit.John also thinks that Bill loves Mary.’
- b. John-wa [_{CP} Bill-ga Mary-o aisiteiru to] dake] omotteiru.
 John-Top Bill-Non Mary-Acc loves Comp only thinks
 ‘Lit.John only thinks that Bill loves Mary.’

In general, an operator can bind its variable long-distance across the clausal boundary CP, as illustrated below:

- (ii) a. Who_i thinks [_{CP} that Bill loves his_i sister]?
 b. Everyone_i thinks [_{CP} that Bill loves his_i sister].

The wh-operator *who* and the quantificational operator *everyone* can successfully bind its variable *his* across the CP boundary in (ii). If the relevant relation between the focus particles and its associates are of the same as in (ii), it is predicted that association with focus is possible across the CP boundary in (i). However, this is not the case. (ia,b) cannot be interpreted as being equivalent to (iiia,b), respectively:

- (iii) a. John-wa [_{CP} Bill-ga Mary-mo aisiteiru to] omotteiru.
 John-Top Bill-Nom Mary-also loves Comp thinks
 ‘Lit.John thinks that Bill loves Mary also.’
- b. John-wa [_{CP} Bill-ga Mary-dake-o aisiteiru to] omotteiru.
 John-Top Bill-Non Mary-only-Acc loves Comp thinks
 ‘Lit.John thinks that Bill loves only Mary.’

The above considerations lead us to the conclusion that an operator-variable construction is not playing a role in association with focus in Japanese.

14) Although Aoyagi (1998, 1999, 2006), following Yamada (1936), judges that both *DP-o-dake* and *DP-dake-o* are equally fine, I find the former quite unacceptable, disagreeing with their position on this matter. In fact, several informants that I have consulted with agree with my judgment on this matter. Thus, the paradigm in (31) reflects the type of judgment including mine. I have to leave an account for this judgmental disagreement to another occasion.

15) I will assume that the accusative Case marker can be optionally dropped in Japanese (cf. Saito 1983, 1985 *inter alia*.).

16) In fact, theoretically speaking, unlike the case of the K-particle *mo*, with respect to the case of the F-particle *dake*, there is a possibility that even if the DP merged with *dake* preceding the nominative Case-marker, the accusative Case-marker, or the dative Case-marker is not assigned any focus features, the sentence is grammatical as long as no FocP is generated in the clausal structure. Just for expository simplicity, I will not take this possible derivations into consideration in the following discussion.

17) There is a significant scopal difference between [*DP-dake-P*] and [*DP-P-dake*], as discussed in section

3. I will tentatively assume that, while the former is a PP as a whole, the latter is a kind of QP as a whole headed by a quasi-quantificational element *dake*, which will require that *[DP-P-dake]* be located at an operator position like *[Spec,FocP]*, unlike the case of the PP *[DP-dake-P]*.

