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Decomposing Association with Focus in Japanese*

Koji Hoshi

Abstract

Following the spirit, but not the same mechanism, of Kayne's (1998, 2000) overt syntactic derivational analysis of focus-related elements such as *only*, *also/too*, and *even* in English, this paper explores the nature of association with focus in Japanese with special reference to the additive focus particle *mo* 'also' and the exclusive focus particle *dake* 'only.' In this paper, I will argue that, in spite of their attractiveness, at least the versions of LF focus particle movement analysis of association with focus entertained and discussed in Aoyagi (1998, 1999, 2006) are faced with theoretical/empirical problems, exploring another way of reframing Kuroda's (1965) attachment transformation analysis and spelling out an alternative analysis of association with focus in Japanese, which does not depend upon any LF-movement. More specifically, I will make the following points: (i) the additive focus particle *mo* 'also' can trigger both association with narrow focus and association with wide focus, and its association with focus should be best analyzed as involving overt XP movement to [Spec,FocP] via Agree between the Foc head *mo* and its focus associate; (ii) the exclusive focus particle *dake* 'only' can trigger only association with narrow focus, and its association with focus is to be analyzed as involving just Merge without any Agree operation. To the extent that this approach is on the right track, it shows that the empirical domain of association with focus in Japanese is not compatible with the GB/earlier Minimalist Program double-cycle computational system, but it can be compatible with the recent view of the single-cycle computational system in the Minimalist Program (Chomsky 2001b, 2004).

1. Introduction

In the generative grammatical tradition, Kuroda (1965) made the first attempt to provide a formal syntactic analysis of the phenomenon of “association with focus”¹⁾ in Japanese, as illustrated in (1) with the use of the additive focus particle *mo* ‘also’ (the “scope” or more accurately the “focus associate” of the additive focus particle *mo* ‘also’ is indicated in bold type in example sentences and is roughly indicated by the diacritic [. .]_F in their translations in what follows, sometimes abstracting away from slight differences between Japanese and English):²⁾

- (1) a. Mary-ga piza-o tabe-ta dake de naku,
Mary-NOM pizza-ACC eat-PAST not only but
John-mo piza-o tabe-ta.
John-also pizza-ACC eat-PAST
‘Not only Mary ate pizza, but [John]_F also ate pizza.’
(= association with narrow focus)
- b. (zyuunen tat-te) musuko-ga daigaku-ni hairi,
ten years pass son-NOM college-DAT enter
musume-mo **yome-ni** it-ta.
daughter-also marry-PAST
‘Lit. (Ten years passed and) his son entered college and also [his daughter was married]_F.’
(= association with wide focus: adapted from Kuroda 1965: 81, (20))

Roughly, association with narrow focus in (1a) connects the additive focus particle *mo* with the preceding element like *John*; whereas, association with wide focus in (1b) takes the whole unit like TP containing the focus particle at stake as the target of association with focus.³⁾

In capturing both patterns of association with focus in (1), Kuroda (1965) proposed the so-called attachment transformation, which moves a focus particle base-generated at the end of a sentence to attach it to an element inside the sentence in the mapping from the deep structure to the surface structure in the framework of Standard Theory in Chomsky (1965), as depicted in (2) (fp stands for a focus particle such as *mo* ‘also’ and *dake* ‘only’):⁴⁾

- (2) Kuroda’s (1965) attachment transformation analysis:

- a. deep str: [_S X-Y-Z]-fp → semantic interpretive component
 ↓ fp-attachment transformation
- b. [_S X-Y+fp-Z]-fp
 ↓ fp-deletion
- c. surface str: [_S X-Y+fp-Z]-∅ → phonological interpretive component

Notice that although the theoretical assumptions in Standard Theory are quite different from those in the current Minimalist Program, the relevant computation in narrow syntax (NS) in (2) has an “overt” single cycle from the present perspective.

On the other hand, reframing Kuroda’s (1965) attachment transformation analysis in the framework of principles and parameters approach, Aoyagi (1998, 1999, 2006) propounded a quite intriguing LF/covert-movement-based analysis of association with focus in Japanese, in which the additive focus particle *mo* ‘also’ and the exclusive focus particle *dake* ‘only’, for instance, covertly move to adjoin to the functional heads T and v, respectively, as illustrated in (3):

- (3) Aoyagi’s (1998, 1999, 2006) LF/covert movement analysis:
- Numeration (N)
 ↓
 - a. Spell-Out: [_{TP/vP} . . . XP-fp . . .] → phonological interpretive component
 ↓ post-Spell-Out covert fp-movement
 - b. LF: [_{TP/vP} . . . XP-t_i . . . T/v-fp_i] → semantic interpretive component

Note that the computation in NS in this model has two cycles, i.e., the overt cycle and the covert cycle.

Recently, however, in the course of the development of the Minimalist Program, various types of LF/covert movements proposed in the past have been subject to critical scrutiny (see Yanagida 1996 for LF *wh*-movement, Kitahara 1996 for QR, and Kayne 1998, 2000 for scope-related movements in general *inter alia*. See also Groat and O’Neil 1996, Lasnik and Uriagereka 2005, Watanabe 2005, and Hinzen 2006 *inter alia*. on this issue).

Against the backdrop of this trend, the main purpose of this paper is to argue that the empirical domain of association with focus in Japanese is also to be amenable to an alternative analysis without recourse to any LF/covert movement in light of the recent minimalist view of single-cycle computation for NS in the faculty of language (FL) (Kayne 1998, 2000, Epstein et al. 1998, Chomsky 2001b, 2004, Epstein and Seely 2006 *inter alia*).⁵⁾ It is demonstrated that the alternative proposal

that I will make in this paper can also incorporate an aspect of Kuroda's (1965) original insight in the attachment transformation in a different fashion than Aoyagi's (1998, 1999, 2006), while at the same time keeping in part to Aoyagi's (1998, 1999, 2006) original insight that association with focus has something to do with "feature agreement or sharing" between a focus particle and its focus associate.

More specifically, it will be demonstrated that the phenomenon of association with focus in Japanese is basically to be decomposable into fundamental syntactic operations of Merge and/or Agree in the single-cycle of overt computation as far as NS is concerned, with special reference to the additive focus particle *mo* and the exclusive focus particle *dake* in Japanese. In so doing, I will make the following points: (i) the additive focus particle *mo* 'also' can trigger both association with narrow focus and association with wide focus, and its association with focus should be best analyzed as involving overt XP movement to [Spec,FocP] via Agree between the Foc head *mo* and its focus associate; (ii) the exclusive focus particle *dake* 'only' can trigger only association with narrow focus, and its association with focus is to be analyzed as involving just Merge without any Agree operation. To the extent that this approach is on the right track, it shows that the empirical domain of association with focus in Japanese is not compatible with the GB/earlier Minimalist Program double-cycle computational system, but it can be compatible with the recent view of the single-cycle computational system in the Minimalist Program (Chomsky 2001b, 2004).

This paper is structured as follows. Section 2 re-examines the LF/covert movement approach to association with focus originally discussed in detail by Aoyagi (1998, 1999, 2006) and points out theoretical/empirical problems with such an approach. Section 3 explores an alternative overt movement approach to association with focus, articulating the mechanisms of association with focus for the additive focus particle *mo* and the exclusive focus particle *dake* in Japanese. Section 4 provides further empirical motivations for the alternative analysis of association with focus in Japanese put forth in section 3. Section 5 concludes this paper.

2. LF/Covert Movement Approach to Association with Focus in Japanese and Its Problems

In this section, I will critically re-examine the LF/covert movement approach to association with focus in Japanese entertained by Aoyagi (1998, 1999, 2006) and contend that it does not seem to be adequate enough in dealing with association with focus in Japanese from theoretical/empirical viewpoints.

2.1. Aoyagi's (1998, 1999, 2006) Theory of Association with Focus in Japanese

In the framework of principles and parameters approach, Aoyagi (1998, 1999, 2006) proposed a quite attractive theory of association with focus in Japanese, which appeals to LF/covert operations in syntax, based on the classification of focus particles in Japanese in (4) dating back to the traditional Japanese grammatical study (e.g., Matsushita 1930, Yamada 1936, Hashimoto 1969 *inter alia*.):⁶⁾

- (4) Kakari-joshi (= “agreement particle”) vs. Fuku-joshi (= “adverbial particle”)
 a. Kakari-joshi: wa, mo, sae, etc.
 b. Fuku-joshi: dake, made, bakari, sae, etc.

In the ensuing discussion, I will take up the additive focus particle *mo* ‘also’ and the exclusive focus particle *dake* ‘only’ from the *kakari-joshi* “agreement particle” group and the *fuku-joshi* “adverbial particle” group, respectively, as a representative of each camp.

Aoyagi (1998, 1999, 2006) considers two possible types of the LF/covert movement approach to association with focus in Japanese, viz. “LF head movement” approach and “LF clitic adjunct movement” approach.⁷⁾ In these approaches, the additive focus particle *mo* and the exclusive focus particle *dake* are assumed to covertly move from its underlying position to the functional heads T and v, respectively, in a uniform manner for association with focus to take place. Independently, it is assumed that an interpretable focus feature [+focus] in *mo* or *dake* will be copied onto its sister element and be propagated/percolated upward along the tree branches and that at LF [+focus] in *mo* at T or *dake* at v will enter into an “agreement” relation with a node with its propagated/percolated [+focus] in its c-command domain, yielding association with focus (see Aoyagi 1998, 1999, 2006 for details). In what follows, I will just address the process of LF/covert movement of *mo* and *dake*, ignoring the other processes in association with focus in Aoyagi's (1998, 1999, 2006) system, since only the former is relevant to the ensuing discussion.

By way of illustration, let us observe the following examples of association with focus and their derivations in (5)-(6):

- (5) a. [_{TP} [_{VP} John-ga [_{VP} [**piano**-mo] hii]v]-ta] (at Spell-Out)
 John-NOM piano-also play-PAST
 ‘Lit. John played also [the piano]_F.’

- b. [_{TP} [_{VP} John-ga [_{VP} [**piano**-t_{mo}] hii]v]-ta + **mo**] (at LF)
 (= adapted from Aoyagi 1999: 31-32, (11))
- (6) a. [_{TP} [_{VP} John-ga [_{VP} [**piano**-dake(-o)] hii]v]-ta] (at Spell-Out)
 John-NOM piano-only(-ACC) play-PAST
 ‘Lit. John played only [the piano]_F.’
- b. [_{TP} [_{VP} John-ga [_{VP} [**piano**-t_{dake} (-o)] hii]v+ dake]-ta] (at LF)

In (5), the additive focus particle *mo* ‘also’ undergoes covert movement to T at LF by either head-movement or clitic-movement, while, in (6), the exclusive particle *dake* ‘only’ covertly moves to v at LF by either of the two LF movements (see Aoyagi 1998, 1999, 2006 for discussion of empirical motivations for the difference of the landing sites of *mo* and *dake*).

2.2. Theoretical/Empirical Problems

2.2.1. Downward Movement

As far as we look at the above examples in (5)-(6), there seems to be no problem with Aoyagi’s (1998, 1999, 2006) theory of association with focus. However, once we extend the domain of empirical data, a certain theoretical/empirical problem arises for such LF/covert movement approaches. First, witness the following example with the exclusive particle *dake* in (7):

- (7) a. [_{TP} [_{VP} **John**-dake-(ga) [_{VP} piano-o hii]v]-ta]] (at Spell-Out)
 John-only-(NOM) book-ACC read-PAST
 “Nobody other than John read a book.”
- b. [_{TP} [_{VP} **John**-t_{dake} -(ga) [_{VP} piano-o hii]v+*dake*]-ta] (at LF)

It is to be noted that, unlike the case in (6), where *dake* ‘only’ moves from the object to v, the case in (7) involves a lowering movement of *dake* ‘only’ from the subject at the Spec of v down to the head v. Given the standard assumption that UG generally prohibits lowering operations in NS, the derivation in (7) should be expected to be ruled out, contrary to fact. Thus, there seems to be a theoretical/empirical problem with both the LF head movement approach and the LF clitic adjunct movement approach in Aoyagi (1998, 1999, 2006) in light of the fact in (7).

By parity of reasoning, the following examples in (8)-(9) equally pose the same theoretical/empirical problem to both versions of the LF/covert movement approach at hand:

- (8) **Taroo-mo** musume-ga daigaku-ni hait-ta.
 Taro-also daughter-NOM college-DAT enter-PAST
 ‘Lit. Also [Taro]_F, his daughter entered college.’
- (9) **Taroo-dake**(-ga) musume-ga daigaku-ni hait-ta.
 Taro-only(-NOM) daughter-NOM college-DAT enter-PAST
 ‘Lit. Only [Taro]_F, his daughter entered college.’

(8) and (9) are related to the double nominative construction in (10) below via its underlying structure (see Kuno 1973 for discussion of the double/multiple nominative construction in Japanese).

- (10) Taroo-ga musume-ga daigaku-ni hait-ta.
 Taro-NOM daughter-NOM college-DAT enter-PAST
 ‘It is Taro whose daughter entered college.’

Thus, the sentence-initial element *Taroo-mo* ‘Taro-also’ in (8) and *Taroo-dake* ‘Taro-only’ in (9) can be considered on a par with the major subject *Taroo-ga* ‘Taro-NOM’ in (10) (see Kuroda 1986b for this line of analysis). Unlike the regular subject, it is assumed in the literature that the major subject in Japanese is licensed by an aboutness condition (Kuroda 1986b) or a predication relation (Heycock 1993) by being adjoined to TP (see Kuroda 1986a, Ueda 1990, Tateishi 1991 *inter alia.*), as Aoyagi (1998, 2006) himself assumes as well.

Therefore, if this is the case, both the LF head movement approach and the LF clitic adjunct movement approach would force the additive focus particle *mo* and the exclusive focus particle *dake* to move down to T and v out of a TP-adjoined position for (8) and (9), respectively. Thus, association with focus would be predicted to be impossible in (8) and (9), given the general ban on lowering operations in NS. But, as (8) and (9) clearly show, association with focus is possible with respect to the major subject in Japanese.⁸⁾

Furthermore, the following examples in (11) and (12) involving clause-internal scrambling provide additional pieces of evidence against both the LF head movement approach and the LF clitic adjunct movement approach in question. Observe (11) and (12):

- (11) [_{XP} **ano hon**_j-mo [_{TP} [_{DP} [pro_j kai-ta] hito]_i-o [_{TP} Taroo-ga t_i sittei-ru]]]
 that book-also write-PAST person-ACC Taro-NOM know-PRES
 ‘Lit. Also [that book]_F, the person who wrote it, Taro knows.’

- (12) [_{XP} **ano hon**_j-dake [_{TP} [_{DP} [_{pro}_j kai-ta] hito]_i-o [_{TP} Taroo-ga t_i sittei-ru]]]
 that book-only write-PAST person-ACC Taro-NOM know-PRES
 ‘Lit. Only [that book]_P, the person who wrote it, Taro knows.’

In (11) and (12), the complex noun phrase object DP [_{DP} [_{pro}_j kai-ta] hito]_i-o has been scrambled to adjoin to TP (see Saito 1985 for the standard analysis of clause-internal scrambling in Japanese along this line.) Note that the sentence-initial elements **ano hon-mo** ‘that book-also’ and **ano hon-dake** ‘that book-only’ are located higher than the TP-adjoined scrambled object and in addition they are connected to a zero pronoun *pro* inside the scrambled complex noun phrase object DP, which indicates that **ano hon-mo** ‘that book-also’ and **ano hon-dake** ‘that book-only’ are base-generated (or externally merged) at the sentence-initial position rather than moved there from inside the complex noun phrase object DP.

Accordingly, in (11) and (12), both the LF head movement approach and the LF clitic adjunct movement approach would result in moving the additive focus particle *mo* and the exclusive focus particle *dake* from the position higher than the TP-adjoined scrambled element down to the T head and the v head of the matrix clause, respectively, at LF, as depicted in (13) and (14) below:

- (13) [_{XP} **ano hon**_j-t_{mo} [_{TP} [_{DP} [_{pro}_j kaita] hito]_i-o
 [_{TP} [_{vP} Taroo-ga [_{vP} t_i sittei] v] -ru +mo]]]
 (→ *mo* moves down to T at LF)
- (14) [_{XP} **ano hon**_j-t_{dake} [_{TP} [_{DP} [_{pro}_j kaita] hito]_i-o
 [_{TP} [_{vP} Taroo-ga [_{vP} t_i sittei] v+dake] -ru]]]
 (→ *dake* moves down to v at LF)

Again, under the standard assumption that UG bans downward movement in general in NS, the facts in (13) and (14) pose the same theoretical/empirical problem to both the LF head movement approach and the LF clitic adjunct movement approach.

2.2.2. Lack of Domain Extensions

Hoshi and Miyoshi (2005, to appear) discuss another type of empirical evidence concerning lack of domain extensions, which suggests that the versions of the LF/covert movement approaches to association with focus with respect to the exclusive focus particle *dake* ‘only’ are not on the right track. First, observe the following paradigm in (15), cited from Aoyagi (1998: 160-161):

- (15) a. John-wa [_{VP} **manga-o yon**]-da-*dake*-de zenzen benkyoo-si-nakat-ta.
 John-TOP comics-ACC read-only at all study-do-not-PAST
 “John only read comics and did not study at all.”
- b. John-wa [_{VP} **manga-dake yon**]-de zenzen benkyoo-si-nakat-ta.
 John-TOP comics-only read at all study-do-not-PAST
 “Lit. John read only comics and did not study at all.”

Aoyagi (1998) argues that association with focus takes place in covert syntax on the basis of (15), for which he pointed out that (15b) has the same reading as (15a), which in turn suggests that *dake* in (15b) extends its domain up to the VP. Hoshi and Miyoshi (2005, to appear), however, note that the acceptability of (15b) does not entail that *dake* extends its domain up to the VP on the grounds that even if we assign a focus only to the DP *manga* ‘comics’, (15b) is still acceptable, and they point out that the example (15b) only checks the semantic compatibility between the two propositions: *John read only comics* and *John did not study at all* (see Hoshi and Miyoshi 2005, to appear for discussion of this point in terms of the theory of alternative semantics in Rooth 1985, 1992, 1995, 1999 *inter alia*.).

The point is that the first proposition does not specify the possibility of whether John did anything other than reading comics or not, as clearly illustrated by the following examples in (16) and (17):

- (16) John-wa [_{VP} **manga-dake yon**]-de hokani nanimo sinakat-ta.
 John-TOP comics-only read else anything do-not-PAST
 “lit. John read only comics and did not do anything else.”
- (17) John-wa [_{VP} **manga-dake yon**]-de terebi-o mi-ta.
 John-TOP comics-only read TV-ACC watch-PAST
 ‘lit. John read only comics and watched TV.’

In (16), the first proposition is accompanied by the second proposition stating that he (= John) did not do anything other than reading only comics. On the other hand, in (17), the first proposition is followed by the second proposition specifying that he (= John) watched TV in addition to reading only comics. Therefore, (15b) does not verify the domain extension of *dake*, which, in turn, suggests that (15b) does not constitute evidence in favor of LF/covert movement of *dake* to the v head.

In order to strengthen this conclusion, Hoshi and Miyoshi (2005, to appear) consider idiom interpretation facts. Given that it is generally accepted that a part of an idiom is not a semantic primitive in its own right, it follows that it cannot be

focused, simply because a focused material must denote something in worlds/situations in order to be contrasted with others. If the exclusive focus particle *dake* could extend its domain up to the VP by LF/covert movement, it is expected that *dake* ought to be able to attach to a relevant part of an idiom. However, this expectation is not fulfilled, as illustrated in (18)-(19) below:⁹⁾

- (18) a. John-ga hanasi-ni mizu-o sasi-ta.
 John-NOM conversation-DAT water-ACC pour-PAST
 “John put a damper on the conversation.”
 b. *John-ga hanasi-ni mizu-*dake*-o sasi-ta.
 John-NOM conversation-DAT water-ACC pour-PAST
 “lit. John put only a damper on the conversation.”
 (= adapted from Hoshi and Miyoshi to appear:(30))
- (19) a. John-ga hi-ni abura-o sosoi-da.
 John-NOM fire-DAT oil-ACC pour-PAST
 “John added oil to the fire.”
 b. *John-ga hi-ni abura-*dake*-o sosoi-da.
 John-NOM fire-DAT oil-only-ACC pour-PAST
 “lit. John only added oil to the fire.”
 (= adapted from Hoshi and Miyoshi to appear:(31))

If *dake* could extend its domain up to VP, they could in principle be interpreted roughly on a par with the readings in (20) and (21) below, respectively:

- (20) John-ga hanasi-ni mizu-o sasi-*dake* si-ta.
 John-NOM conversation-DAT water-ACC pour-only do-PAST
 ‘lit. John only put a damper on the conversation.’
 (= adapted from Hoshi and Miyoshi to appear:(32))
- (21) John-ga hi-ni abura-o sosoi-*dake* si-ta.
 John-NOM fire-DAT oil-ACC pour-only do-PAST
 ‘lit. John only added oil to the fire.’
 (= adapted from Hoshi and Miyoshi to appear:(33))

However, as (18b) and (19b) clearly show, this prediction is not borne out. This strongly indicates that alleged covert movement does not exist for association with focus in Japanese.

In connection with the issue of (im)possibility of domain extensions of the

exclusive focus particle *dake*, Yoko Sugioka (p.c.) points out the fact that the following examples in (22) apparently seem to allow for “wide focus interpretations” with *dake*:

- (22) a. sono toki-wa ame-wa yandeori, **tuyoi kaze-dake-ga huiteita.**
 that time-TOP rain-TOP has-stopped strong wind-only-NOM blowing be-PAST
 ‘lit. At that time, the rain has stopped, and only strong winds were blowing.’
 b. nanimo sinai aidani, **zikan-dake-ga tatta.**
 anything do-NEG during, time-only-NOM pass-PAST
 ‘lit. While not doing anything, only the time passed.’
 c. karera-ga satta atoni, tada **yuki-dake-ga hutteita.**
 they-NOM leave-PAST after merely snow-only-NOM fall be-PAST
 ‘lit. After they left, only the snow was falling.’

She notes that the boldfaced portions in (22a,b,c) have the same interpretations as (23a,b,c), respectively:

- (23) a. tuyoi kaze-ga huiteiru dake datta.
 strong wind-NOM blow be only COP-PAST
 ‘lit. It was only that strong winds were blowing.’
 b. zikan-ga tatta dake datta.
 time-NOM pass-PAST only COP-PAST
 ‘lit. It was only that the time passed.’
 c. yuki-ga hutteiru dake datta.
 snow-NOM fall be only COP-PAST
 ‘lit. It was only that snow was falling.’

Is there a solution to this problem while maintaining the position that *dake* cannot extend its focus domain? One possible line of analysis is to appeal to alternative semantics. Normally, when a sentence involving the exclusive focus particle such as *dake* is evaluated, a set of alternative propositions must be naturally constructed under a particular context, with the claim that only one of those propositions is true. In this vein, notice that, in the given contexts in (22a,b,c), it is impossible to construct such a set of alternative propositions, but only a singleton set containing a proposition corresponding to the one without *dake* is available for evaluation. As a result, this indeed produces virtually the same interpretive effects as the examples

in (23a,b,c) display, without appealing to the mechanism of domain extensions for *dake*. If the above reasoning is not off the mark, the facts in (22)-(23) do not pose any problem to the claim for the lack of domain extensions concerning *dake*.

Given this situation, I will pursue an alternative approach to association with focus in Japanese without recourse to any LF/covert movement in the next section.

3. An Alternative Approach to Association with Focus in Japanese

3.1. Some Auxiliary Theoretical Assumptions

In this section, I will spell out some important assumptions on case particles in Japanese, on which the following discussion is crucially based.

First, I will follow Kayne (1994: 143) in assuming that (some) case particles and (some) focus particles in Japanese are merged as an independent functional head under the hypothesis that the underlying basic word order is universally Spec-Head-Complement (Kayne 1994). Specifically, the nominative case particle *ga* is taken to be introduced so that it takes its complement on its right (see also Takezawa and Whitman 1998, Hoshi 1999, Whitman 2001, Yanagida 2003 and Ogawa 2003, 2004 *inter alia*. for the idea that the nominative case particle *ga* is a clausal head in Japanese). However, departing from Kayne (1994) and the others, I will assume that, unlike the nominative case particle, the accusative case particle and the dative case particle are directly merged to a nominal projection.

This demarcation is empirically motivated by the facts on scrambling (cf. Kuno 1973, Saito 1985, Shibatani 1990, Hoji 1990) and clefting (cf. Hoji 1990) in Japanese. Observe the following paradigms in (24)-(25):

(24) Scrambling:

- a. *_{[TP} Hanako-ga_i _{[TP} Taro-ga _{[CP} t_i Ziroo-ni sono hon-o watasi-ta to] omottei-ru]]
Hanako-NOM Taro-NOM Ziro-DAT that book-o hand-PAST COMP think-PRES
'Lit. Hanako, Taro thinks that (she) handed that book to Ziro.'
- b. _{[TP} sono hon-o_i _{[TP} Taro-ga _{[CP} Hanako-ga Ziroo-ni t_i watasi-ta to] omottei-ru]]
that book-ACC Taro-NOM Hanako-NOM Ziro-DAT hand-PAST COMP think-PRES
'Lit. that book, Taro thinks that Hanako handed to Ziro.'
- c. _{[TP} Ziroo-ni_i _{[TP} Taro-ga _{[CP} Hanako-ga t_i sono hon-o watasi-ta to] omottei-ru]]
Ziro-DAT Taro-NOM Hanako-NOM that book-ACC hand-PAST COMP think-PRES

‘Lit. To Ziro, Taro thinks that Hanako handed that book.’

- d. [_{TP} sono honya-de_i [_{TP} Taroo-ga [_{CP} Hanako-ga t_i hon-o kat-ta to] omottei-ru]]
that bookstore-at Taro-NOM Hanako-NOM book-ACC buy-PAST COMP
think-PRES

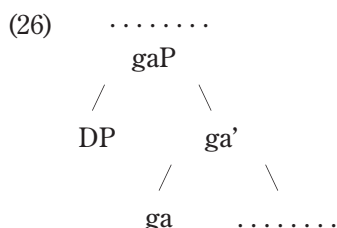
‘Lit. At that bookstore, Taro thinks that Hanako bought a book.’

(25) Clefting:

- a. * [_{CP} [e]_i sono hon-o Ziroo-ni watasita no]-wa Hanako-ga_i da.
that book-ACC Ziro-DAT hand-PAST COMP-TOP Hanako-NOM COP
‘Lit. It is Hanako that handed that book to Ziro.’
- b. [_{CP} Hanako-ga [e]_i Ziroo-ni watasi-ta no]-wa sono hon-o_i da.
Hanako-NOM Ziro-DAT hand-PAST COMP-TOP that book-ACC COP
‘Lit. It is that book that Hanako handed to Ziro.’
- c. [_{CP} Hanako-ga sono hon-o [e]_i watasi-ta no]-wa Ziroo-ni_i da.
Hanako-NOM that book-ACC hand-PAST COMP-TOP Ziro-DAT COP
‘Lit. It is to Ziro that Hanako handed that book.’
- d. [_{CP} Hanako-ga [e]_i hon-o kat-ta no]-wa sono honya-de_i da.
Hanako-NOM book-ACC buy-PAST COMP-TOP that bookstore-at COP
‘Lit. It is at that bookstore that Hanako bought a book.’

They observe that the nominative case-marked DP is incapable of moving by scrambling (cf. (24a)) or clefting (cf. (25a)), whereas the accusative case-marked DP, and the dative case-marked DP are freely allowed to move by such operations (cf. (24b,c) and (25b,c), respectively) on a par with the PPs (cf. (24d) and (25d)) in Japanese.

These facts in (24)-(25) can receive straightforward accounts if it is assumed that, unlike the accusative case particle *o* and the dative case particle *ni*, the nominative case particle *ga* does not make up a constituent with the preceding DP, given the standard assumption that only a constituent can be affected by movement. Following Kayne (1994) and the others mentioned above, suppose that the nominative case particle *ga* is a clausal head, then automatically it would not make up a constituent with the DP, which has been moved to its Spec, as schematically represented in (26) (see also Hoshi to appear b for further empirical arguments for this assumption on the basis of anti-Haig-Kuroda’s generalization on NQs and scrambling in Japanese):¹⁰⁾



Given the assumption in (26), it is correctly predicted that the sequence of *DP-ga* cannot undergo any movement.¹¹⁾

Furthermore, departing from Takezawa and Whitman (1998), Whitman (2001), and Yanagida (2003), but following Hoshi (1999), I will hypothesize that the nominative case particle *ga* is selected from the lexicon as an independent functional element different from T and is merged into the clausal projection in Japanese. However, unlike Hoshi (1999), I propose to analyze the functional head T as optionally selecting the nominative case particle projection *gaP* (see also Ogawa 2003, 2004) rather than the opposite, which in turn selects *vP* as its complement.^{12), 13)}

Without going into the justification in this paper, I will simply assume that the nominative case particle head *ga* has [$u\phi$] and [EPP] and the DP to be overtly moved to [Spec,*gaP*] has [ϕ] and [uCase], putting aside the cases of the accusative case particle head *o* and the dative case particle head *ni* for the moment.¹⁴⁾ This will guarantee that the relevant DP obtains an appropriate Case value as reflection of Agree between [$u\phi$] and [ϕ] and that the DP at stake is overtly moved to [Spec,*gaP*] due to the [EPP] at the nominative case head. With regard to the status of the morphological nominative case *ga*, I will presume that its inherent feature must be matched up with the syntactically valued Case feature of the accompanying complement DP in the morphological component after Transfer. Thus, on this conception of the grammar of Japanese, both abstract Case and morphological case are at work, but the former is concerned with the computation of NS as universally dictated in UG, while the latter is the matter of language-particular PF reflex.

3.2. A Single Cycle-based Theory of Association with Focus in Japanese

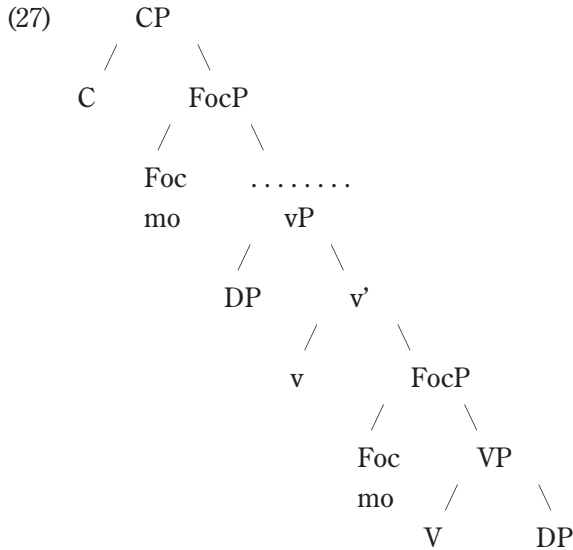
3.2.1. Association with Focus for the Additive Focus Particle *Mo* ‘Also’

3.2.1.1. Assumptions on the Additive Focus Particle *Mo*

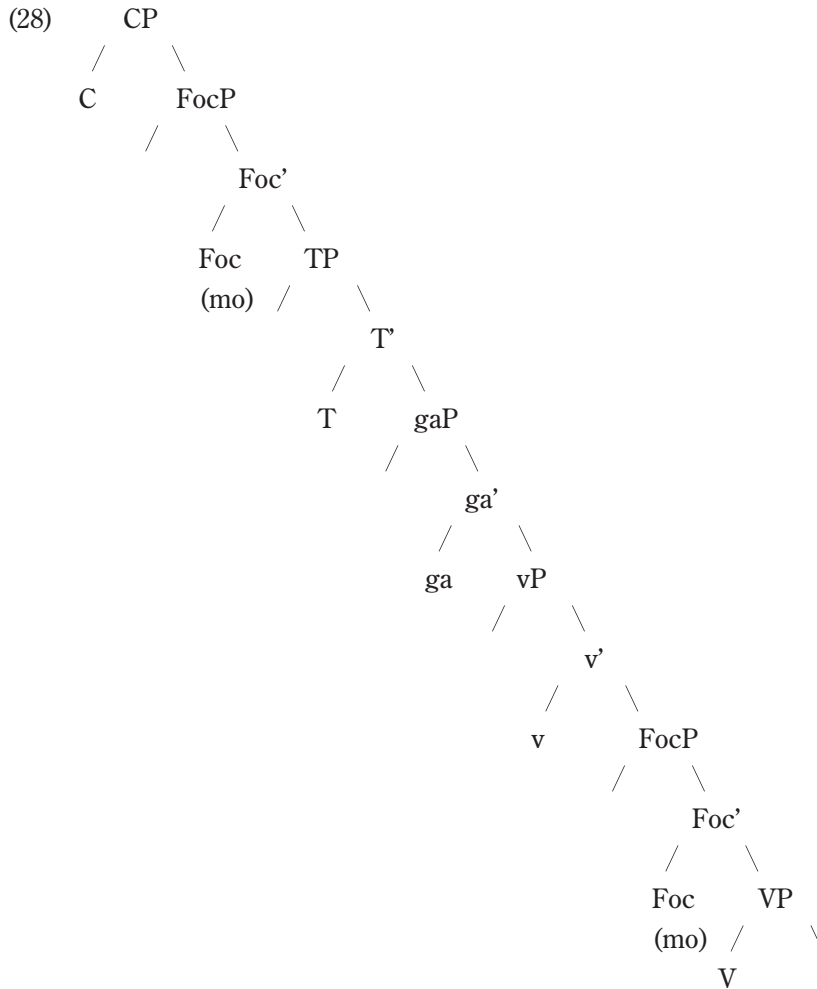
With respect to the additive focus particle *mo* in Japanese, I will posit that it is an optional element to be introduced in Numeration (N)/Lexical Array (LA) and is merged as an independent functional Foc head TP-internally or TP-externally

(see Brody 1990a,b, Choe 1995, Rizzi 1977, Poletto 2000, Yanagida 2003 *inter alia.* for TP-external FocP and see Ndayiragije 1999, Belletti 2002, Ogawa 2003, 2004, Yanagida 1996 *inter alia.* for TP-internal FocP).

More specifically, I will claim that the additive focus particle *mo* is optionally merged as a lexical realization of the Foc head either between CP and TP or between vP and VP, as schematically displayed in (27) (see Miyoshi and Hoshi 2006 for the idea that *nur* ‘only’ in German is merged in this fashion):



Lumping together the assumptions so far, the Japanese underlying clausal configuration involving FocPs (for the transitive clause) can be represented as in (28):¹⁵⁾



There is a piece of empirical evidence for the assumptions on case particles and the additive focus particle *mo* as reflected in the particular Japanese clausal configuration in (28). This stems from the facts on particle ordering restrictions in Japanese (see Aoyagi 1998, 1999, 2006 and references cited therein for more detailed discussion of this issue). Consider the following paradigm in (29) involving the additive focus particle *mo* in Japanese:¹⁶⁾

- (29) a. Bill-dake de naku **John**-mo sasimi-o tabe-ta.
 Bill-only not but John-also raw fish-ACC eat-PAST
 ‘Lit. Not only Bill but also [John]_F ate raw fish.’
 b. *Bill-dake de naku **John**-ga-mo sasimi-o tabe-ta.

- Bill-only not but John-NOM-also raw fish-ACC eat-PAST
 c. *Bill-dake de naku **John**-mo-ga sasimi-o tabe-ta.
 Bill-only not but John-also-NOM raw fish-ACC eat-PAST
 d. John-ga susi-dake de naku **sasimi**-(o)-mo tabe-ta.
 John-NOM sushi-only not but raw fish-(ACC)-also eat-PAST
 ‘Lit. John ate not only sushi but also [raw fish]_F.’
 e. *John-ga susi-dake de naku **sasimi**-mo-o tabe-ta.
 John-NOM sushi-only not but raw fish-also-ACC eat-PAST

The ungrammaticality in (29b,c) naturally follows, since in (28), the sequences *John-mo-ga* ‘John-also-NOM’ or *John-ga-mo* ‘John-NOM-also’ would never be generated on the following grounds. The former case would require that the subject DP *John* at [Spec,vP] first move up to [Spec,FocP] and then *John-mo* move down to [Spec,gaP] in (28), but such a movement is never possible for two reasons: (i) the putative movement of *John-mo* at stake from [Spec,FocP] to [Spec,gaP] is downward, if possible at all; (ii) worse still, the sequence *John-mo* would not make up a constituent in (28) in the first place, which clearly prohibits movement in the first place on the standard assumption. On the other hand, I take the grammaticality in (29a) as indicating that there is a phonologically null nominative case particle *øga* when there is no overt nominative case particle *ga* and that the subject DP *John* alone can move through [Spec, *øga*P] to reach [Spec,FocP], leaving behind the phonologically null nominative case particle *øga*.¹⁷ As (29c) shows, when the nominative case particle is overt, this possibility is excluded, plausibly due to the requirement that the Spec of an overt case particle has to be filled by an overt element.

Further, the grammaticality of (29d) can be accounted for rather straightforwardly. The direct object DP(-ACC) *sasimi(-o)* is first merged to V as a constituent and is moved to [Spec, FocP] (after the accusative Case-feature checking/valuation). On the other hand, (29e) is correctly excluded since the sequence *sasimi-mo-o* ‘raw fish-also-ACC’ would never be generated in my system. It is to be noted that deriving such a sequence would require that the direct object DP be detached from the accusative case particle *o* in moving to [Spec,FocP] in violation of the above-mentioned constraint that the Spec of an overt case particle has to be filled by an overt element.

To sum up, to the extent that the syntactic accounts in this section for the puzzling particle ordering restrictions among case particles and the additive focus particle *mo* in (29) is on the right track, it provides a piece of empirical argument for the clausal architecture for Japanese proposed in (28).¹⁸

3.2.1.2. Overt “Focus Movement”

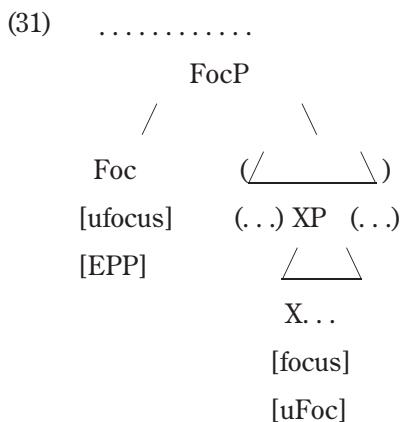
In this section, I will put forth a specific mechanism for executing association with focus with respect to the additive focus particle *mo* in Japanese without recourse to any LF movement operation.

First of all, I will assume that the assignment of relevant focus-related features to lexical items is regulated by the following set of conditions in (30) when Numeration (N)/Lexical Array (LA) for NS is formed for derivation:¹⁹⁾

(30) Focus Feature Assignment:

- (i) An uninterpretable focus feature [ufocus] is assigned to the Foc head as part of its label.
- (ii) An interpretable focus feature [focus] to be matched with the [ufocus] at the Foc head is assigned to the label of its focus associate (either functional or lexical) in the search domain of the Foc head.
- (iii) An uninterpretable focus feature [uFoc], which triggers overt movement in conjunction with [EPP] at the Foc head, is assigned to the label of the element to be overtly moved (either functional or lexical) in the search domain of the Foc head.

Thus, a typical pattern of assignment of these formal features [ufocus], [focus], [uFoc], and [EPP] is schematically represented in (31):



Note that although the uninterpretable focus feature [uFoc] is assigned to the head of an XP as part of its label, it serves as a “marker” for an overt movement of the whole phrase XP rather than an overt movement of the head. Furthermore, it is to

be noted that assignment of the interpretable focus feature [focus] to a head as part of its label will give rise to multiple possibilities of specifying focus associates in principle, since all the “projections” of the head at hand share the same label under the bare phrase structure theory (Chomsky 1995), which I am implicitly assuming here. Thus, (31) can be ambiguous with respect to the assignment of [focus]. In (31), [focus] can be taken to be assigned to not only the label of X but also the label of any projection of X including XP. In contrast, since [uFoc] at the label of X is just a feature indicating that its maximal projection XP must undergo overt movement, there is no such ambiguity.²⁰⁾

Based on the assignment of focus-related features in (30), I will propose a specific mechanism of association with focus for the additive focus particle *mo* in Japanese, bringing Chomsky’s (2000) analysis of overt *wh*-movement to bear upon it. First, let us consider Chomsky’s (2000) mechanism for overt *wh*-movement depicted in (32):

(32) Chomsky (2000): Overt *Wh*-movement

a. Agree ([uQ], [Q])

[... [_{CP} C <i>Wh</i> -phrase . . .]]
[EPP] [uWh]
{uQ} [Q]

b. Copy + Pied-piping + Merge

[... [_{CP} <i>Wh</i> -phrase [C <i>Wh</i>-phrase . . .]]
{uWh} {EPP}
[Q] [uQ]

The interrogative C has [uQ] (= uninterpretable Q-feature) and [EPP] and the *wh*-phrase carries [Q] (= interpretable Q-feature) and [uWh] (= uninterpretable *wh*-feature). [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] in the *wh*-phrase and attracts the whole *wh*-phrase to [Spec,CP] overtly by pied-piping, with [EPP] and [uWh] being eliminated. This is more or less an Agree-based mechanism behind overt *wh*-movement.

In this paper, following and extending Watanabe’s (2005: 80) suggestion that there might be two types of focus features, viz., an interpretable focus feature and an uninterpretable focus feature, I would like to propose that Chomsky’s (2000) mechanism of overt *wh*-movement can be naturally extended into the domain of overt “focus movement” related to association with focus in Japanese (see also

Watanabe 2002, 2004 for discussion of the role of an uninterpretable focus feature in overt *wh*-movement).

To be more specific, I will claim that there is a kind of Agree process involved in the relation between the Foc head and an element XP in its search domain to be overtly attracted to [Spec,FocP], as illustrated in (33):

(33) Overt “Focus Movement”:

a. Agree ([ufocus], [focus])

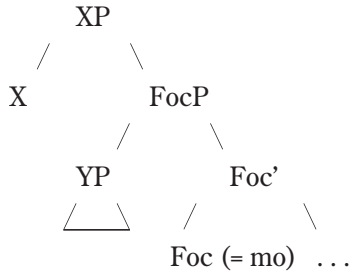
[. . . [_{FocP} Foc(= <i>mo</i>) XP . . .]]	
[EPP]	[uFoc]
{ufocus}	[focus]

b. Copy + Pied-piping + Merge

[. . . [_{FocP} XP [Foc(= <i>mo</i>) XP . . .]]	
{uFoc}	{EPP}
[focus]	{ufocus}

The additive focus particle *mo* projects its own functional projection FocP with a set of an uninterpretable focus feature [ufocus] and an [EPP] feature as a probe, which enters into Agree with the goal of an element XP in its search domain with an interpretable focus feature [focus] and an uninterpretable focus feature [uFoc], implementing displacement of XP to [Spec,FocP] in the following way. The probe containing a set of an [EPP] feature and an uninterpretable focus feature [ufocus] seeks down a goal with an uninterpretable focus feature [uFoc] and an interpretable focus feature [focus]. Matching between [ufocus] at the probe and [focus] at the goal will delete the former, while the [EPP] at the probe and [uFoc] at the goal will be deleted after the phrase XP containing [uFoc] is overtly moved to [Spec,FocP] by pied-piping. Notice that it is assumed that [uFoc] in XP in (33) cannot be deleted only by matching between [ufocus] at the probe and [focus] at the goal on a par with [uWh] at the goal under Chomsky’s (2000) system of overt *wh*-movement.