References

- Aoyagi, Hiroshi. 1994. "On Association with Focus and Scope of Focus Particles in Japanese." *Formal Approaches to Japanese Linguistics* 1, *MIT Working Papers in Linguistics* 24, 23–44.
- Aoyagi, Hiroshi. 1996. "On Kuroda's Scope Mystery." *Academia* 61, 97–133. Nanzan University.
- Aoyagi, Hiroshi. 1998. On the Nature of Particles in Japanese and Its Theoretical Implications. Doctoral dissertation, University of Southern California, Los Angeles.
- Aoyagi, Hiroshi. 1999. "On Association of Quantifier-like Particles with Focus in Japanese." In Masatake Muraki and Enoch Iwamoto (eds.), *Linguistics: In Search of the Human Mind*, 24–56. Kaitakusha, Tokyo.
- Aoyagi, Hiroshi. 2006. *Nihongo no Joshi to Kinouhanchuu* [Particles in Japanese and Functional Categories]. Hitsujishobo, Tokyo.
- Belletti, Adriana. 2002. "Inversion as Focalization." In Aafke Hulk and Jean-Yves Pollock (eds.), *Subject Inversion in Romance and the Theory of Universal Grammar*, 60–90, New York, Oxford University Press.
- Chomsky, Noam. 1995. *The Minimalist Program*. MIT Press, Cambridge, Mass.
- Chomsky, Noam. 2000. "Minimalist Inquiries: The Framework." In Roger Martin, David Michaels, and Juan Uriagereka (eds.), *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, 89–155. MIT Press, Cambridge, Mass.
- Chomsky, Noam. 2001a. "Derivation by Phase." In Michael Kenstowicz (ed.), *Ken Hale: A Life in Language*, 1–52. MIT Press, Cambridge, Mass.
- Chomsky, Noam. 2001b. "Beyond Explanatory Adequacy." *MIT Occasional Papers in Linguistics* 20, 1–28. [Reprinted in Adriana Belletti (ed.), *Structures and Beyond: The Cartography of Syntactic Structures*, Vol.3, 104–131. Oxford University Press, Oxford, 2004]
- Chomsky, Noam. 2005a. "Three Factors in Language Design." *Linguistic Inquiry* 36, 1–22.
- Chomsky, Noam. 2005b. "On Phases." Ms., MIT.
- Collins, Chris. 2001. "Eliminating Labels." *MIT Occasional Papers in Linguistics* 20, 1–25.
- Epstein, Samuel D., Erich Groat, Ruriko Kawashima, and Hisatsugu Kitahara. 1998. *A Derivational Approach to Syntactic Relations*. Oxford University Press, Oxford.
- Epstein Samuel D. and T. Daniel Seely. 2006. *Derivations in Minimalism*. Cambridge University Press, Cambridge.
- Fukui, Naoki and Hiromu Sakai. 2003. "The Visibility Guideline for Functional Categories: Verb Raising in Japanese and Related Issues." *Lingua* 113, 321–375.
- Futagi, Yoko. 2004. Japanese Focus Particles at the Syntax-Semantics Interface. Doctoral dissertation, Rutgers, the State University of New Jersey.
- Harada, Yasunari and Naohiko Noguchi. 1992. "On the Semantics and Pragmatics of *Dake* (and Only)."

- In Chris Barker and David Dowty (eds.), *Proceedings of the second conference on Semantics and Linguistic Theory (SALT II), Working Papers in Linguistics* 40, 125–144. Department of Linguistics, the Ohio State University.
- Hasegawa, Nobuko. 1994. "Economy of Derivation and A'-Movement in Japanese." In Masaru Nakamura (ed.), *Current Topics in English and Japanese*, 1–26, Hituzi Shobo, Tokyo.
- Hasegawa, Nobuko. 2005. "The EPP Materialized First, Agree Later: Wh-Questions, Subjects and *Mo* 'also'-Phrases." *Scientific Approaches to Language* 4, 33–80. Center for Language Sciences, Kanda University of International Studies.
- Honda, Kensuke. 1999. *Universal Word Order and Language Variation: A Case Study in Comparative Syntax*. Doctoral dissertation, Dokkyo University.
- Honda, Kensuke. 2002. "Hantaisyousei kara mita Nihongotougoron [An Antisymmetric Approach to Japanese Syntax]." In Tsukuba Daigaku Gendaigengogaku Kenkyukai (ed.), *Zisedai no Gengokenkyu* I, 175–224.
- Honda, Kensuke. 2003. "Antisymmetry and the Licensing of Negative Polarity Items in Japanese: A Preliminary Study." *Kogakuin Daigaku Kenkyu Ronsoo* 41, 151–164.
- Hoji, Hajime. 1985. *Logical Form Constraints and Configurational Structures in Japanese*. Doctoral dissertation, University of Washington, Seattle.
- Hoji, Hajime. 1990. "Theories of Anaphora and Aspects of Japanese Syntax." Ms., University of Southern California, Los Angeles.
- Hoshi, Koji. 2004. "Deriving Association with Focus in Japanese." Ms., Keio University, Yokohama.
- Hoshi, Koji. 2006a. "A Derivational Analysis of Association with Focus in Japanese." *English Studies* 49, 17–63. Keio University, Yokohama.
- Hoshi, Koji. 2006b. "On the Nature of Focus Feature Organization: Toward a Unified Account of the Additive *Mo* 'also'." Paper presented at the 78th General Meeting of the English Literary Society of Japan held at Chukyo University, May 21, 2006.
- Hoshi, Koji. In preparation. *The Head-Initial Clausal Configuration and V-Movement in Japanese*. Ms., Keio University, Yokohama.
- Hoshi, Koji and Nobuhiro Miyoshi. 2005. "A Derivational Approach to Association with Focus in Japanese and Its Consequences." Paper presented at the 131st General Meeting of the Linguistic Society of Japan held at Hiroshima University, November 20, 2005.
- Inoue, Kazuko. 1998. "Sentences without Nominative Subjects in Japanese." In Kazuko Inoue (ed.), *Report (2): Researching and Verifying an Advanced Theory of Human Language*, 1–29. Kanda University of International Studies.
- Kayne, Richard S. 1998. "Overt versus Covert Movement." *Syntax* 1, 128–191.
- Kayne, Richard S. 2000. *Parameters and Universals*. Oxford University Press, Oxford.
- Kayne, Richard S. 2003a. "Antisymmetry and Japanese." *English Linguistics* 20, 1–40.
- Kayne, Richard S. 2003b. "Some Remarks on Agreement and on Heavy-NP Shift." In Masatomo Ukaji, Masayuki Ike-Uchi and Yoshiki Nishimura (eds.), *Current Issues in English Linguistics*, 67–86. Kaitakusha, Tokyo.