With the proposed mechanism of association with focus in (33) in mind, association with narrow focus can be characterized as depicted in (34) under my theory of association with focus (note that X could be either C or v and that the Foc head *mo* always has [ufocus] and [EPP]):^{21), 22)}

(34) Association with Narrow Focus with *Mo* ‘Also’

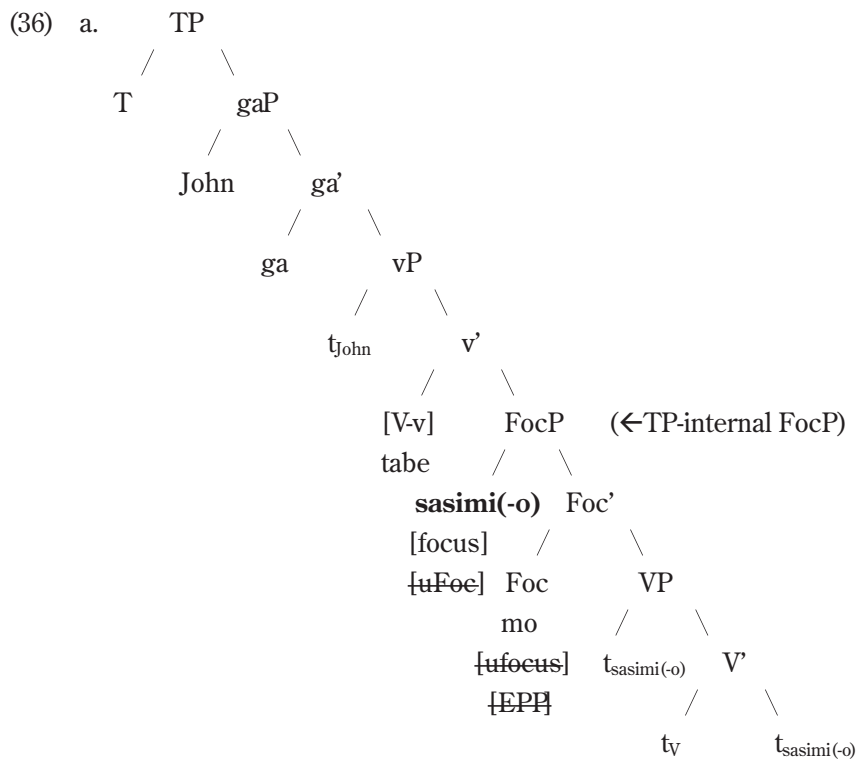
([focus] and [uFoc] are located at the label of YP to be overtly moved to [Spec,FocP])

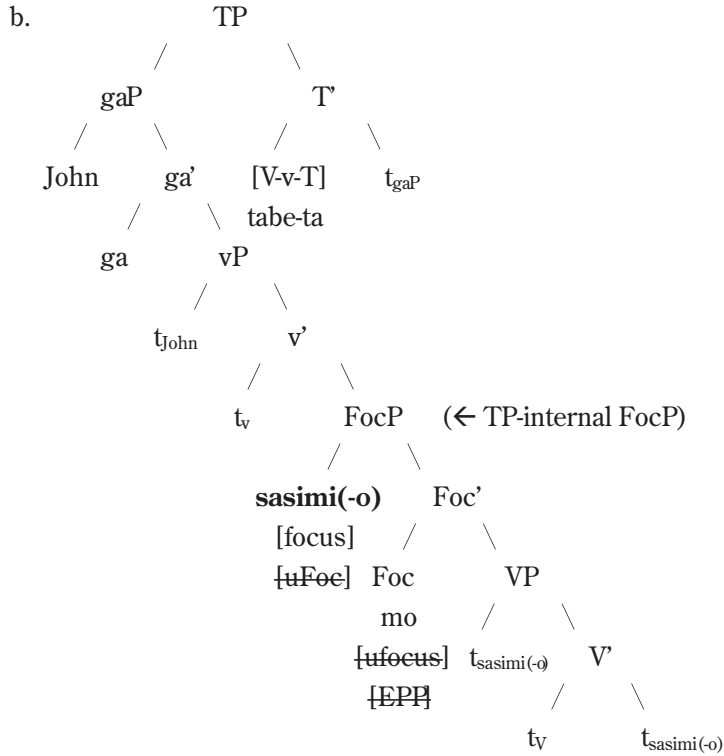
In (34), YP has overtly moved to [Spec,FocP] from or from within the complement of the Foc head, with Y or its projection including YP being interpreted as the focus associate.

Let us first consider the derivation for the case of simple association with narrow focus. Observe the examples in (29a) and (29d), repeated here as (35a) and (35b):

- (35) a. Bill-dake de naku **John**-mo sasimi-o tabe-ta.
 Bill-only not but John-also raw fish-ACC eat-PAST
 ‘Lit.Not only Bill but also [John]_F ate raw fish.’
 b. John-ga susi-dake de naku **sasimi**-(o)-mo tabe-ta.
 John-NOM sushi-only not but raw fish-(ACC)-also eat-PAST
 ‘Lit.John ate not only sushi but also [raw fish]_F.’

As an illustration, let us take stock of the derivation for (35b), which is represented in (36) (the phrase *susi-dake de naku* ‘not only sushi but’ and the matrix CP projection are omitted just for expository simplicity): ^{23), 24), 25), 26)}





In (36a), the direct object DP *sasimi(-o)* is merged as the sister of V and is moved to [Spec,VP] for checking of the accusative Case feature of the direct object DP by V (cf. Chomsky 2006 and references cited therein for discussion of this process). The interpretable focus feature [focus] and the uninterpretable focus feature [uFoc] have been assigned together as part of the label of the direct object DP. When the additive focus particle *mo* with the set of an uninterpretable focus feature [ufocus] and an [EPP] feature is merged TP-internally, [ufocus] enters into Agree with [focus], licensing association with focus, accompanied by overt movement of the direct object DP from [Spec,VP] to [Spec, FocP], due to the presence of [EPP] and [uFoc]. In addition to V-movement to T via v and the subject DP movement from [Spec,vP] to [Spec, *ga*P], movement of the whole *ga*P to [Spec, TP] takes place, as in (36b), and yields the input structure to both the phonological component and the semantic component for (35b).

How about the cases of apparently more complicated association with narrow focus involving the light verb *su* ‘do’ in Japanese, as illustrated in (37):

- (37) a. John_i-wa keeki-o tabe-ta dake de naku,
 John-TOP cake-ACC eat-PAST only not but
 ‘John ate not only a piece of cake, but’
 pro_i **piza-o** tabe-mo si-ta.
 he pizza-ACC eat-also do-PAST
 ‘he also ate [pizza]_F.’
- b. John_i-wa piza-o yai-ta dake de naku,
 John-TOP pizza-ACC bake-PAST only not but
 ‘John not only baked a pizza, but’
 pro_i piza-o **tabe-mo** si-ta.
 he pizza-ACC eat-also do-PAST
 ‘he also [ate]_F pizza.’
- c. John_i-wa biiru-o non-da dake de naku,
 John-TOP beer-ACC drink-PAST only not but
 ‘John not only drank beer, but’
 pro_i **piza-o** **tabe-mo** si-ta.
 he pizza-ACC eat-also do-PAST
 ‘he also [ate pizza]_F.’

Apparently, (37a,b,c) display association with narrow focus with regard to direct object, V, and VP, respectively, as indicated in each translation. However, notice that if the configuration in (34) for assignment of focus features hold true for the cases of apparently more complicated association with narrow focus as in (37), it must be the case that the uninterpretable focus feature [uFoc] and the interpretable focus feature [focus] are assigned to the label of the V in all the cases in (37). Accordingly, the indicated patterns of association with narrow focus in (37) should not be correct, contrary to the traditional standard view (cf. Aoyagi 1998, 1999, 2006 and references cited therein). The right patterns of association with narrow focus in question should be something like the following in (38):

- (38) a. John_i-wa keeki-o tabe-ta dake de naku,
 John-TOP cake-ACC eat-PAST only not but
 ‘John not only ate a piece of cake, but’
 pro_i **piza-o** **tabe-mo** si-ta.
 he pizza-ACC eat-also do-PAST
 ‘he also [ate pizza]_F.’
- (= VP as the focus associate)

- b. John_i-wa piza-o yai-ta dake de naku,
 John-TOP pizza-ACC bake-PAST only not but
 ‘John not only baked a pizza, but’
 pro_i **piza-o** **tabe**-mo si-ta.
 he pizza-ACC eat-also do-PAST
 ‘he also [ate pizza]_F.’
 (= VP as the focus associate)
- b’. John_i-wa piza-o yai-ta dake de naku,
 John-TOP pizza-ACC bake-PAST only not but
 ‘John not only baked a pizza, but’
 pro_i piza-o **tabe**-mo si-ta.
 he pizza-ACC eat-also do-PAST
 ‘he also [ate]_F pizza.’
 (= V as the focus associate)
- c. John_i-wa biiru-o non-da dake de naku,
 John-TOP beer-ACC drink-PAST only not but
 ‘John not only drank beer, but’
 pro_i **piza-o** **tabe**-mo si-ta.
 he pizza-ACC eat-also do-PAST
 ‘he also [ate pizza]_F.’
 (= VP as the focus associate)

Thus, under this view, there is no actual case of purely the direct object as the focus associate in the case of apparently more complicated association with narrow focus. At first, this situation might strike you as quite odd, but this is no mystery given the following licensing condition in (39) on the use of the additive focus particle *mo* in Japanese:

(39) The Licensing Condition on the Use of *Mo* ‘also’:

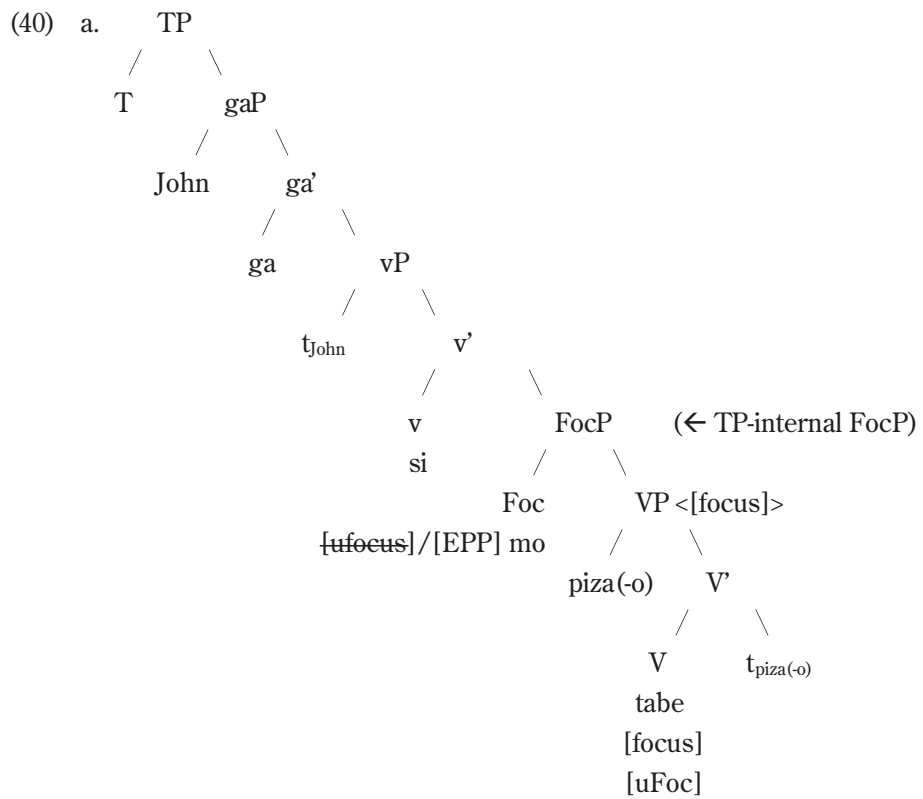
A syntactic object *a* at/within [Spec,FocP] serves as the focus associate of the additive focus particle *mo* ‘also’ iff there is another explicitly or implicitly provided distinct syntactic object *β* comparable to *a*, with which *a* can semantically stand in an “in-addition-to” relation.

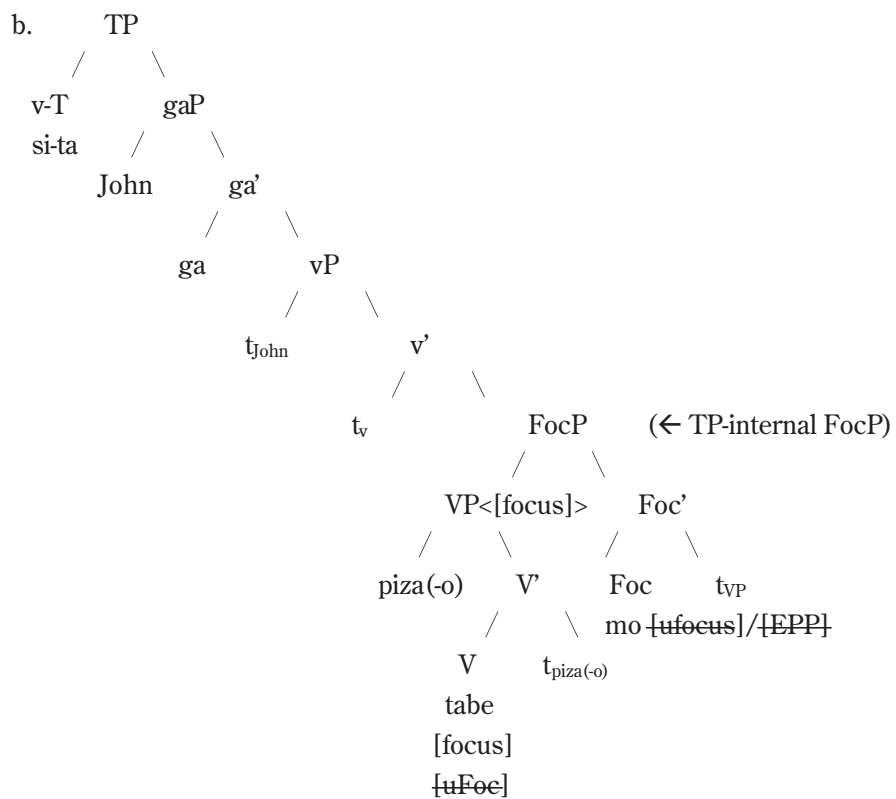
In the case of simple association with narrow focus in (35), clearly there is either a subject or an object, which is comparable to the subject or the object in [Spec,FocP], and the latter can semantically stand in an “in-addition-to” relation

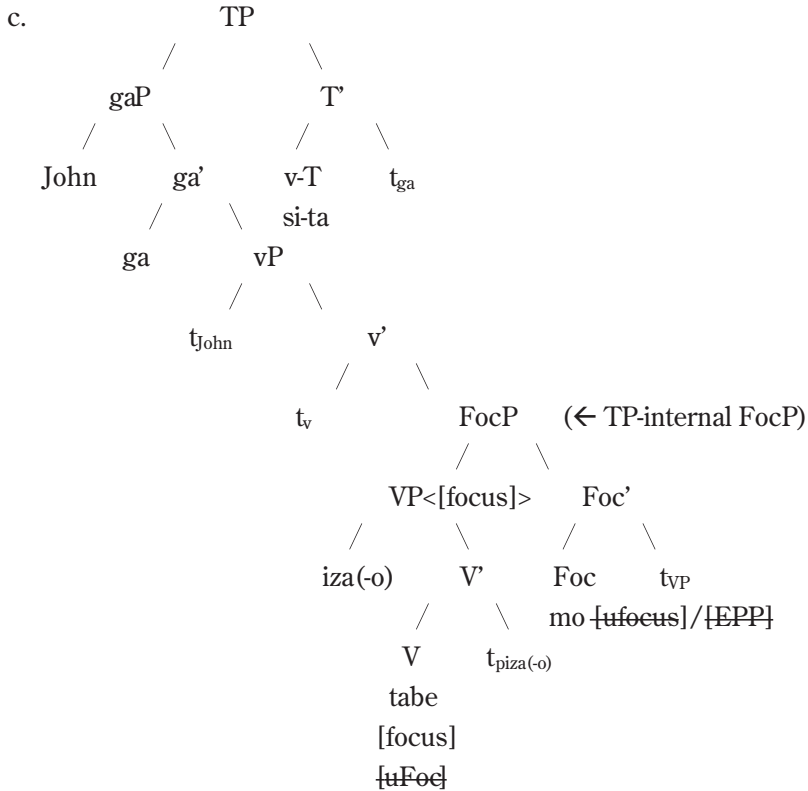
with the former. Thus, the licensing condition in (39) is met.

What about the cases of apparently more complicated association with narrow focus in (38)? In (38a), a distinct activity of eating cake is explicitly given by VP, which is comparable to the activity of eating pizza expressed by VP at [Spec,FocP], and the latter can semantically stand in an “in-addition-to” relation with the former, in compliance with the licensing condition in (39). Similarly, in (38b) and (38b’), there is a distinct activity of baking pizza or there is a distinct action of baking explicitly provided by VP or V, which is comparable to the activity of eating pizza expressed by VP at [Spec,FocP] or the action of eating expressed by V within [Spec,FocP], respectively. And, the latter can semantically stand in an “in-addition-to” relation with the former in (38b) and (38b’), which is in accordance with the licensing condition in (39). Finally, in (38c), a distinct activity of drinking beer is explicitly supplied by VP, which is comparable to the activity of eating pizza expressed by VP at [Spec,FocP], and the latter can semantically stand in an “in-addition-to” relation with the former, satisfying the licensing condition in (39). Thus, contrary to the traditional standard view, there is no redundantly overlapping ways for marking association with narrow focus with respect to the object in VP under this view: the object has to be overtly moved to [Spec,FocP] by itself in order to take part in association with narrow focus.

By way of illustration, let us look at the derivation for (38a), which would proceed as follows: ²⁷⁾





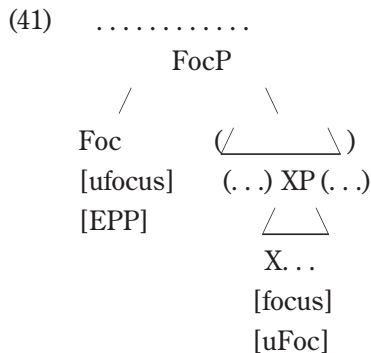


In (40a), the direct object *DP pizza(-o)* is merged to V and is raised to [Spec,VP] for accusative Case checking. The interpretable focus feature [focus] and the unvalued focus feature [uFoc] are assigned as part of the label of VP. When the additive focus particle *mo* with the unvalued focus feature [ufocus] and the [EPP] feature is merged TP-internally, [ufocus] and [focus] enter into Agree, licensing association with focus, accompanied by overt movement of the entire VP to [Spec, FocP] by pied-piping, due to the presence of [EPP] and [uFoc], as shown in (40b). In addition to the subject movement to [Spec, *gaP*], movement of the whole *gaP* to [Spec, TP] takes place, as in (40c), and yields the input structure to the phonological component and the semantic component for (38a).

Note that, at the stage depicted in (40b), V cannot move out of the VP, which is located at [Spec,FocP], since such a movement would run afoul of the CED (Huang 1982) and thus it has to remain in situ. As a result, T will attract the light verb *v* with the complex [v-T] being realized as *su-ru* ‘do-PRES’ or *si-ta* ‘do-PAST’ in Japanese (see Stroik 2001 *inter alia*. for the claim that the light verb *v* in English can be morphophonologically realized as the auxiliary *do*).

3.2.1.3. Focus Feature Organization and Focus Feature-Splitting Hypothesis

As far as association with narrow focus as illustrated in (37)-(38) is concerned, the focus feature assignment mechanism in (30) and the mechanism of overt “focus movement” in (33) would suffice. Note that, in association with narrow focus, typically, the interpretable focus feature [focus] and the uninterpretable focus feature [uFoc] reside in the same label of a focus associate, as illustrated in (34), which is reproduced as (41):



However, as will be demonstrated below, such a focus feature organization as represented in (41) (= (34)) cannot do justice to the treatment of association with wide focus, as it stands. Therefore, (30) and (33) have to be supplemented by a further mechanism in order to deal with the case of association with wide focus appropriately.

Concretely, on top of (30) and (33), I will make the point that an interpretable focus feature [focus] and an uninterpretable focus feature [uFoc] to be sought by the probe in the Foc head could in principle be separately assigned to two distinct elements to the extent that a certain “locality condition” related to phases is met, as defined in (42):

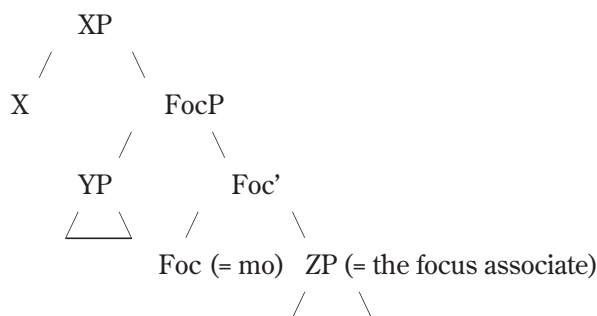
(42) Focus Feature-Splitting Hypothesis:

An interpretable focus feature [focus] and an uninterpretable focus feature [uFoc] in the search domain of the Foc head can in principle be assigned to separate labels of relevant lexical items to the extent that the syntactic object with [uFoc] as part of its label is contained within the syntactic object with [focus] as part of its label within the minimal phase.

Although the conditions stated in (30) and (42) should be derived from more general and deeper principles for FL, I will tentatively assume that they are at work in assembling lexical items from the universal set of features to form Numeration (N)/Lexical Array (LA) for the computation of narrow syntax (NS). It is taken for granted in the Minimalist Program that the Numeration (N)/Lexical Array (LA) is made up of its subsets, or lexical subarrays, which constitute phases (Chomsky 2000, 2001a). Given that the focus feature-splitting process is part of assembling lexical items and a phase is a minimal unit for narrow syntactic computation which manipulates various formal features including focus features, the “locality condition” limiting focus feature-splitting within the minimal phase, as expressed in (42), makes sense.²⁸⁾

Now, let us next take stock of the case of association with wide focus in Japanese. With the proposed mechanism of association with focus in mind, association with wide focus can be characterized as depicted in (43) under my theory of association with focus (note that X could be either C or v and that the Foc head *mo* always has [ufocus] and [EPP]):

(43) Association with Wide Focus with *Mo* ‘Also’



([focus] is located at the label of ZP; [uFoc] is located at the label of YP to be overtly moved to [Spec,FocP])

In the case of association with wide focus, the focus associate is always ZP as a whole, as shown in (43), where ZP is semantically either a property or a proposition. Therefore, if ZP corresponds to a proposition, then there is no remaining background/given portion within a sentence. As a result, the whole ZP must be non-given, in conjunction with the nature of the licensing condition on the use of the additive focus particle *mo* in (39). It does not make any sense if the added proposition is not new and is just the same as another paired comparable proposition. Basically, a similar remark applies to the case of ZP, which expresses a

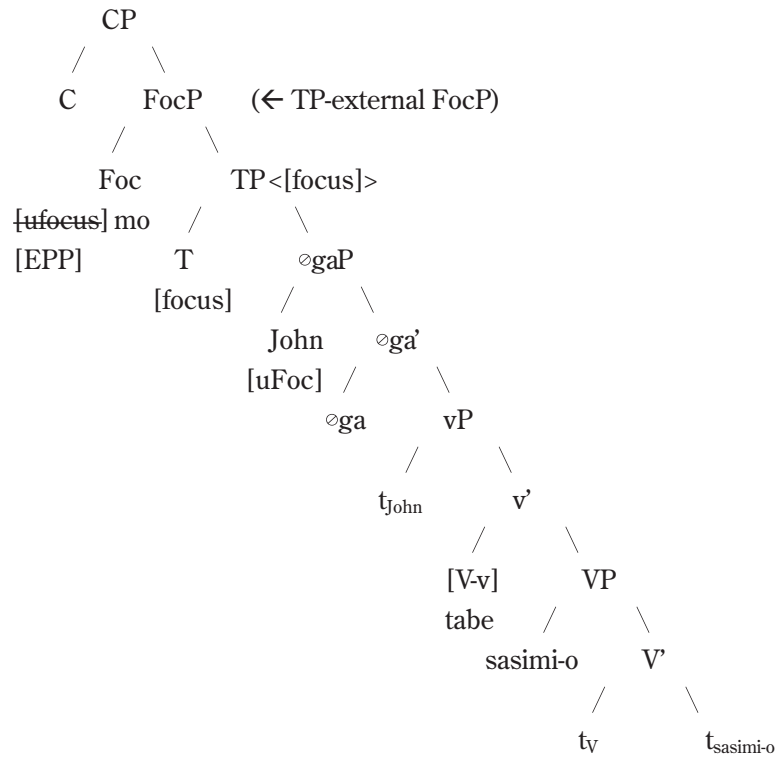
property.

Let us observe some examples of association with wide focus in (44):

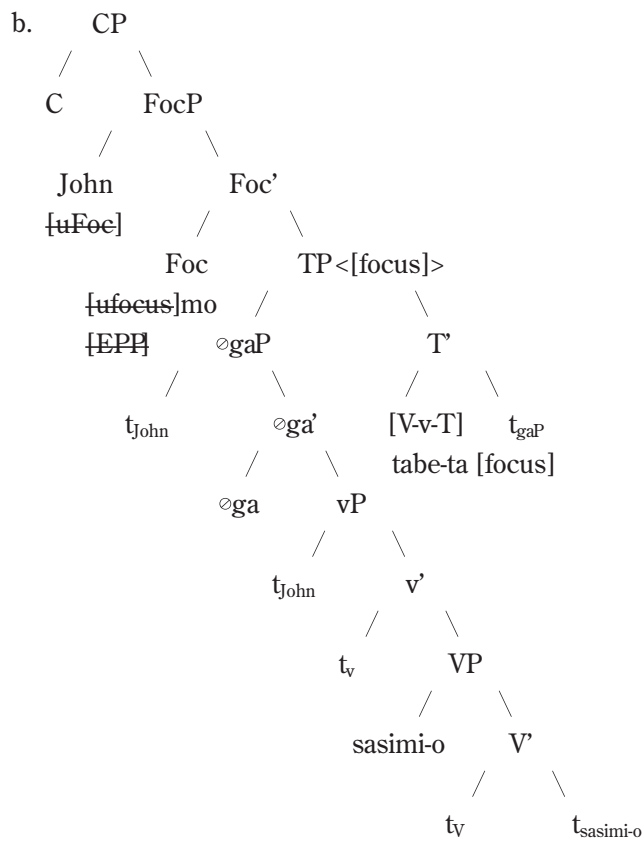
- (44) kinoo-wa mezurasii koto-ga okot-ta.
Yesterday-TOP unusual fact-NOM happen-PAST
'Unusual things happened yesterday.'
- a. Mary-ga sake-o non-da dake de naku,
Mary-NOM sake-ACC drink-PAST only not but,
'Not only Mary drank sake, but'
John-mo sasimi-o tabe-ta.
John-also raw fish-ACC eat-PAST
'Lit. Also [John ate raw fish]_F.'
- (= TP as the focus associate)
- b. John_i-ga [pro_i sake-o non-da dake de naku],
John-NOM sake-ACC drink-PAST only not but,
sasimi-mo tabe-ta.
raw fish-also eat-PAST
'Lit. John also [ate pizza]_F.'
- (= VP as the focus associate)

The relevant derivations for (44a) and (44b) would look something like the following in (45) and (46), respectively (CP is omitted for (46) just for simplicity):

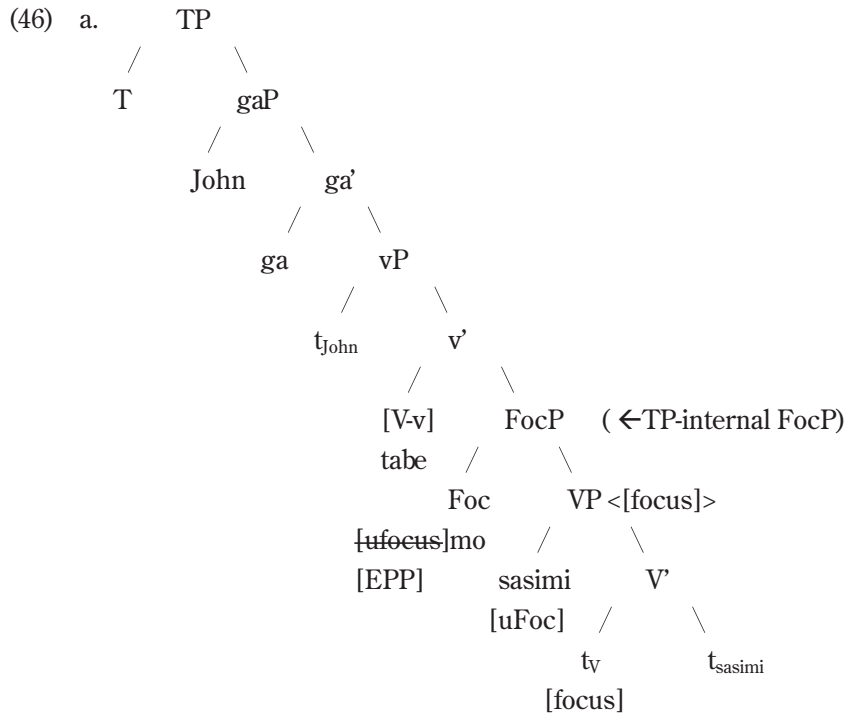
(45) a.



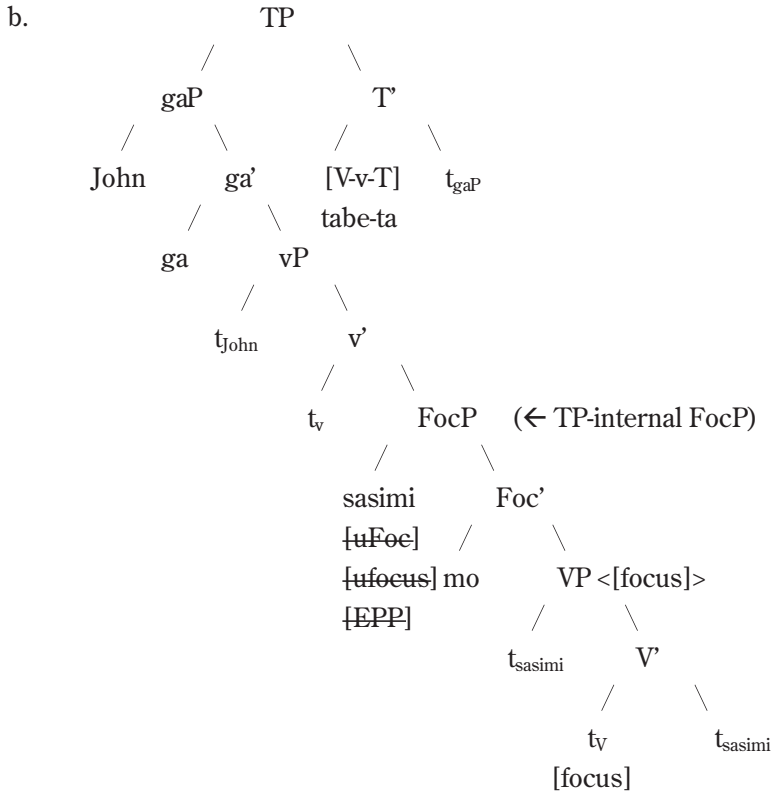
← the locality condition in (42) is met.



← the locality condition in (42) is met.



← the locality condition in (42) is met.



← the locality condition in (42) is met.

First, with respect to the TP wide focus association case in (44a), the subject DP *John* is merged, with the unvalued focus feature [uFoc] as part of its label, and the interpretable focus feature [focus] is assigned as part of the label of the whole TP. Note that the locality condition in (42) is satisfied because the focus feature-splitting at stake is occurring within the minimal phase CP in the relevant sense. When the additive focus particle *mo* with the uninterpretable focus feature [ufocus] and the [EPP] feature is merged TP-externally, [ufocus] and [focus] enter into Agree, licensing association with focus, accompanied by overt movement of the subject to [Spec, FocP], due to the presence of [EPP] and [uFoc]. In addition to V-movement to T via v, movement of the whole *gaP* to [Spec, TP] takes place, as shown in (45b), and yields the input structure to both the phonological component and the semantic component for (44a).²⁹⁾

By the same token, as for the VP wide focus association case in (44b), the direct object DP *sasimi* ‘raw fish’ is merged, with the unvalued focus feature [uFoc] as part of its label, and the interpretable focus feature [focus] is assigned as part

of the label of the whole VP. Notice that the locality condition in (42) is again met since the focus feature-splitting at stake is happening within the minimal phase vP in the relevant sense. When the additive focus particle *mo* with the uninterpretable focus feature [ufocus] and the [EPP] feature is merged TP-internally, [ufocus] and [focus] enter into Agree, licensing association with focus, accompanied by overt movement of the direct object to [Spec, FocP], due to the presence of [EPP] and [uFoc]. In addition to V-movement to T via v, movement of the whole *ga*P to [Spec, TP] takes place, as shown in (46b), and yields the input structure to both the phonological component and the semantic component for (44b).

Strictly speaking, the NS-internal condition in (42) *per se* does not suffice in properly choosing the correct representation from among NS-internal possible candidates, since the condition in (42) only restricts but does not determine the environment where the interpretable focus feature [focus] may occur in connection with the uninterpretable focus feature [uFoc]. Therefore, in addition to (42), some kind of NS-external condition is called for with respect to the determination of a focus associate in association with focus based on the interpretable focus feature [focus]. I would like to tentatively propose the following NS-external/semantic component-internal condition for interpretation, as stated in (47):

(47) The Information Structural Condition on Association with Focus:

The focus associate portion of a sentence can be new or given or a mixture of new and given elements in association with narrow focus, while it must be new in association with wide focus. On the other hand, the remaining background portion of the sentence must be given in both association with narrow focus and association with wide focus.

The above fundamental condition in (47) concerning “information structure” has to be satisfied for both association with narrow focus and association with wide focus. To substantiate the condition in (47), let us consider the following paradigms in (48)-(49):

- (48) a. John-wa Mary-o home-ta. Omakeni,
 John-TOP Mary-ACC praise-PAST Besides
 ‘John praised Mary. Besides,’
 (kare-wa) Bill-o suisensi-ta dake de naku **Lucy**-mo suisensi-ta.
 (he-TOP) Bill-ACC recommend-PAST only not but Lucy-also recommend-
 PAST

‘(he) not only recommended Bill but also recommended [Lucy]_F.’
 (= association with narrow focus with *Lucy* as the focus associate)

- b. John-wa Mary_i-o home-ta. Omake ni,
 John-TOP Mary-ACC praise-PAST Besides
 ‘John praised Mary. Besides,’
 (kare-wa) Bill-o suisensi-ta dake de naku **kanozyo**_i-mo suisensi-ta.
 (he-TOP) Bill-ACC recommend-PAST only not but her-also recommend-
 PAST

‘(he) not only recommended Bill but also recommended [her]_F.’
 (= association with narrow focus with *kanozyo* ‘her’ as the focus associate)

- (49) a. John-ga Mary-o home-ta dake de naku
 John-NOM Mary-ACC praise-PAST only not but
 ‘Not only John praised Mary but,’
Bill-mo Lucy-o suisensi-ta.
 Bill-also Lucy-ACC recommend-PAST
 ‘Intended. also [Bill recommended Lucy]_F.’
 (= association with wide focus with the TP as the focus associate)

- b. #John_i-ga Mary-o home-ta dake de naku
 John-NOM Mary-ACC praise-PAST only not but
 ‘Not only John praised Mary but,’
kare_i-mo **Lucy-o suisensi-ta.**
 he-also Lucy-ACC recommend-PAST
 ‘Intended. also [he recommended Lucy]_F.’
 (= association with wide focus with the TP as the focus associate)

(48) shows that association with narrow focus can take place with respect to both a new element like *Lucy* and a given element like *kanozyo* ‘her’ equally. On the other hand, the contrast between (49a) and (49b) indicates that, unlike association with narrow focus, association with wide focus can only target a domain which does not contain any given element like *kare* ‘he’.

Before closing this section, recall from section 2 that it was observed that the examples in (8) and (11), which are reproduced as (50) and (51), pose a theoretical/empirical problem to both versions of the LF movement approach to association with focus:

- (50) **Taroo-mo** musume-ga daigaku-ni hait-ta.
 Taro-also daughter-NOM college-DAT enter-PAST

‘Lit. Also [Taro]_F, his daughter entered college.’

- (51) [_{XP} **ano hon**]-mo [_{TP} [_{DP} [pro]_j kai-ta] hito]_i-o [_{TP} Taro-ga t_i sittei-ru]]
 that book-also write-PAST person-ACC Taro-NOM know-PRES
 ‘Lit. Also [that book]_F, the person who wrote it, Taro knows.’

It is to be noted that in both (50) and (51) a focus associate DP has been overtly moved up to [Spec,FocP], which is itself generated TP-externally, without involving any lowering operations unlike the versions of the LF movement approach in question. Hence, my approach is free from the theoretical/empirical problem pointed out in section 2.

3.2.2. Association with Focus for the Exclusive Focus Particle *Dake* ‘Only’

3.2.2.1. Assumptions on the Exclusive Focus Particle *Dake*

With respect to the exclusive focus particle *dake* in Japanese, I will assume that, unlike the additive focus particle *mo*, *dake* is not a lexical realization of the Foc head and is crucially devoid of an uninterpretable focus feature [ufocus] and that its focus associate cannot carry an uninterpretable focus feature [uFoc] (even if it could in principle carry an interpretable focus feature [focus]). Furthermore, I will claim that the exclusive focus particle *dake* in Japanese is an optional element to be introduced in Numeration (N)/Lexical Array (LA) and is directly merged with basically any types of XP, as illustrated in (52) below, before the merged unit [_{dakeP} XP-*dake*] is further merged to a syntactic object:

- (52)
- $$\begin{array}{c}
 \text{dakeP} \\
 \swarrow \quad \searrow \\
 \text{XP}_i \quad \text{dake}' \\
 \quad \swarrow \quad \searrow \\
 \quad \text{dake} \quad t_i \\
 \quad \text{[EPP]}
 \end{array}$$

Thus, unlike the additive focus particle *mo*, there are no independent functional Foc heads to be merged TP-internally or TP-externally. When the particle *dake* is merged with a phrase XP, projecting the *dakeP*, with XP being moved to [Spec, *dakeP*] due to the EPP/edge property of *dake*, the whole sister phrase XP is taken as the focus associate of the exclusive focus particle *dake*. Thus, association with focus is licensed at this derivational step and is ready for “shipping” to the semantic interface by Transfer, without recourse to any further LF/covert movement of

dake.³⁰⁾

3.2.2.2. Overt Merge without Any Focus Feature-checking

There are theoretical and empirical reasons to believe that the exclusive focus particle *dake* in Japanese is only subject to overt merger but does not participate in Agree-based overt movement to [Spec,FocP], unlike the additive focus particle *mo* in Japanese.

First, if the exclusive focus particle *dake* only involves purely direct overt merger (plus overt movement to [Spec,*dake*P] induced by edge/EPP-feature) without any overt movement to the Spec of an independent clausal head Foc, as depicted in (50), it is expected that the distribution of *dake* is rather free in contrast to *mo* in Japanese (see the paradigm in (29) in section 3.2.1.1 for limited distribution of *mo* in Japanese). Observe the following paradigms in (53)-(58):

(53) **Subject/Object DP:**

- a. **John-dake** sasimi-o tabe-ta.
John-only raw fish-ACC eat-PAST
'Lit.Only [John]_F ate raw fish.'
- b. **John-dake-ga** sasimi-o tabe-ta.
John-only-NOM raw fish-ACC eat-PAST
'Lit.Only [John]_F ate raw fish.'
- c. ***John-ga-dake** sasimi-o tabe-ta.
John-NOM-only raw fish-ACC eat-PAST
'Lit.Only [John]_F ate raw fish.'
- d. John-ga **sasimi-dake** tabe-ta.
John-NOM raw fish-only eat-PAST
'Lit.John ate only [raw fish]_F.'
- e. John-ga **sasimi-dake-o** tabe-ta.
John-NOM raw fish-only-ACC eat-PAST
'Lit.John ate only [raw fish]_F.'
- f. (?)John-ga **sasimi-o-dake** tabe-ta.³¹⁾
John-NOM raw fish-ACC-only eat-PAST
'Lit.John ate only [raw fish]_F.'

(54) **Argument/Adjunct PP:**

- a. John-ga **Mary-ni-dake** at-ta.
John-NOM Mary-DAT-only meet-PAST
'Lit.John met only [Mary]_F.'

- cf. John-ga **Mary**-dake-ni at-ta.
 John-NOM Mary-only-DAT meet-PAST
 ‘Lit. John met only [Mary]_F.’
- b. John-ga **Mary-to**-dake dansu-o si-ta.
 John-NOM Mary-with-only dance-ACC do-PAST
 ‘Lit. John danced only [with Mary]_F.’
- cf. John-ga **Mary**-dake-to dansu-o si-ta.
 John-NOM Mary-only-with dance-ACC do-PAST
 ‘Lit. John danced only [with Mary]_F.’
- (55) **AP:**
 Sono heya-ga [_{AP} **akaruku**]-dake nat-ta.
 that room-NOM bright-only become-PAST
 ‘That room became only [bright]_F.’
- (56) **vP/VP:**
 John-ga [_{VP/VP} **sasimi-o tabe**]-dake si-ta.
 John-NOM raw fish-ACC eat-only do-PAST
 ‘John only [ate raw fish]_F.’
- (57) **TP:**
 a. [_{TP} **John-ga sasimi-o tabe-ta**]-dake da.
 John-NOM raw fish-ACC eat-PAST-only COP
 ‘It is only that [John ate raw fish]_F.’
 b. Mary-ga [_{TP} **John-ga sasimi-o tabe-ta**]-dake (da) to it-ta.
 Mary-NOM John-NOM raw fish-ACC eat-PAST COMP-only (COP) say-PAST
 ‘Lit. Mary said that only [John ate raw fish]_F.’
- (58) **CP:**
 Mary-ga [_{CP} **John-ga sasimi-o tabe-ta to**]-dake it-ta.
 Mary-NOM John-NOM raw fish-ACC eat-PAST COMP-only say-PAST
 ‘Lit. Mary said only [that John ate raw fish]_F.’

The ungrammaticality in (53c) receives a natural account in my theory. Notice that the sequence *John-ga-dake* ‘John-NOM-only’ in (53c) would never be generated in the first place on the following ground. Since the nominative case head *ga* is an independent functional head generated vP-externally, the argument *John* must first merged with the exclusive focus particle *dake* and the resultant [_{dakeP} John-*dake*] is merged to [Spec, vP], before overtly moving to [Spec, *ga*P]. It is to be noted that with respect to other cases in (53)-(58), there seems to be no restriction as to where

the exclusive focus particle *dake* is merged, as is also expected. Hence, the almost free distribution of the particle *dake* in (53)-(58) indicates that there is no particular selectional property which is inherently specified for *dake* with regard to its sister element to be interpreted as its focus associate.³²⁾

Second, if the exclusive focus particle *dake* involves focus features [ufocus], [focus], and [uFoc] along with [EPP] on a par with the additive focus particle *mo*, it is predicted that not only association with narrow focus but also association with wide focus should be possible for *dake*. However, as pointed out in Hoshi and Miyoshi (2005, to appear), unlike the case of *mo*, there is no upward domain-extension effects in the case of the exclusive focus particle *dake* for association with wide focus in the sense of Kuroda (1965) and Aoyagi (1998, 1999, 2006), as illustrated in (59) (see section 2.2.2 for the demonstration that this prediction is not borne out, either, with respect to the object, contra the standard interpretation of relevant data):

(59) **John-dake-(ga)** hon-o yon-da.