- Kuno, Susumu. 1973. *The Structure of the Japanese Language*. MIT Press, Cambridge, Mass.
- Kuroda, S.-Y. 1965. Generative Grammatical Studies in the Japanese Language. Doctoral dissertation, MIT.
- Kuroda, S.-Y. 1969. "Remarks on the Notion of Subject with Reference to Words Like *also, even* or *only*," Part I. *Annual Bulletin, Research Institute of Logopedics and Phoniatrics*, University of Tokyo, 3, 111–129. Reprinted in *Papers in Japanese Linguistics* 11, 98–120.
- Kuroda, S.-Y. 1970. "Remarks on the Notion of Subject with Reference to Words Like *also, even* or *only*," Part II. *Annual Bulletin, Research Institute of Logopedics and Phoniatrics*, University of Tokyo, 4, 127–152. Reprinted in *Papers in Japanese Linguistics* 11, 121–157.
- Laka, Itziar. 1990. Negation in Syntax: On the Nature of Functional Categories and Projections. Doctoral dissertation, MIT.
- Lasnik, Howard and Juan Uriagereka. 2005. *A Course in Minimalist Syntax: Foundations and Prospects*. Blackwell, Oxford.
- Maki, Hideki. 1995. The Syntax of Particles. Doctoral dissertation, University of Connecticut, Storrs.
- Miyagawa, Shigeru. 2005. "Unifying Agreement and Agreement-less Languages." Ms., MIT. (a revised version will appear in *Proceedings of the Workshop on Altaic Formal Linguistics* 2, MIT.)
- Ndayiragije, Juvénal. 1999. "Checking Economy," *Linguistic Inquiry* 30, 399–444.
- Ogawa, Sadayoshi. 2003. "Remnant Movement and Appellative Constructions in Medieval French." Paper presented at the Zisedai no Gengokenkyu IV at the University of Tsukuba on December 26, 2003.
- Ogawa, Sadayoshi. 2004. "Remnant Movement and an Appellative Construction in Medieval French," *Integrative Studies on Essential Properties of Human Language by Theoretical Linguistics, Functional Linguistics, and Cognitive Neuroscience: MEXT Research Report A2*, 86–122, Tokyo Metropolitan University, Tokyo.
- Ogawa, Yoshiki. 2003. "Microparametric Syntax and Minimalist Syntax." *English Linguistics* 20, 299–335.
- Ogino, Megumi. 1990. An Analysis of *Sae*. Master's thesis, Ohio State University.
- Okutsu, Keiichiro, Yoshiko Numata, and Takeshi Sugimoto. 1986. *Iwayuru Nihongozyosi no Kenkyuu* [The Study on the So-called Japanese Particles], Bonjinsha, Tokyo.
- Ouhalla, Jamal. 1990. "Sentential Negation, Relativized Minimality and the Aspectual Status of Auxiliaries." *The Linguistic Review* 7, 183–231.
- Ouhalla, Jamal. 1991. *Functional Categories and Parametric Variation. Theoretical Linguistics Series*. Routledge, London.
- Poletto, Cecilia. 2000. *The Higher Functional Field, Evidence from Northern Italian Dialects*, New York, Oxford University Press.
- Rizzi, Luigi. 1997. "The Fine Structure of the Left Periphery." In Liliane Haegeman (ed.), *Elements of Grammar*, 281–337, Dordrecht, Kluwer Academic Publishers.
- Saito, Mamoru. 1983. "Case and Government in Japanese." *WCCFL* 2, 247–259.
- Saito, Mamoru. 1985. Some Asymmetries in Japanese and Their Theoretical Implications. Doctoral dissertation, MIT.
- Sells, Peter. 1995. "Korean and Japanese Morphology from a Lexical Perspective." *Linguistic Inquiry* 26,