John-only-(NOM) book-ACC read-PAST

“Nobody other than John read a book.”

“*It only happened that John read a book (and nothing else happened).”

Note that (59) does not yield the interpretation that “it only happened that John read a book (and nothing else happened),” which would be obtained if *dake* were to take the whole propositional unit TP in (59) as its focus associate. Hence, the lack of such “wide focus” reading with respect to *dake* also suggests that the association has to be local in nature. Given that the exclusive focus particle *dake* cannot induce association with wide focus, it is not possible to invoke the same mechanism of association with focus for the additive focus particle *mo*.

Incidentally, one might argue that association with focus involving the exclusive focus particle *dake* could take place in situ via Agree without triggering overt movement on the basis of the following paradigm in (60):

(60) a. [Mary]-dake-ga uta-o utat-te, hokani daremo uta-o utaw-anakat-ta.

Mary-only-NOM song-ACC sing, else anybody song-ACC sing-NEG-PAST

‘Only Mary sang a song, and nobody else sang a song.’

b. [Mary-ga uta-o utat-ta]-dake de, hokani daremo uta-o utaw-anakat-ta.

Mary-NOM song-ACC sing-PAST-only, else anybody song-ACC sing-

NEG-PAST

‘It only happened that Mary sang a song, and nobody else sang a song.’

At first blush, (60a) and (60b) appear to be synonymous, as is standardly claimed in the literature (see Aoyagi 1998, 1999, 2006 and references cited therein). Recall from section 3.2.1.3 that I proposed the following NS-external/semantic component-internal condition for interpretation in connection with association with focus involving the additive focus particle *mo*, as stated in (47), repeated here as (61):

(61) The Information Structural Condition on Association with Focus:

The focus associate portion of a sentence can be new or given or a mixture of new and given elements in association with narrow focus, while it must be new in association with wide focus. On the other hand, the remaining background portion of the sentence must be given in both association with narrow focus and association with wide focus.

It is to be noted, however, that (61) is independent of the narrow syntactic computation and functions as a kind of filter at the C-I interface. Hence, it is expected that it should also apply to association with focus involving the exclusive focus particle *dake*. If my claim that association with focus for *dake* takes the whole element of [Spec,dakeP] as its focus associate, its pattern should fall into the category of association with narrow focus (see (34) for the characterization of association with narrow focus for the additive focus particle *mo*), which is in fact empirically supported by the unavailability of association with wide focus in (59) as well. Thus, (61) would allow for its focus associate to be made up of a mixture of new and given elements. Notice that (61b) constitutes such a case in point, with the whole unit [Mary-ga uta-o utat-ta] rather than [Mary] as the focus associate in association with narrow focus.

As a matter of fact, there is further empirical evidence that suggests that the whole unit at [Spec,dakeP] rather than its subpart should be the focus associate of *dake*. Consider the following contrast in (62):

- (62) (kinoo-no paatii-de-wa, mezurasii koto-ni,
 yesterday-NOM party-at-TOP to-my-surprise
 a. John-ga hitori-de gakk-i-o hii-ta ri,
 John-NOM alone musical instrument-ACC play-PAST and

- [Mary]-dake-ga uta-o utat-ta.
 Mary-only-NOM song-ACC sing-PAST
 ‘John played a musical instrument alone, and only Mary sang a song.’
- b. # John-ga hitori-de gakki-o hii-ta ri,
 John-NOM alone musical instrument-ACC play-PAST and
 [Mary-ga uta-o utat-ta]-dake dat-ta.
 Mary-NOM song-ACC sing-PAST-only be-PAST
 ‘#John played a musical instrument alone, and it only happened that Mary sang a song.’

Note that, although (62a) sounds fine in this discourse, (62b) is not the case. If *dake* can be directly associated with *Mary*, say, via Agree in (62b), the result would be the same as (62a), contrary to fact. Therefore, the contrast in (62) also provides further empirical evidence for my assumption that association with focus involving the exclusive focus particle *dake* in Japanese is not mediated by Agree but it is only implemented by (direct) merger.

4. Further Empirical Motivations

In this section, I will provide further empirical motivations for my theory of association with focus in Japanese developed in section 3.

4.1. Obligatory Overt Movement vs. Lack Thereof

In this section, I will consider empirical motivations for the claim that association with focus for the additive focus particle *mo* obligatorily involves overt “focus movement” to [Spec,FocP], while association with focus for the exclusive focus particle *dake* does not.

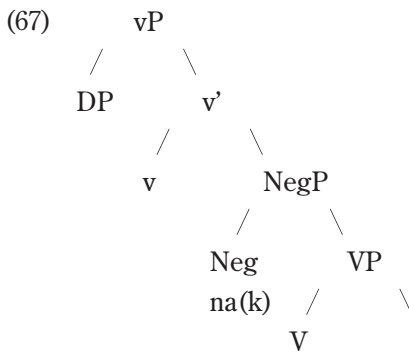
4.1.1. Scope Interpretation with Negation

An interesting scopal difference exists between the additive focus particle *mo* and the exclusive focus particle *dake* in association with focus relative to negation in Japanese. Observe the following paradigm in (63)-(66) (see also Miyagawa 2005 and Hasegawa 2005 for discussion of scope interaction between the additive focus particle *mo* and negation):³³⁾

- (63) John-wa sasimi-mo tabe-nakat-ta.
 John-TOP raw fish-also eat-NEG-PAST

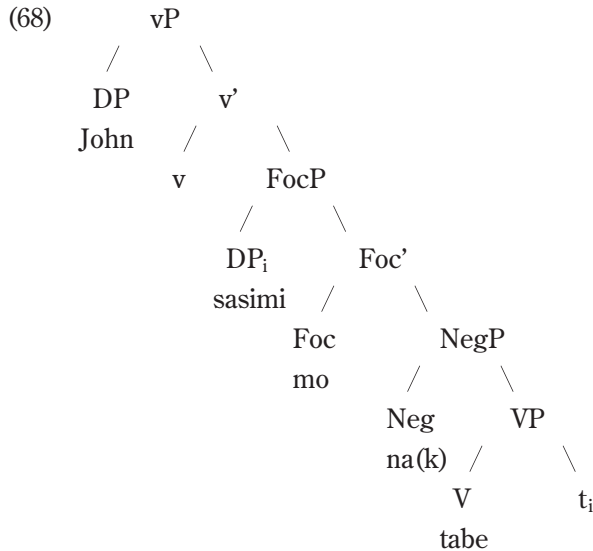
- ‘Lit. John did not eat also raw fish.’
also > not, *not > also
- (64) John-wa sasimi-dake-o tabe-nakat-ta.
John-TOP raw fish-only-ACC eat-NEG-PAST
‘Lit. John did not eat only raw fish.’
only > not, not > only
- (65) Mary-wa John-ni-mo hon-o okuranakat-ta.
Mary-TOP John-DAT-also book-ACC send-NEG-PAST
‘Mary did not send a book also to John.’
also > not, *not > also
- (66) Mary-wa John-dake-ni hon-o okuranakat-ta.
Mary-TOP John-only-DAT book-ACC send-NEG-PAST
‘Mary did not send a book only to John.’
only > not, not > only

Note that, although the direct object/the indirect object attached with the additive focus particle *mo* has to take scope over negation, the one attached with the exclusive focus particle *dake* can take scope both over and under negation, as illustrated by the contrast between (63)/(65) and (64)/(66). Suppose that NegP is located between vP and VP in Japanese, contra the standard assumption in the literature that NegP is universally located above vP, as depicted below:³⁴⁾



In what follows, just for expository simplicity, I will put aside the facts involving ditransitive verbs in (65) and (66) and concentrate on the facts in (63) and (64). First of all, the scope fact in (63) will follow once we assume that the TP-internal FocP headed by the additive focus particle *mo* is located between vP and NegP, as illustrated below (overt movement of the direct object DP to [Spec,VP] for

accusative Case-checking is ignored here just for expository simplicity):



In (68), the focus associate direct object DP must move overtly from within VP to [Spec,FocP] across NegP. Suppose that the scope relation between *mo* ‘also’ and *na(k)* ‘Neg’ is determined at their “base” positions due to the head-to-head selectional relation between them. If this is the case, then, the scope fact in (63) will fall into place.³⁵⁾

On the other hand, the same analysis does not carry over to the case in (64), otherwise the scope fact should pattern with (63), contrary to fact. Recall that the exclusive focus particle *dake* is merged with its focus associate directly. Suppose that there is no phonologically null FocP in Japanese. Given this assumption, there should be no independent FocP in association with focus involving the exclusive focus particle *dake*. In fact, if there were such a null FocP in association with focus for *dake*, the derivation would not converge due to the existence of undeleted formal features of the putative Foc head, viz., [ufocus] and [EPP] (see the discussion of the assumptions on *dake* in section 3.2.2). The scope fact in (64) will follow if the *dake*-phrase can optionally undergo scrambling, as illustrated below:

In this connection, it is quite instructive to look at the following interesting observation made by Takano (2003: 819):

- As expected, (70a) is ambiguous with respect to the scope of the *dake*-phrase relative to negation (see (64) above). Interestingly, on the other hand, (70b) is not ambiguous: the *dake*-phrase must take scope over negation. Note that in (70b) another focus particle *wa* (= a contrastive use of *wa*) is used instead of *mo*. It is to be noted that the additive focus particle *mo* is semantically incompatible with the exclusive focus particle *dake*, but the contrastive focus particle *wa* is compatible.

Thus, the scope fact in (70b) follows, given the derivation in which the *dake*-phrase has been overtly moved to [Spec,FocP] headed by the contrastive focus particle *wa*. This in turn provides further support for the analysis in (68), which is for the additive focus particle *mo*.

4.1.2. (Lack of) Reconstruction/Connectivity Effects with Pronominal Variable Binding

First, observe the paradigms in (71)-(72) concerning (im)possibility of pronominal variable binding by the *dake*-phrase:³⁶⁾

- (71) a. *soko-no itiban kosan-no kaikeisi-dake-ga
 that place-GEN most senior-GEN accountant(s)-only-NOM
 33%-izyoo-no kaisya-o hihansi-ta.
 33% or more-GEN companies-ACC criticize-PAST
 ‘only *its* most senior accountant(s) criticized 33% or more companies.’
- b. *soko-no itiban kosan-no kaikeisi-dake
 that place-GEN most senior-GEN accountant(s)-only
 33%-izyoo-no kaisya-o hihansi-ta.
 33% or more-GEN companies-ACC criticize-PAST
 ‘only *its* most senior accountant(s) criticized 33% or more companies.’
- c. soko-no itiban kosan-no kaikeisi-dake-o
 that place-GEN most senior-GEN accountant(s)-only-ACC
 33%-izyoo-no kaisya-ga hihansi-ta.
 33% or more-GEN companies-NOM criticize-PAST
 ‘only *its* most senior accountant(s), 33% or more companies criticized.’
- (72) a. *soko-no itiban kosan-no kaikeisi-dake-ga
 that place-GEN most senior-GEN accountant-only-NOM
 33%-izyoo-no kaisya-ni wairo-o watasi-ta.
 33% or more-GEN companies-DAT bribe-ACC give-PAST
 ‘only *its* most senior accountant(s) gave a bribe to 33% or more companies.’
- b. *soko-no itiban kosan-no kaikeisi-dake
 that place-GEN most senior-GEN accountant-only
 33%-izyoo-no kaisya-ni wairo-o watasi-ta.
 33% or more-GEN companies-DAT bribe-ACC give-PAST
 ‘only *its* most senior accountant(s) gave a bribe to 33% or more companies.’
- c. soko-no itiban kosan-no kaikeisi-dake-ni
 that place-GEN most senior-GEN accountant(s)-only-DAT

- 33%-izyoo-no kaisya-ga wairo-o watasi-ta.
 33% or more-GEN companies-NOM bribe-ACC give-PAST
 ‘only to its most senior accountant(s), 33% or more companies gave a bribe.’
- d. soko-no itiban kosan-no kaikeisi-ni-dake
 that place-GEN most senior-GEN accountant(s)-DAT-only
 33%-izyoo-no kaisya-ga wairo-o watasi-ta.
 33% or more-GEN companies-NOM bribe-ACC give-PAST
 ‘only to its most senior accountant(s), 33% or more companies gave a bribe.’

The fact that pronominal variable binding is possible in (72c,d) can be accounted for by the reconstruction/connectivity effect related to scrambling of the *dake*-phrase to the sentence-initial position.

Next, observe the following paradigm in (73)-(74) concerning (im)possibility of pronominal variable binding by the additive focus particle *mo*:

- (73) a. *soko-no itiban kosan-no kaikeisi-mo
 that place-GEN most senior-GEN accountant(s)-also
 33%-izyoo-no kaisya-o hihansi-ta.
 33% or more-GEN companies-ACC criticize-PAST
 ‘its most senior accountant(s) also criticized 33% or more companies.’
- b. soko-no itiban kosan-no kaikeisi-mo
 that place-GEN most senior-GEN accountant(s)-also
 33%-izyoo-no kaisya-ga hihansi-ta.
 33% or more-GEN companies-NOM criticize-PAST
 ‘its most senior accountant(s) also, 33% or more companies criticized.’
- c. soko-no itiban kosan-no kaikeisi-o-mo
 that place-GEN most senior-GEN accountant(s)-ACC-also
 33%-izyoo-no kaisya-ga hihansi-ta.
 33% or more-GEN companies-NOM criticize-PAST
 ‘its most senior accountant(s) also, 33% or more companies criticized.’
- (74) a. *soko-no itiban kosan-no kaikeisi-mo
 that place-GEN most senior-GEN accountant(s)-also
 33%-izyoo-no kaisya-ni wairo-o watasi-ta.
 33% or more-GEN companies-DAT bribe-ACC give-PAST
 ‘its most senior accountant(s) also gave a bribe to 33% or more companies.’
- b. soko-no itiban kosan-no kaikeisi-ni-mo
 that place-GEN most senior-GEN accountant(s)-DAT-also

33%-izyoo-no kaisya-ga wairo-o watasi-ta.
 33% or more-GEN companies-NOM bribe-ACC give-PAST
 ‘to its most senior accountant(s) also, 33% or more companies gave a bribe.’

The fact that pronominal variable binding is possible in (74b) indicates that there must be reconstruction/connectivity effects involved here as well. If the copy of the focus-moved constituent [*soko-no itiban kosan-no kaikeisi-ni*] is used for pronominal variable binding, while the scope of it is determined at [Spec,FocP] headed by *mo*, the fact in (74b) falls into place.

One might wonder whether the additive focus particle *mo* could be “reconstructed into” a VP-internal base-position along with the constituent [*soko-no itiban kosan-no kaikeisi-ni*]. That this is not the case can be detected by observing the following example:

- (75) soko-no itiban kosan-no kaikeisi-ni-mo
 that place-GEN most senior-GEN accountant(s)-DAT-also
 33%-izyoo-no kaisya-ga wairo-o watas-anakat-ta.
 33% or more-GEN companies-NOM bribe-ACC give-NEG-PAST
 ‘to its most senior accountant(s) also, 33% or more companies did not give a
 bribe.’

As we have already seen, unlike the exclusive focus particle *dake*, the additive focus particle *mo* must always take scope over negation. If the whole putative unit [*soko-no itiban kosan-no kaikeisi-ni-mo*] were reconstructed to its putative base-position (= indirect object position), *mo* would be forced to be under negation, contrary to fact. Thus, in (75), the additive focus particle *mo* must not be “reconstructed into” its putative base-position along with [*soko-no itiban kosan-no kaikeisi-ni*]. In fact, (75) is to be interpreted as saying that another person that 33% or more companies did not give a bribe to is its most senior accountant(s), as predicted by the assumption in this paper that the additive focus particle *mo* as an instance of the *kakari-joshi* “agreement particle” projects its own independent functional projection FocP, to the Spec of which an XP will be overtly moved.

4.2. The Locality Condition for Focus Feature-Splitting

In this section, I will provide further empirical motivations for the locality condition for the focus feature-splitting hypothesis in (42) in section 3.2.1.3, demonstrating that Aoyagi’s (1998, 1999, 2006) paradigms concerning (a) upper-

boundedness of wide focus, (b) absence of sideway focus shift, (c) absence of wide focus reading in dislocated DP-*mo*, and (d) argument-adjunct asymmetry in wide focus, are to be accounted for in a principled manner under my theory of association with focus as well.

4.2.1. Upper-boundedness of Wide Focus

Aoyagi (1998, 1999, 2006) observes that the additive focus particle *mo* in (76b) cannot take a matrix scope unlike in (76a), as illustrated below:

- (76) (John-wa Mary-ga sake-o nom-eru to omottei-ru dake de naku,
John-TOP Mary-NOM sake-ACC drink-can COMP think-PRES not only but
(‘John not only thinks that Mary can drink sake, but ...’)
a. (kare-wa) [Nancy-ga sasimi-o tabe-rareru to] sinzite-mo i-ru.
(he-TOP) Nancy-NOM raw fish-ACC eat-can COMP believe-also be-PRES
‘(he) also [believes that Nancy can eat raw fish]_F.’
b. (kare-wa) [Nancy-ga sasimi-mo tabe-rareru to] sinzitei-ru.
(he-TOP) Nancy-NOM raw fish-also eat-can COMP believe-PRES
‘(he) believes that Nancy can eat also [raw fish]_F.’
(= adapted from Aoyagi 1999: 53, (41))

The upper-boundedness of association with wide focus observed in (76b) follows automatically under my theory of association with focus. Recall that association with wide focus requires that the unvalued focus feature [uFoc] and the interpretable focus feature [focus] be separately assigned, being subject to the locality condition in (42). In (76b), since the additive focus particle *mo* is attached to the direct object of the embedded clause, the relevant local domain is confined to the embedded phase vP, which is minimal in the relevant sense. Hence, the interpretable focus feature [focus] cannot be split from the uninterpretable focus feature [uFoc] at the label of the embedded direct object in order to be assigned to the label of the matrix vP well beyond the embedded vP in (76b) in the first place. This correctly accounts for the upper-boundedness of association with wide focus in Japanese, as desired.

In this vein, it is of interest to note the fact that, although the additive focus particle *mo* in (76b) cannot take a matrix scope, it can still take the embedded VP, but not the embedded TP, as the focus associate in association with wide focus, as illustrated by the contrast in (77a) and (77b):

- (77) (John-wa Mary-ga sake-o nom-eru to omottei-ru dake de naku,)

John-TOP Mary-NOM sake-ACC drink-can COMP think-PRES only not but
 ‘John not only thinks that Mary can drink sake, but’

- a. #(*kare-wa*) [**Nancy-ga sasimi-mo tabe-rareru** to] *omottei-ru*.
 he-TOP Nancy-NOM raw fish-also eat-can COMP think-PRES
 ‘he also thinks that [Nancy can eat raw fish]_F.’
- b. (*kare-wa*) [*Mary-ga sasimi-mo tabe-rareru* to] *omottei-ru*.
 he-TOP Mary-NOM raw fish-also eat-can COMP think-PRES
 ‘he also thinks that Mary [can eat raw fish]_F.’

Although (77a), where the entire embedded clause TP is the focus associate, sounds odd, (77b), where only the embedded VP is the focus associate, sounds fine. In fact, this is correctly predicted by my theory of association with focus in section 3.2. Recall that when the additive focus particle *mo* is attached to the direct object in association with wide focus, the splitting of the interpretable focus feature [focus] and the uninterpretable focus feature [uFoc] can take place within the minimal phase, i.e., the embedded vP, with the VP sister to the phase head *v* as the focus associate for association with wide focus, excluding the subject, as illustrated in (46) in section 3.2. Hence the acceptability of association with wide focus in (77b) on the interpretation of the embedded VP as the focus associate.

4.2.2. Absence of Sideway Focus Shift

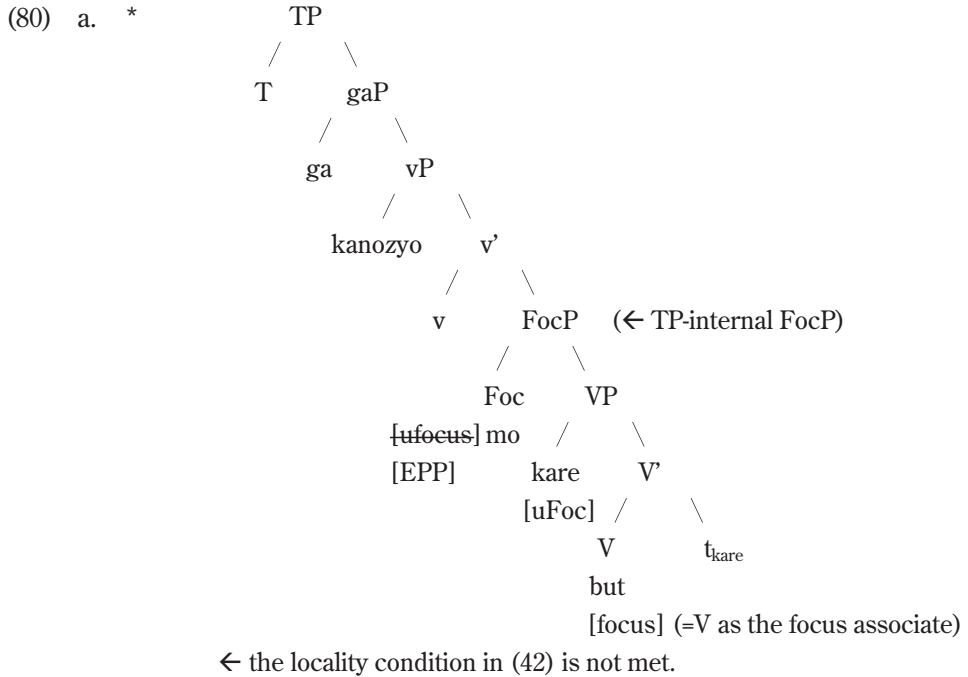
Aoyagi (1998, 1999, 2006) points out further that there is no sideway shift of association with focus in Japanese, as illustrated in (78)-(79):

- (78) (*kinoo Mary-wa John-o karakat-ta si*,)
 yesterday Mary-TOP John-ACC make-PAST fun of and
 (‘Yesterday, Mary made fun of John, and’)
 #(*kanozyo-wa kare-mo but-ta*.
 (she-TOP) him-also slap-PAST
 ‘Intended: (she) also [slapped]_F him.’
 (= adapted from Aoyagi 1999: 42, (28))
- (79) (*kinoo-wa Mary-ga John-o karakat-ta si*,)
 yesterday-TOP Mary-NOM John-ACC make-PAST fun of and
 (‘Yesterday, Mary made fun of John, and’)
 #**Lucy-ga** *kare-mo karakat-ta*.
 Lucy-NOM him-also make-PAST fun of
 ‘Intended: [Lucy]_F also made fun of him.’

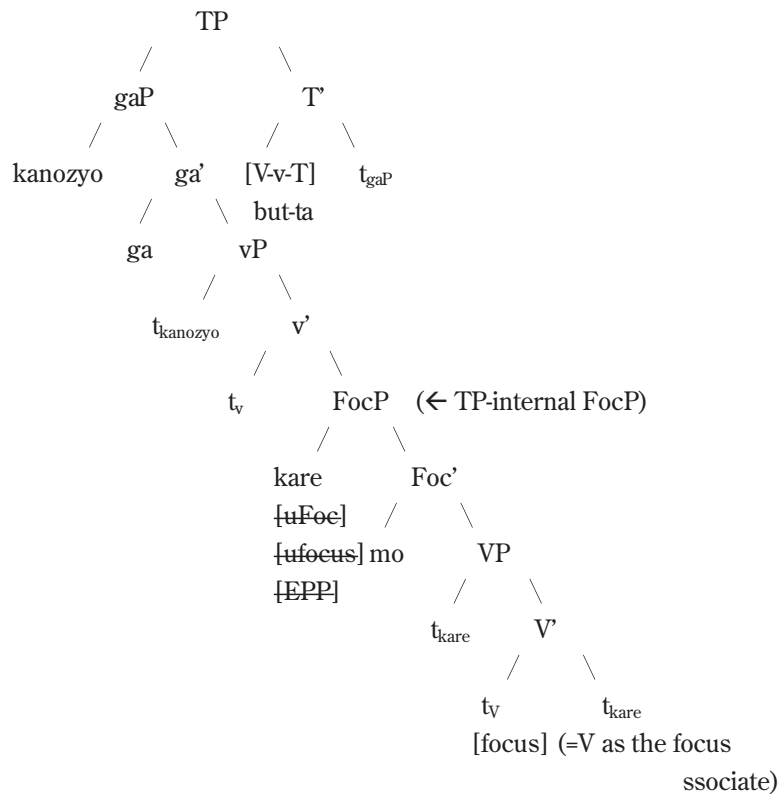
(= adapted from Aoyagi 1999: 46, fn.22, (i))

As indicated in (78), the additive focus particle *mo* attached to the direct object cannot be associated with the verb so that it has the interpretation that “she also SLAPPED him.” Similarly, as (79) shows, the additive focus particle *mo* attached to the direct object cannot be associated with the subject to yield the interpretation that “LUCY also made fun of him.”

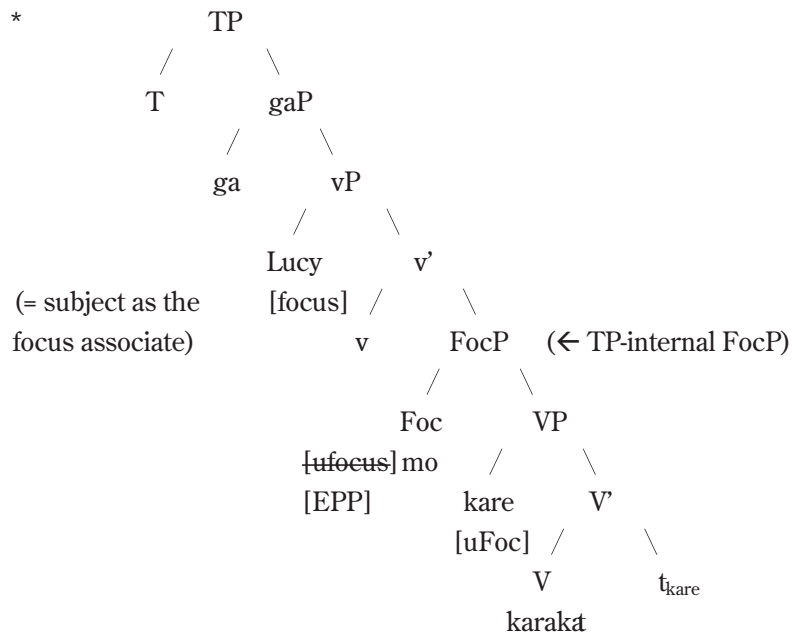
How can the impossibility of sideway focus shift in both (78) and (79) be accounted for under my theory of association with focus? To see the impossibility of the derivation for (78) and (79), the relevant steps of derivation are displayed in (80) and (81), respectively (the topic particle *wa* in (78) is replaced with the nominative case particle *ga* just for expository purposes in (80)):

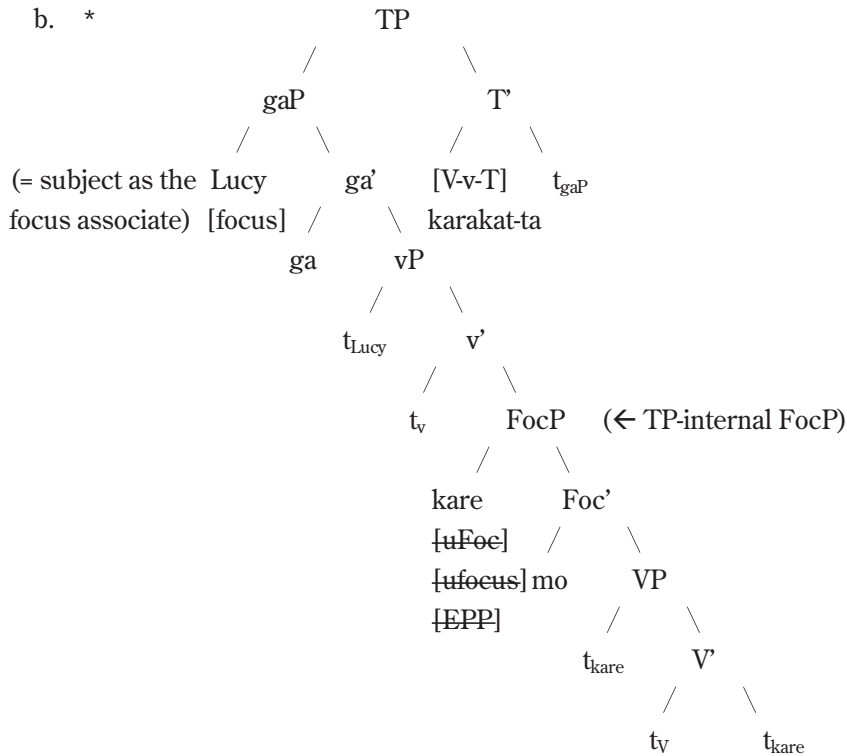


b. *



(81) a. *





← the locality condition in (42) is not met.

First of all, it is to be noted that, both in (80) and (81), the direct object *kare* 'him' has been moved to [Spec, FocP], which means that the direct object had the unvalued focus feature [uFoc] as part of its label. Second, if the verb and the subject are intended to be interpreted as being associated with the additive focus particle *mo*, which has the unvalued focus feature [ufocus] as part of its label, the verb V and the subject DP must carry the interpretable focus feature [focus] as part of their label in (80) and (81), respectively. Taken all together, this in turn means that the unvalued focus feature [uFoc] and the interpretable focus feature [focus] are supposed to be split apart.

However, according to the locality condition in (42), this kind of splitting pattern is not allowed. Recall the locality condition in *Focus Feature-Splitting Hypothesis* in (42) from section 3.2, which is reproduced below as (82) for ease of reference:

(82) Focus Feature-Splitting Hypothesis:

An interpretable focus feature [focus] and an uninterpretable focus feature

[uFoc] in the search domain of the Foc head can in principle be assigned to separate labels of relevant lexical items to the extent that the syntactic object with [uFoc] as part of its label is contained within the syntactic object with [focus] as part of its label within the minimal phase.

In (80), neither the V nor the direct object DP contains the other, in violation of the containment requirement in (82) (= (42)). Similarly, in (81), neither the direct object DP nor the subject DP contains the other, again running afoul of the containment requirement in (82) (= (42)). Hence, the impossible patterns of focus-feature splitting in (80) and (81) can account for the lack of sideways focus shift in a quite natural fashion.

However, notice that the locality condition in (82) (= (42)) alone does not prevent the entire VP from bearing the interpretable focus feature [focus] due to its presence at the label of the VP to have association with wide focus in (78)/(80) and (79)/(81). If we assume that, in (78)/(80) and (79)/(81), the focus associate is the whole VP, i.e., [_{VP} kare-o but] ‘hit him’ and [_{VP} kare-o karakat], then the sentences should be felicitous in the given contexts, in contradistinction to the facts in (83)-(84):

- (83) (kinoo Mary-wa John-o karakat-ta si,
yesterday Mary-TOP John-ACC make-PAST fun of and
(‘Yesterday, Mary made fun of John, and’)
#(kanozyo-wa) **kare**-mo **but**-ta.
(she-TOP) him-also slap-PAST
‘Intended: (she) also [slapped him]_F.’
- (84) (kinoo-wa Mary-ga John-o karakat-ta si,
yesterday-TOP Mary-NOM John-ACC make-PAST fun of and
(‘Yesterday, Mary made fun of John, and’)
#Lucy-ga **kare**-mo **karakat**-ta.
Lucy-NOM him-also make-PAST fun of
‘Intended: Lucy also [made fun of him]_F.’

In fact, the sentence in (78) becomes completely felicitous with apparently complicated association with narrow focus, as shown in (85):

- (85) (kinoo Mary-wa John-o karakat-ta si)
yesterday Mary-TOP John-ACC make-PAST fun of and

(‘Yesterday, Mary made fun of John, and’)
 (kanozyo-wa) **kare-o** **buti**-mo si-ta.
 (she-TOP) him-ACC slap-also do-PAST
 ‘Lit. (she) also [slapped him]_F.’

Notice that the sentence in (85) not only allows association with narrow focus for the verb V, but also association with wide focus for the entire VP (see Büring 2003 for an observation that a discourse-given element like a pronoun can be (part of) a focus).

Now, can we account for the lack of association with wide focus for the entire VP in (78)/(80) and (79)/(81) together with the presence of association with narrow focus for the entire VP in (85) in a non-contradictory manner under my theory of association with focus? Recall the information structural condition in (47), repeated here as (86) for convenience:

(86) The Information Structural Condition on Association with Focus:

The focus associate portion of a sentence can be new or given or a mixture of new and given elements in association with narrow focus, while it must be new in association with wide focus. On the other hand, the remaining background portion of the sentence must be given in both association with narrow focus and association with wide focus.

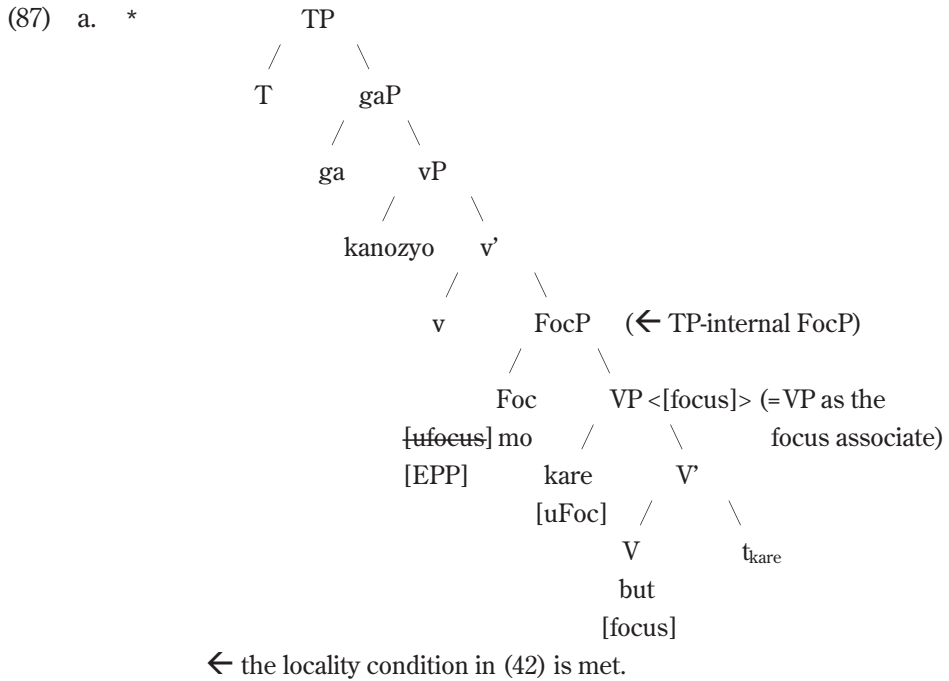
It is to be noted that NS-internal computation only dictates possible patterns of focus feature assignment and possible syntactic environments for occurrence of focus-related features by (30) and (42), and that the candidates generated by NS-internal computation are to be further “filtered out” through NS-external/semantic component-internal condition in (86) in determining the final appropriate representation for association with focus in question.

One might wonder why there is a fundamental difference between association with narrow focus and association with wide focus with respect to the information structural condition in (86). Although the ultimate source remains to be discovered, it seems that the following difference might be at least partly responsible for the discrepancy at stake from the perspective of my theory of association with focus. In the case of association with narrow focus, the focus associate is purely syntactically restricted to the head or its projection of an element which has been overtly moved to [Spec,FocP]. Since the relevant restriction is purely formal, the element at [Spec,FocP] is rather free in terms of information structure in that it can be new or

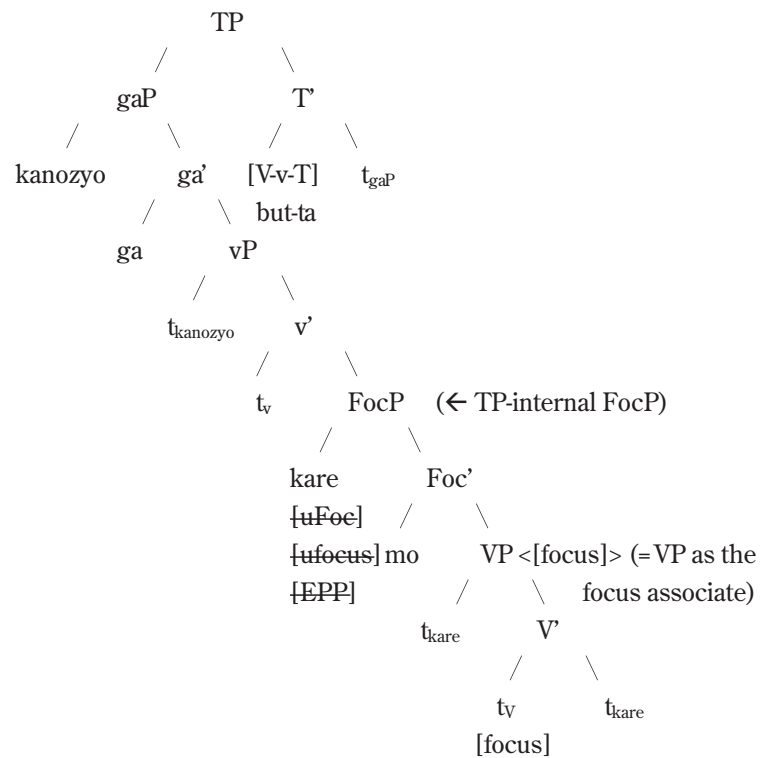
given or a mixture of new and given elements.

On the other hand, in the case of association with wide focus, the focus associate cannot be restricted in purely syntactic terms. Note that, although an interpretable focus feature [focus] is assigned to the label of the complement of the Foc head, the whole complement XP, not its subpart, always has to be interpreted as the focus associate. Presumably, in order to guarantee this, there has to be a stronger non-syntactic restriction in (86) (= (47)) to be imposed on the focus associate in association with wide focus in such a way that it has to be made up of elements carrying only new information.

With the relevant condition in (86) (= (47)) in mind, let us look at the derivation for “putative” association with wide focus in (78) and (79), as illustrated in (87) and (89), respectively:

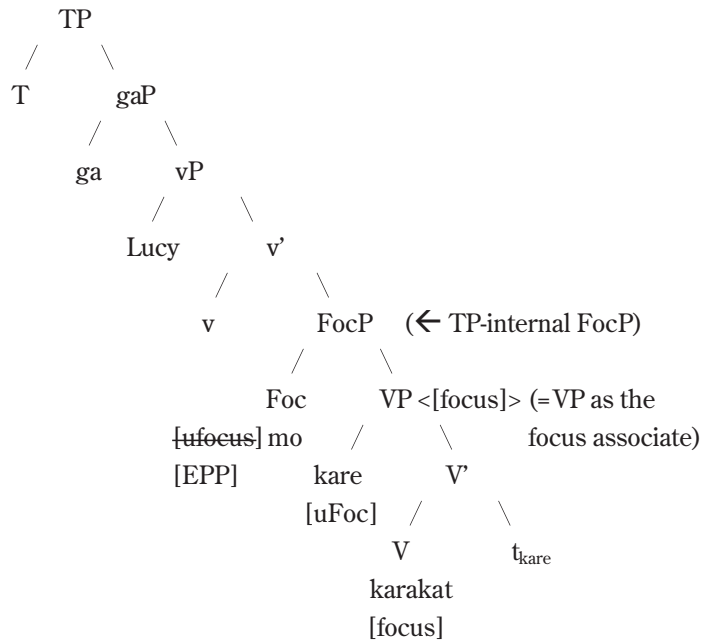


b. *



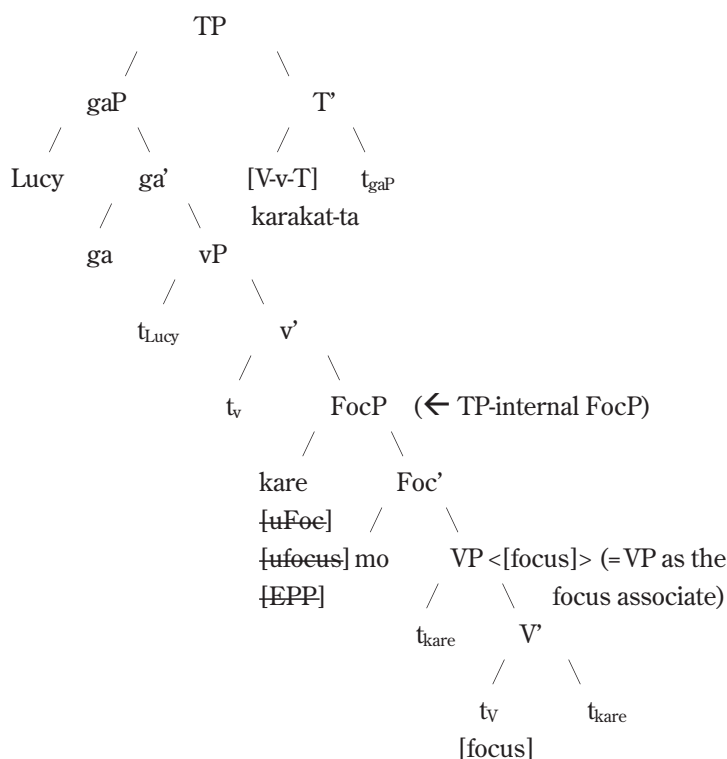
← the locality condition in (42) is met.

(88) a. *



← the locality condition in (42) is met.

b. *



← the locality condition in (42) is met.

Recall from the discussion at section 3.2 concerning association with wide focus in connection with the condition in (86) (= (47)). In effect, association with wide focus requires that the focus associate be completely new, including no given element, unlike in association with narrow focus. Note, however, that, in (87), the VP as the putative focus associate contains a given element *kare* ‘him’, which rules out association with wide focus, as desired. By the same token, in (88), the VP as the putative focus associate includes given elements such as *kare* ‘him’ and *karakat* ‘make fun of’, which is incompatible with association with wide focus. In contrast, since (85) involves association with narrow focus, it is free from this requirement on the focus associate.