277–325.

- Shibatani, Masayoshi. 1990. *The Languages of Japan*. Cambridge University Press, Cambridge.
- Shibatani, Masayoshi. 1977. "Grammatical Relations and Surface Cases." *Language* 53, 789–809.
- Shoji, Atsuko. 1986. *Dake and Sika in Japanese: Syntax, Semantics and Pragmatics*, Doctoral dissertation, Cornell University.
- Takezawa, Koichi. 1987. *A Configurational Approach to Case-Marking in Japanese*. Doctoral dissertation, University of Washington, Seattle.
- Ueda, Yukiko. 2002. *Subject Positions, Ditransitives, and Scope in Minimalist Syntax: A Phrase-Based Approach*. Doctoral dissertation, Kanda University of International Studies.
- Ura, Hiroyuki. 2000. *Checking Theory and Grammatical Functions in Universal Grammar*. Oxford University Press, New York.
- Watanabe, Akira. 2004. "Parametrization of Quantificational Determiners and Head-Internal Relatives." *Language and Linguistics* 5, 59–97.
- Watanabe, Akira. 2005. *Minimarisuto Puroguramu Zyosetu* [Introduction to Minimalist Program]. Taishukan, Tokyo.
- Whitman, John. 2001. "Kayne 1994: P.143, FN.3." In Alexandrova, Balina M. and Olga Arnudova (eds.), *The Minimalist Parameter*, 77–100. John Benjamins, Amsterdam/Philadelphia.
- Yamada, Yoshio. 1936. *Nihonbunpoogaku Gairon*. Hoobunkan, Tokyo.
- Yanagida, Yuko. 1996. "Syntactic QR in *Wh-in-situ* Languages." *Lingua* 99, 21–36.
- Yanagida, Yuko. 2003. "Ga no Saikaisyaku to Nihongo no Kukouzou nituite- Kukouzou no Huhensei nikansuru Kayne (1994) no Sitekikensyoo." In Tsukuba Daigaku Gendaigengogaku Kenkyuukai (ed.), *Zisedai no Gengokenkyuu* II, 1–24.
- Zanuttini, Raffaella. 1991. *Syntactic Properties of Sentential Negation: A Comprehensive Study of Romance Languages*. Doctoral dissertation, University of Pennsylvania.
- Zanuttini, Raffaella. 1994. "Re-examining Negative Clauses." In Guglielmo Cinque, Jan Koster, Jean-Yves Pollock, Luigi Rizzi, and Raffaella Zanuttini (eds.), *Paths Towards Universal Grammar: Studies in Honor of Richard S. Kayne*, 427–451. Georgetown University Press, Washington, D.C.
- Zanuttini, Raffaella. 1997. *Negation and Clausal Structure: A Comprehensive Study of Romance Languages*. Oxford University Press, Oxford.