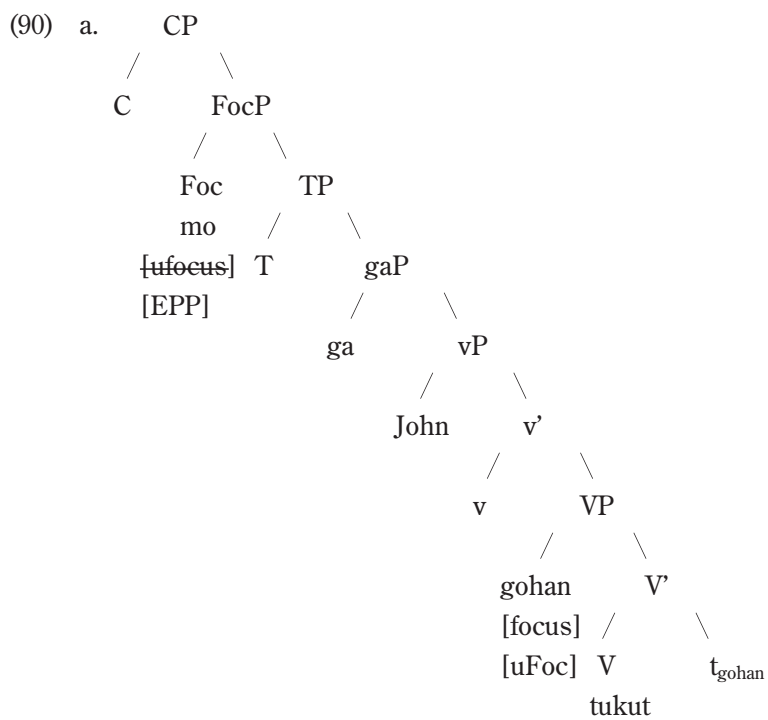
4.2.3. Absence of Wide Focus Reading in Dislocated DP-*mo*

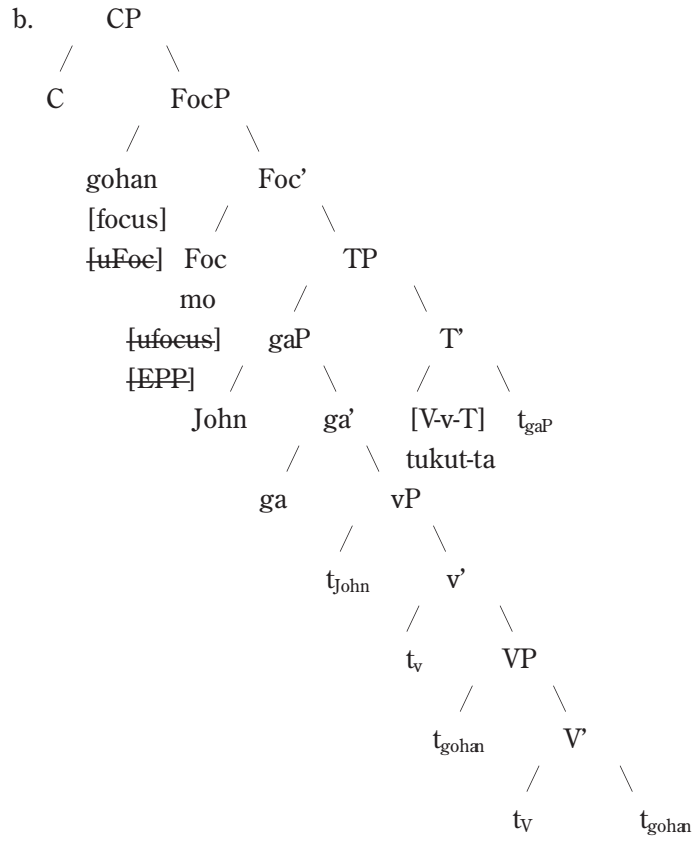
In addition, Aoyagi (1998, 1999, 2006) pays attention to the fact that once an argument DP with a focus particle is moved to a sentence-initial position by scrambling or topicalization, association with wide focus is rendered impossible, as witnessed in (89) below:

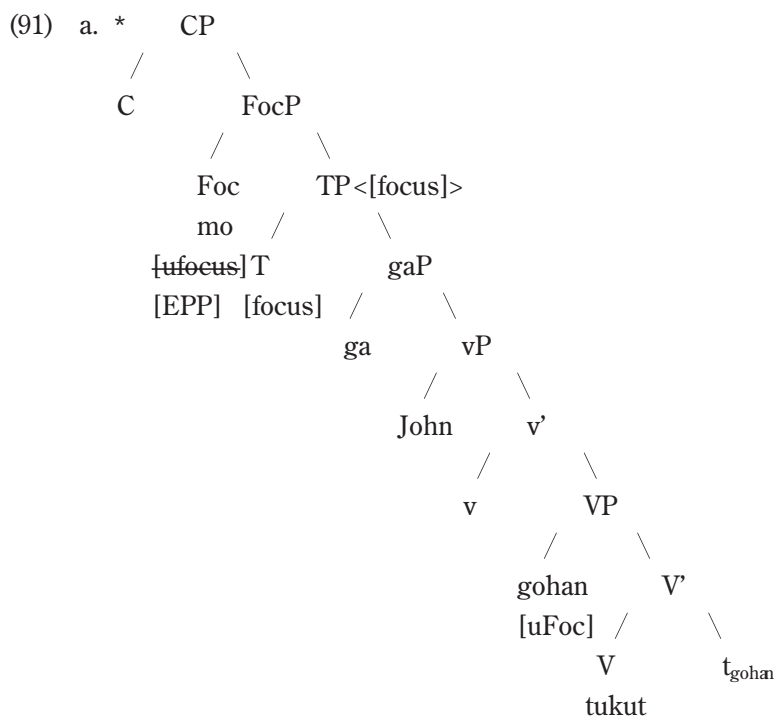
- (89) (kinoo-wa iroiro mezurasii koto-ga at-ta. 4-gatu nanoni
 yesterday-TOP many unusual thing-NOM exist-PAST April though
 ooyuki-ga hut-ta, sosite)
 heavy snow-NOM fall-PAST and
 ('Yesterday, many unusual things happened. Although it is April by now,
 it snowed heavily, and')
 #**gohan**_i-mo John-ga _i tukut-ta.
 meal-also John-NOM make-PAST
 'Lit. Also [a meal]_F, John made.'

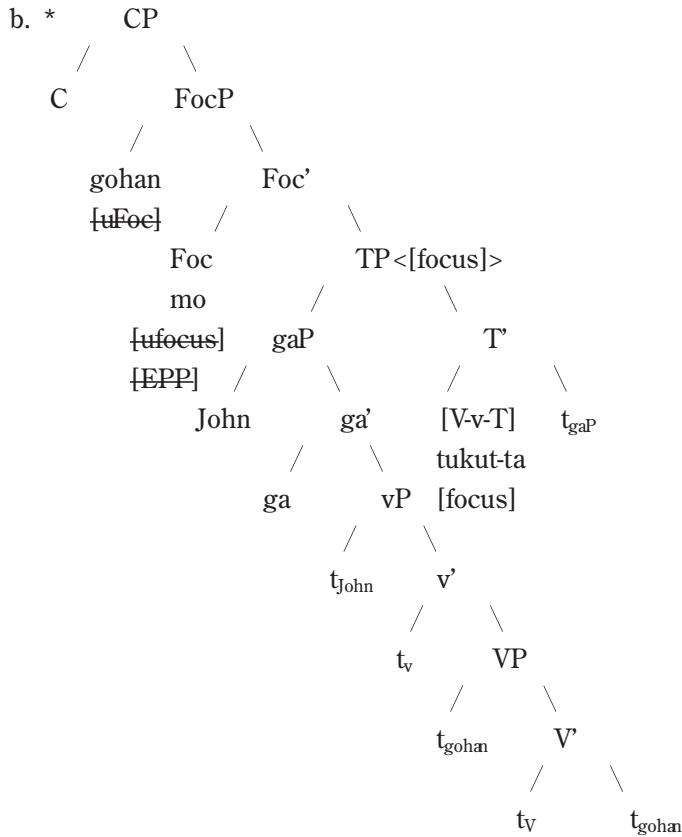
(= adapted from Aoyagi 1999: 50, (38c))

(89) can involve only association with narrow focus for the displaced DP *gohan* 'rice', but the context forces association with wide focus with the whole TP as the focus associate. Hence, the oddness arises in (89). Note that (89) indicates that the displaced DP *gohan* 'rice' has been moved to [Spec,FocP] located TP-externally, which is clear due to the presence of the nominative case-marked subject. The fact in (89) also follows from my theory of association with focus. To see this, let us compare the actual derivation for (89), as depicted in (90), and the derivation to be required for association with wide focus for (89), as shown in (91):









It is to be noted that, in order to obtain association with wide focus with the whole TP as the focus associate, the interpretable focus feature [focus] has to be split from [uFoc] at the label of the direct object DP *gohan* ‘rice’ to be displaced to [Spec,FocP] and be separately assigned to the label of the whole TP, as depicted in (91a). However, such a splitting pattern is not permitted by the locality condition in (42). Recall that since (42) would force the splitting in question to take place within the minimal phase vP for (89), it could not put the interpretable focus feature [focus] at the label of TP projection, which is outside of the minimal vP phase, as shown in (91a), under my theory of association with focus, as correctly predicted.³⁷⁾

4.2.4. Argument-Adjunct Asymmetry in Wide Focus

Finally, Aoyagi (1996, 1998, 1999) notes an argument-adjunct asymmetry with respect to possibility of wide focus association, as illustrated in (92):

- (92) (John-wa mai asa tyuusya-o utta dake-de naku,
 John-TOP every morning shot-ACC take-PAST not only but
 ('John not only took a shot every morning, but')
- a. **itiniti sankai kusuri-o nomi**-mo si-ta.
 one day three-times medicine-ACC take-also do-PAST
 '(he) also [took medicine three times a day]_F.'
- b. **itiniti sankai kusuri**-mo **non**-da.
 one day three-times medicine-also take-PAST
 '(he) also [took medicine three times a day]_F.'
- c. **itiniti sankai**-mo kusuri-o non-da.
 one day three-times-as often as medicine-ACC take-PAST
 'Lit. (he) took medicine as often as three times a day.'
- (= adapted from Aoyagi 1999: 46, (35))

As shown in (92b), the direct object attached by the additive focus particle *mo* permits association with wide focus with the VP including the adjunct *itiniti sankai* 'three times a day' as the focus associate. I will take the acceptability of (92b) on the relevant interpretation as indicating that the adjunct has been scrambled to a pre-FocP position and the copy located within the VP is used in obtaining association with wide focus.

By contrast, as illustrated in (92c), the adjunct expression *itiniti sankai* 'three times a day' attached by the additive focus particle *mo* does not allow for association with wide focus, unlike arguments. Recall that association with wide focus requires the splitting of the unvalued focus feature [uFoc] and the interpretable focus feature [focus] in accordance with the locality condition in (40) under my system. One possible account for the fact in (92c) is that such focus feature separation is impossible in (92c), since the relevant containment relation between [focus] and [uFoc] does not hold between distinct planes in (92c), given the assumption that adjuncts belong to a different dimension (Chomsky 2001b, 2004, Goodall 1984, 1987). This might also be related to the following fact pointed out by Aoyagi (1998, 1999). Notice that as far as the interpretation of the focus particle *mo* in (92c) is concerned, it carries a degree interpretation such as "as often as," which is quite different from the usual additive use of the focus particle *mo* in Japanese. Thus, it seems reasonable to take the focus particle *mo* attached to the adjunct in (92c) as not the same instance of the additive focus particle *mo* in Japanese.

One might wonder whether the impossibility of association with wide focus with respect to *mo*-attached adjuncts is restricted to adjuncts like *itiniti sankai*

‘three times a day’, which appear to be difficult to stand in an “in-addition-to” relation in the first place. However, the relevant restriction on adjuncts can apply to other types of adjuncts like time adverbs, as shown in (93):

- (93) (John-wa kinoo tyuusya-o ut-ta dake de naku,
 John-TOP yesterday shot-ACC take-PAST not only but
 (‘John not only took a shot yesterday, but . . .’)
 #**kyoo**-mo kusuri-o non-da.
 today-also medicine-ACC take-PAST
 ‘Lit. (he) took medicine also [today]_F.’
 Not ‘(he) also [took medicine today]_F.’

As the translations in (93) indicate, association with wide focus is not available with the *mo*-attached adjunct *kyoo-mo* ‘today-also’. Thus, it seems that Aoyagi’s (1998, 1999, 2006) observation for argument-adjunct asymmetry in wide focus holds in general.

Related to the issue on (92b), there is an interesting fact that, when the object is attached by the accusative case particle *o* along with the additive focus particle *mo*, association with wide focus does not seem to be available, as illustrated in (94):

- (94) (John-wa mai asa tyuusya-o utta dake-de naku,
 John-TOP every morning shot-ACC take-PAST only not but
 (‘John not only took a shot every morning, but’)
 #itiniti sankai **kusuri-o**-mo non-da.
 one-day three-times medicine-ACC-also take-PAST
 ‘Lit. (he) also took [medicine]_F three times a day.’

Although the judgment of (94) might be subtle, there seems to be some oddness under the interpretation of association with wide focus, which is forced by the context in (94). Thus, as reflected in the translation in (94), only association with narrow focus seems to be available. Note that association with wide focus for (94) would require assignment of the uninterpretable focus feature [uFoc] to the label of the whole accusative case-marked direct object *kusuri-o* ‘medicine-ACC’ and assignment of the interpretable focus feature [focus] to the label of the VP (including the copy of the adjunct *itiniti sankai* ‘three times a day’).

The unavailability of association with wide focus in (94) might suggest that the accusative case-marked direct object [DP-o] constitutes an independent phase

on a par with vP and CP, unlike the non-accusative-case-marked bare direct object DP. If this is the case, splitting of the interpretable focus feature [focus] and the uninterpretable focus feature [uFoc] is impossible across the phase in question due to the locality condition in (42) based on the notion of phase. Since a full-fledge investigation into this issue is definitely called for, I will leave it to another occasion.

5. Concluding Remarks

In this paper, I have pointed out that at least the versions of the LF movement approach to association with focus in Japanese entertained by Aoyagi (1998, 1999, 2006) are faced with theoretical/empirical problems, exploring another way of reframing Kuroda's (1965) attachment transformation analysis. I have claimed that the phenomenon of association with focus in Japanese should be best captured without recourse to any LF movement operations in the spirit, but not on the same mechanism, of Kayne (1998, 2000), while keeping in part to Aoyagi's (1998, 1999, 2006) original insight of taking association with focus as "focus feature agreement or sharing."

More specifically, I have made the following points: (i) the additive focus particle *mo* 'also' can trigger both association with narrow focus and association with wide focus, and its association with focus should be best analyzed as involving overt XP movement to [Spec,FocP] via Agree between the Foc head *mo* and its focus associate; (ii) the exclusive focus particle *dake* 'only' can trigger only association with narrow focus, and its association with focus is to be analyzed as involving just Merge without any Agree operation. In so doing, I put forth a new hypothesis for focus feature organization in narrow syntax (NS) (*Focus Feature-Splitting Hypothesis*) to the effect that the unvalued focus feature [uFoc] and the focus feature [focus] can in principle be separately assigned as part of the labels of two distinct lexical items, as long as such focus feature splitting meets some locality condition based on the notion of phase with respect to the containment relation between the two labels at stake. I also demonstrated that the proposal and analysis in this paper including the *Focus Feature-Splitting Hypothesis* is empirically motivated, by closely reexamining Aoyagi's (1998, 1999, 2006) paradigms concerning (a) upper-boundedness of wide focus, (b) absence of sideways focus shift, (c) absence of wide focus reading in dislocated DP-*mo*, and (d) argument-adjunct asymmetry in wide focus in light of my theory of association with focus.

To the extent that the proposal and analysis in this paper is on the right track,

it shows that the empirical domain of association with focus in Japanese is not compatible with the GB/earlier Minimalist Program double-cycle computational system for the faculty of language (FL), but it can be compatible with the recent view of the single-cycle computational system in the Minimalist Program for FL (cf. Kayne 1998, 2000, Epstein et al. 1998, Chomsky 2001b, 2004, and Epstein and Seely 2006 *inter alia*.)³⁸.

Notes

*The content in this paper which is related to the additive focus particle *mo* ‘also’ in Japanese will appear in *Journal of Japanese Linguistics* 24 (Hoshi to appear a). This paper is an attempt to integrate both the additive focus particle *mo* ‘also’ and the exclusive focus particle *dake* ‘only’ into a more comprehensive and coherent theory of association with focus in Japanese. I wish to thank Kazumi Matsuoka and Nobuhiro Miyoshi for discussion during the gestation period of this project. An earlier version of this paper was presented at the 78th General Meeting of the English Literary Society of Japan (Chukyo University, May 21). Thanks are also due to the audience of the conference, especially Hiroshi Aoyagi and Yuji Takano, for useful comments. Finally, I would like to express my thanks to Yoko Sugioka, Yuji Takano and Kazumi Matsuoka for their insightful comments on an earlier version of this paper. Needless to say, all remaining errors and inadequacies are solely my own responsibility. The research reported here is supported by Japan Society for the Promotion of Science Grant-in-Aid for Scientific Research (B) 6320062 (principal investigator: Kazumi Matsuoka).

1) The term “association with focus” is originally due to Fisher (1968), which is cited by Jackendoff (1972). See Rooth (1985, 1992, 1995, 1999) for an in-depth formal semantic analysis of association with focus in the framework of Alternative Semantics.

2) In this paper, the following abbreviations are employed for glosses:

NOM = nominative; ACC = accusative; DAT = dative; TOP = topic; PAST = past tense; PRES = present tense; COMP = complementizer; COP = copula; NEG = negation; CL = classifier

3) Association with narrow focus and association with wide focus are characterized by Aoyagi (1998, 1999, 2006) as follows: In the former, a focus particle c-commands its focus associate at Spell-Out and at LF; in the latter, a focus particle does not c-command its focus associate at Spell-Out, but it does so at LF (see Aoyagi 1998, 1999, 2006 for details. But see section 3.2 for my reformulations of the definitions of association with narrow focus and association with wide focus).

4) See Hagstrom (1998) for a very similar proposal for Japanese and Sinhalese *wh*-questions. I would like to leave a re-examination of his work to future research.

5) Chomsky (2001b, 2004) mentions the possibility of taking the difference between overt movement and covert movement in the traditional sense as deriving from the timing of Spell-Out/Transfer with respect to movement in the single-cycle system, as claimed by Nissenbaum (2000) and Pesetsky (2000) *inter alia* (see also Bobaljik 2002 for a different view in the single output model). Although it might be possible to somehow recapture Aoyagi’s (1998, 1999, 2006) LF movement analysis along these lines, I will pursue the simpler system of narrow syntactic computation, as entertained by Kayne (1998, 2000), Epstein et

al. (1998), Chomsky (2001b, 2004), and Epstein and Seely (2006) *inter alia*. in this paper. I am grateful to Yuji Takano for bringing the difference between Nissenbaum's (2000) and Pesetsky's (2000) view of single-cycle narrow syntactic computation and that of Kayne (1998, 2000), Epstein et al. (1998), Chomsky (2001b, 2004), and Epstein and Seely (2006) into my attention.

6) The focus particle *sae* 'even' in Modern Japanese is somewhat vague with respect to its status. Aoyagi (1998:64-65, fn.3) states that *sae* has undergone a shift from an Old Japanese *fuku-joshi* to a Modern Japanese *kakari-joshi* (cf. Izuru Shinmura (ed.) *Kojien* Dictionary (4th edition, 1991)). In spite of this diachronic categorial shift, *sae* in Modern Japanese seems to exhibit mixed characteristics of *kakari-joshi* and *fuku-joshi* as far as both distribution and association with focus are concerned. I will leave the treatment of other focus particles in Japanese including *sae* to future research.

7) Although Aoyagi (1998, 1999, 2006) himself dismisses the LF head movement approach in light of the relevant LF head-movement's violability of the Head Movement Constraint (HMC) (cf. Travis 1984), I will include this approach as part of the discussion here, since I believe that the strict version of the HMC does not necessarily hold here as well (see Chomsky 1995 for such a view). Thus, I will provide different empirical evidence below to reject the LF head-movement approach independent of its violability of the HMC.

8) Even if we assume that the major subject in Japanese is located at a vP-adjoined position (or at an outer Spec of vP in a multiple Spec structure), in both the LF head movement approach and the LF clitic adjunct movement approach, the LF movement of the additive focus particle *mo* and the exclusive focus particle *dake* out of the major subject would run afoul of some version of CED (Huang 1982), since the movement in question would involve extraction out of a non-complement (cf. Kitagawa 1986 and Kuroda 1988 *inter alia*. for an analysis of the major subject in Japanese under the predicate-internal subject hypothesis). See also Aoyagi (1999) for some discussion on CED effects with regard to LF-movement of *mo* and *dake* in Japanese.

9) A caveat is in order here with respect to the use of idiom chunks. In general, idioms vary in the degree of "frozenness." In what follows, an idiom appropriate for the test at stake is selected on the basis of the two criteria relevant for frozenness properties: (i) impossibility of modifying an idiom chunk to be focused ; (ii) impossibility of scrambling an idiom chunk to be focused. It is crucial not to employ any idioms that fall short of such criteria.

10) Yuji Takano (p.c.) wondered how the following pair of examples involving the so-called dative subject construction in Japanese could be dealt with under my analysis:

- (i) a. John-ni rosiago-ga waku.
- John-DAT Russian-NOM understand-PRES
- 'John understands Russian.'
- b. rosiago-ga John-ni waku.
- Russian-NOM John-DAT understand-PRES
- 'Russian, John understands (it).'

(ia) is assumed to reflect the underlying order, whereas (ib) is considered to correspond to the derived order. I would like to tentatively propose that the dative subject is generated at [Spec,vP] and a *ga*P can

also be generated optionally between vP and VP in Japanese on a par with a FocP. Under this assumption, the nominative object *rosiago* ‘Russian’ in (ia) has been moved from the complement of V to [Spec,*ga*P], which is located between vP and VP. On the other hand, in the case of (ii), the object *rosiago* ‘Russian’ has been moved from the complement of V to [Spec,*ga*P], which is located between TP and vP, as assumed in the text below, crossing the dative subject at [Spec,vP]. Thus, strictly speaking, there is no scrambling involved in (ib) under my analysis, in accordance with the immobile nature of a *ga*P observed in (24a) and (25a). Furthermore, it might be possible to incorporate the nominative case-marked proleptic object in the sense of Takano (2003) under the assumption that such a proleptic object is directly externally merged into [Spec,*ga*P] generated between vP and VP in Japanese. Since a full-fledged investigation into this interesting issue is just beyond the scope of this paper, I would like to leave it to future research.

11) Although I claim that a *ga*-marked DP cannot be clefted in (23a), it is known that it can in some cases such as (i) (see Koizumi 1995, 1999 for more similar examples and extensive relevant discussion of the cleft construction in Japanese).

- (i) Ano yama-no tyoozyoo-ni tadoritui-ta no wa
 that mountain-GEN top-at reach-PAST COMP-TOP
 Waseda-no gakusei-ga san-nin-dake da.
 Waseda Univ.-GEN student-NOM three-CL-only COP

‘It is only three students at Waseda University that reached the top of that mountain.’

Note that, in (i), the *ga*-marked focus element of the cleft [Waseda-no gakusei-ga sannin-dake] contains a floating quantifier associated with the *ga*-marked subject. Under my assumption on the Japanese clausal architecture in this section, one possible approach to such a cleft construction as in (i) is to analyze (i) as involving overt remnant movement of a nominative case particle phrase (*ga*P) to the focus position of the cleft, with [ano yama-no tyoozyoo-ni] and [tadoritui] having undergone scrambling to TP and overt V-v-T movement, respectively. Here, I am basically incorporating into my assumption on Japanese clausal structure Hiraiwa and Ishihara’s (2002) analysis of the cleft construction in Japanese, in which the focus element of the cleft overtly moves to the pre-copula position out of the underlying *no da* construction and then the remnant overtly moves to the Spec of TopP headed by the topic marker *wa* (see Hiraiwa and Ishihara 2002 for more details). Yuji Takano (p.c.) correctly pointed out that my account for (i) would lead to ruling in the unacceptable example in (25a), as it stands, contrary to fact. One possible line of analysis is to invoke some kind of economy of representation as follows, generalizing Diesing’s (1990) and Fukui and Takano’s (2000) ideas (I am grateful to Yuji Takano for bringing these works into my attention in this connection):

- (ii) A syntactic structure is present only when it is necessary to properly reflect PF.

Note that, in (i), the presence of a numeral floating quantifier to be associated with the subject requires postulation of a vP structure in a *ga*P under my analysis of the clausal architecture of Japanese, while it is not the case in (25a) (see Hoshi to appear b for a treatment of numeral floating quantifiers in Japanese, which is compatible with this assumption). Given the constraint in (ii), a derivation involving movement of a *ga*P containing a vP would be correctly ruled out for (25a). Furthermore, Yuji Takano (p.c.) brought up the fact that the following cleft sentence is well-formed unlike the case in (25a):

(iii) John-ga tabeta no-wa sasimi-mo da.

John-NOM eat-PAST COMP-TOP raw fish-also COP

'lit.It is also raw fish that John ate.'

I will take the acceptability in (iii) as indicating that the additive focus particle *mo* heads the FocP generated at the pre-copula position for the cleft construction in Japanese. Interestingly, other focus particles such as *dake* 'only', *sae* 'even', the contrastive *wa* 'at least' behave differently regarding their availability as a part of the focus element of the cleft construction in Japanese:

(iv) a. John-ga tabeta no-wa sasimi-dake da.

John-NOM eat-PAST COMP-TOP raw fish-only COP

'lit.It is only raw fish that John ate.'

b. (?)John-ga tabeta no-wa sasimi-sae da.

John-NOM eat-PAST COMP-TOP raw fish-even COP

'lit.It is even raw fish that John ate.'

c. *John-ga tabeta no-wa sasimi-wa da.

John-NOM eat-PAST COMP-TOP raw fish-at least COP

'lit.It is at least raw fish that John ate.'

Given the assumption that both *mo* and the contrastive *wa* (and a subtype of *sae*) are assumed to head the FocP for the cleft construction in Japanese, the unacceptability of (ivc) is quite surprising and it seems that the contrast between (iii) and (ivc) cannot be accounted for in purely syntactic terms. Incidentally, as proposed later in this paper, the exclusive focus particle *dake* 'only' in Japanese is directly merged with its focus associate, e.g. *sasimi* 'raw fish' in (iv). Provisionally, I would like to propose the following licensing condition on the occurrence of a focus particle as a part of the focus element in the cleft construction in Japanese:

(v) a focus particle can occur as a part of the focus element in the cleft construction to the extent that whether there is/are alternative proposition(s) to be derived from the topic *wa*-marked *no*-phrase or not is clearly determined in interpreting the whole cleft construction at stake.

In the case of *dake* 'only', there cannot be any alternative derived propositions other than 'John ate raw fish'. On the other hand, in the cases of *mo* 'also' and *sae* 'even', there must be alternative derived propositions other than 'John ate raw fish', say, 'John ate fermented soybeans.' In contrast, in the case of the contrastive *wa* 'at least', the availability of such (an) alternative derived proposition(s) is undetermined due to the semantics of the contrastive *wa* in Japanese (see Kuroda 2005 for a detailed discussion of the epistemic background concerning the contrastive *wa* in Japanese). If an account along this line is basically on the right track, the contrast between (iii) and (ivc) does not seem to challenge my claim for (iii). Since these topics *per se* are just beyond the scope of this paper, I would like to pursue them on another occasion in my future research.

12) 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 T (see, e.g., Shibatani 1977, Takezawa 1987, Ura 2000). Although this is not directly relevant in the ensuing discussion, I will not take the position that T will obligatorily select the nominative case particle

projection *ga*P, 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 particle, but it is not a sufficient condition for it. One possibility is to assume that, since the nominative case particle head possesses [u ϕ] along with [EPP], 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 (see the assumption to this effect in the text below). 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 not 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 particle head is not licensed despite the presence of T in the context in (i) above.

13) Takezawa and Whitman (1998:77) observe that the subject of the small clause construction in Japanese can be marked with the nominative case in spite of lack of tense specification, as illustrated below:

- (i) *watasi-wa [_{sc} zibun-no karada-ga totemo karuku] kanzita.*
 I-TOP self-GEN body-Nom very light feel-PAST
 ‘Lit.I felt my body very light.’

Sugioka (2007), however, analyzes (i) as involving the intransitive use of *kanziru* ‘feel’ in Japanese, with its subject being assigned with the nominative case by the matrix T as usual on a par with (ii):

- (ii) *John-wa sono toki totemo sabisiku kanziteita.*
 John-TOP that time very lonely feel-PAST
 ‘John felt very lonely at that time.’

(= adapted from Sugioka 2007: 40, (43))

Thus, to the extent that Sugioka’s (2007) analysis of (i) is on the right, it does not pose any problem to my assumption on the nominative case-marking in Japanese in the text.

14) With respect to the accusative case particle *o* and maybe at least a subtype of the dative case particle *ni*, I will tentatively assume that, although they are merged with a nominal element as functional elements, they lack [u ϕ] unlike the nominative case particle *ga*, with [u ϕ] being assigned to an independent functional element like *v* or *V*. One possibility is that the accusative case particle and at

least a subtype of the dative case particle are morphological realizations of the result of Case-feature checking/valuation (see Takano 1996 and Fukui and Takano 1998 for a similar view on the status of the accusative case particle *o* in Japanese). I will leave this important issue open here, pending more in-depth investigation into Case/case-related phenomena.

15) It might be in order to make a remark about my position for the major subject in Japanese in this connection. Although the topic of major subject in Japanese is not part of the main focus in this paper, I will (tentatively) assume without argument that at least core cases of the major subject will be derived by either of the following ways under the hypothesis that *ga*P can be generated iteratively as long as it is licensed: (i) a DP to be turned into a major subject overtly moves up to [Spec,*ga*P] from [Spec,DP] by internal Merge, or Subjectivization in the sense of Kuno (1973); (ii) a DP to be turned into a major subject is introduced into [Spec,*ga*P] by external Merge. I would like to leave spelling out of the exact derivation of the major subject in Japanese under my analysis of the Japanese clausal architecture to future research. Incidentally, even if it is assumed that the focus-particle-attached sentence-initial elements *Taroo-mo* ‘Taro-also’ in (8) has been derived via the major subject position under the present non-standard assumption, my argument against the LF head movement approach/LF clitic adjunct movement approach in section 2 still holds. Note that, under my assumption on the Japanese clausal configuration in (28), the sentence-initial *mo*-attached element *Taroo-mo* ‘Taro-also’ has to be located above TP due to the fact that it is positioned to the left of the *ga*-marked element *musuko-ga* ‘son-NOM’ in (8), so the additive focus particle *mo* would be forced to move down to T at LF by either the LF head movement approach or the LF clitic adjunct movement approach.

16) Yuji Takano (p.c.) pointed out to me that the sequences *John-made-mo-ga* and *John-sae-mo-ga* are acceptable in contrast to (29c). I will follow Aoyagi (1998, 2006) in assuming that *mademo* and *saemo* in Japanese are not made up of independent particles like *made*, *sae*, and *mo*, but rather they are variants of *made* and *sae*, functioning as *fuku-joshi* (= adverbial particles) as a whole. If this is correct, it is no mystery that *mademo* and *saemo* behave on a par with *dake* with respect to their distribution in Japanese.

17) If the phonologically null case particle *øga* lacks [EPP] feature unlike its overt counterpart *ga*, there is a possibility that the subject DP *John* enters into Agree with *øga* at [Spec,vP] in situ before moving up to [Spec,FocP]. But I will not consider this possibility in this paper, pending further empirical investigation to differentiate the two possibilities.

18) One might cast doubt on my assumption that the TP-external FocP is generated below C, noting the fact that it is possible to have the additive focus particle *mo* above the complementizer *to* ‘that’ at surface, as illustrated below:

(i) Mary-*ga* [[John-*ga* sasimi-*o* tabe-*ta*] *to*]-*mo* it-*ta*.

Mary-NOM John-NOM raw fish-ACC eat-PAST COMP-also say-PAST

‘Lit. Mary said also [that John ate raw fish]_P.’

If the TP-external FocP is located above C, one might claim that my arguments against the LF movement analysis of association with focus discussed in section 2 do not hold anymore, because the TP-adjoined position would be lower than the location of the putative landing site of *mo* at LF, viz., the Foc head of FocP external to CP. Note, however, that this supposition is different from Aoyagi’s (1998, 1999, 2006)

in that the former posits that the Foc head above C is the landing site of the LF movement of *mo*, while the latter takes that T is the landing site of the LF movement of *mo*. Even if the former assumption might be theoretically possible, there are enough reasons to consider that my arguments in section 2 still hold. First of all, the surface appearance of the additive focus particle *mo* above the complementizer *to* in (i) does not necessarily indicate that the FocP must be generated above CP under my theory of Japanese clausal structure in section 3. (i) can be derived in the manner, as shown in (ii):

- (ii) Mary-ga [_{FocP} [_{CP} [_{TP} John-ga sasimi-o tabe-ta] to]_i mo [_{VP} it t_i]-ta.
 Mary-NOM John-NOM raw fish-ACC eat-PAST COMP also say-PAST
 ‘Lit. Mary said also [that John ate raw fish]_F.’

In (ii), the additive focus particle *mo* heads the FocP, which is located between vP and VP, and the CP [*John-ga sasimi-o tabe-ta to*] has been overtly moved to [Spec,FocP] from within VP. Hence, (i) can be compatible with my assumption on the two possible locations of FocPs in Japanese in (28). Furthermore, if the additive focus particle *mo* is moved to the Foc head at LF and the TP-external FocP is located above CP, it would be predicted that association with wide focus targeting the embedded CP should be possible with respect to the additive focus particle *mo*, which is attached to the embedded subject. This is so, because *mo* could move up to the Foc head above the C and could c-command the CP from there at LF. However, this prediction is not fulfilled, as illustrated in the contrast between (iiia) and (iiib) below:

- (iii) a. Mary-wa [_{CP} Bill-ga sake-o non-da to]-dake it-ta
 Mary-TOP Bill-NOM sake-ACC drink-PAST COMP-only say-PAST
 wakedewanaku, [_{CP} John-ga sasimi-o tabe-ta to]-mo it-ta.
 it-is-not-that John-NOM raw fish-ACC eat-PAST COMP-also say-PAST
 ‘Lit. It is not that Mary said only [that Bill drank sake]_F, but she said also [that John ate raw fish]_F.’
 b. Mary-wa [_{CP} Bill-ga sake-o non-da to]-dake it-ta
 Mary-TOP Bill-NOM sake-ACC drink-PAST COMP-only say-PAST
 wakedewanaku, [_{CP} John-mo sasimi-o tabe-ta to] it-ta.
 it-is-not-that John-also raw fish-ACC eat-PAST COMP say-PAST
 ‘Lit. It is not that Mary said only [that Bill drank sake]_F, but she said that [John]_F also ate raw fish.’ or ‘Lit. It is not that Mary said only [that Bill drank sake]_F, but she said that it is also [(the case that) John ate raw fish]_F.’

If the additive focus particle *mo* next to the complementizer *to* is located at the head of the putative CP-external FocP in (iiia) and *mo* could raise from the embedded subject *John-mo* up to the head of the CP-external FocP in question at LF in (iiib), (iiib) should be able to obtain the same interpretation as in (iiia), contrary to fact. Thus, the fact in (iii) casts doubt on the assumption that the TP-external FocP is located above CP at least as far as association with focus in Japanese is concerned. Therefore, I will maintain the original assumption that the TP-external FocP is located below CP. With respect to the TP-internal FocP, see also Hiraiwa (2007) for further evidence that FocP can be generated between vP and VP in natural language based on data in D→gáàrè.

19) Aoyagi (1998, 1999, 2006) assumes that focus particles carry a [+focus] feature which is to establish “agreement” with a [+focus] feature in a focused associate. Notice that my implementation of focus

feature agreement is different from Aoyagi's (1998, 1999, 2006). I am basically following Watanabe's (2005: 80) idea 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 rather different fashion as well. See also Sano (2001b) for the idea that Agree in the sense of Chomsky (2000, 2001a) plays an important role in licensing focus particles in Japanese. In accounting for the matrix and embedded scope of the focus particle in Japanese, he claims that the relevant focus particle has features such as [+F(ocus)] and [uM(odality)], which enter into Agree with [uF] and [+M] of the modal in INFL/T. See also Miyagawa (2001, 2005) and Hasegawa (2005) for the idea that T (= INFL) carries a focus feature which enters into Agree with a focused phrase in a sentence.

20) One might wonder about the relation between my analysis of association with focus and the issue of "focus projection or propagation" in the sense of Selkirk (1995) (see also Büring 2003 and references cited therein on this matter). Although it is beyond the scope of this paper to investigate this relation, I tentatively speculate that my analysis of association with focus is independent of the issue of focus projection or propagation in principle. Note that my analysis of association with focus proposes the mechanism of association with focus in the narrow syntactic part of C_{HL} , while, as convincingly argued by Reinhart (2006), focus projection or propagation is computed in the PF interface after relevant syntactic objects are transferred to the phonological component. I would like to leave an investigation into this matter to future research.

21) It appears that the functional head T *per se* in Japanese cannot be assigned with an uninterpretable focus feature [uFoc], which would trigger overt movement of the whole TP to [Spec,FocP] headed by the additive focus particle *mo* with [EPP]. For some unknown reason, such a movement is not possible, as evidenced by the following example (irrelevant details are omitted):

- (i) * Mary-ga [_{CP} [_{FocP} [_{TP} John-ga sasimi-o tabe-ta]_i-mo t_i] to] it-ta.
 Mary-NOM John-NOM raw fish-ACC eat-PAST-also COMP say-PAST
 'Lit. Mary said that also [John ate raw fish]_F.'

In order to explain the puzzle in (i), it might be possible to claim that non-phasal maximal projections such as TP cannot move freely, while phasal maximal projections such as CP can (see also Chomsky 2000) (Since TP can move to [Spec,CP], it would be more accurate to say that TP always has to move along with the immediately dominating CP when moving further away from [Spec,CP]). If this line of analysis is on the right track, (i) would cease to be a puzzle. The functional head T in Japanese could potentially be assigned with an uninterpretable focus feature [uFoc], but overt movement of TP will be ruled out independently due to this phase/non-phase distinction. I will leave a full investigation into this issue to future research.

22) It is to be noted that, under my theory of association with focus in Japanese, the distinction between "narrow focus" and "wide focus" cannot be made in terms of the presence of c-command at Spell-Out or at LF, since there is no overt/covert distinction in the first place. Accordingly, the terms "narrow focus" and "wide focus" have just taxonomical values and do not have much theoretical significance *per se* in my theory.

23) Although the English-type language forces the subject to move to [Spec,TP], the Japanese-type

language does not on the relevant assumption in this paper. Rather, in the latter, the subject is moved to [Spec,gaP], 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.

24) I am assuming that the functional head T in Japanese carries a type of [EPP], which overtly attracts its complement to its Spec, based on Honda's (2002) idea on a dichotomy of [EPP] with some crucial modification on the subject movement.

25) I am also assuming with Honda (1999, 2002, 2003) that there is overt 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 related to the suffixal properties of *v* and T in Japanese (cf. Chomsky 2001b: 10). See also Miyagawa (2001, 2003) and references therein for the claim that Japanese has V-v-T raising in overt syntax.

26) Here, I will follow Chomsky (1995: chap.4) in assuming that the Head Movement Constraint (HMC) (Travis 1984) does not have a clear status in the general theory of locality of movement in the Minimalist Program. Thus, in principle, head-movement could skip any irrelevant intervening heads in terms of their make-up of formal features including categorical features. Thus, V-v-T movement can usually skip the VP-external Foc head *mo*.

27) Just for expository purposes, I will employ the notation like <[focus]> to graphically indicate the relevant focus associate as a result of the "projection effect" of the label containing [focus] under the bare phrase structure theory.

28) Given that it is generally accepted that a part of an idiom is not a semantic primitive in its own right, it follows that it cannot be focused, simply because a focused material must denote something in worlds/situations in order to be contrasted with others. As expected, association with narrow focus targeting a part of an idiom with the additive focus particle *mo* is not possible, while it is possible to target the whole idiom for association with narrow focus with *mo*, since it denotes a particular activity in worlds/situations, as illustrated in (ib)-(iib) and (ic)-(iic), respectively (The unacceptability judgments of (ib) and (iib) are due to Yoko Sugioka (p.c.)):

- (i) a. John-ga hanasi-ni mizu-o asi-ta.
John-NOM conversation-DAT water-ACC pour-PAST
"John put a damper on the conversation."
- b. *John-ga hanasi-ni mizu-*mo* asi-ta.
John-Nom conversation-DAT water-*also* pour-PAST
"lit. John also put a damper on the conversation."
- c. John-ga hanasi-ni mizu-o asi-*mo* si-ta.
John-NOM conversation-DAT water-ACC pour-also do-PAST
"lit. John also put a damper on the conversation."
- (ii) a. John-ga hi-ni abura-o soso-i-da.
John-NOM fire-DAT oil-ACC pour-PAST
"John added oil to the fire."
- b. *John-ga hi-ni abura-*mo* soso-i-da.

John-Nom fire-DAT oil-also pour-PAST

“lit. John also added oil to the fire”

c. John-ga hi-ni abura-o sosogi-*mo* si-ta.

John-NOM fire-DAT oil-ACC pour-also do-PAST

“lit. John also added oil to the fire.”

In this vein, notice that the lack of idiom interpretations in (ib) and (iib) also indicates that association with wide focus for the additive focus particle *mo* cannot take place in (ib) and (iib), which in turn suggests that focus feature-splitting in (42) is impossible with respect to idioms. Since idioms are in a sense “giant compound lexical items” as a whole in the lexicon, relevant focus features [focus] and [uFoc] must be assigned to the head of the whole idioms, as exemplified by (ic) and (iic). Thus, it seems to be the case that scattering of those focus features within idioms would be blocked due to the nature of idioms in the lexicon, which explains why association with wide focus cannot be observed in (ib) and (iib).

29) Yuji Takano (p.c.) pointed out correctly that movement of *John* to [Spec,FocP] out of *gaP*, which is located at [Spec,TP], would run afoul of the CED (Huang 1982), suggesting that it would be necessary that [V-v] move to C through T and that FocP move to [Spec,CP] to avoid such a violation. Alternatively, it might be the case that movement of *gaP* to [Spec,TP] and movement of *John* to [Spec,FocP] take place simultaneously, or in a parallel fashion, which would nullify the relevant CED effects, if it is plausible to extend Chomsky’s (2005) analysis of *wh*-movement of a subject into the case at hand. I will set aside this important issue here and leave it to future research.

30) One might wonder whether this very local nature of association with focus involving the exclusive focus particle *dake* ‘only’ can be more easily captured by making reference to the c-command domain of *dake* under a simpler and a more ‘traditional’ view of how phrases like *John-dake* ‘only John’ get built, according to which *dake* is attached to *XP* in forming *XP-dake*. Note, however, that the notion of c-command covers not only the sister of *dake* but also all the subparts within its sister, predicting that any subpart of the sister of *dake* can be the focus associate of the exclusive focus particle *dake*. On the other hand, Merge (*dake*, *XP*) involves the whole sister element *XP* of *dake*, without referring to its subparts unlike the traditional notion of c-command. As illustrated in (ia) and (ib) below, dependence on the notion of c-command domain of *dake* does not make a correct prediction.

(i) a. [**John**-ga hensyuu-ni tazusawat-ta hon]-dake-ga yuku ure-ru.

John-NOM editing-DAT take-part-in-PAST book-only-NOM well sell-PRES

‘Only the books that John took part in the editing of sell well.’

b. [**John**-dake-ga hensyuu-ni tazusawat-ta hon]-ga yoku ure-ru.

John-only-NOM editing-DAT take-part-in-PAST book-NOM well sell-PRES

‘The books that only John took part in the editing of sell well.’

Even if the subject *John* of the relative clause is focused by stress, as the translations in (ia) and (ib) show, (ia) cannot be interpreted as the same as (ib), which should be possible under the notion of c-command domain, contrary to fact. Note that (ia) is compatible with a situation where there were editors other than John who took part in the editing of books, while (ib) is not. This clearly indicates that the

notion of c-command domain *per se* is too loose to properly capture association with focus in Japanese. Incidentally, Aoyagi's (1998, 1999, 2006) theory of association with focus also predicts that (ia) does not have the same interpretation as (ib), since the interpretable focus feature [+focus] of *dake* could be copied onto the head of the relative clause *hon* 'book', but could not be copied onto or percolated down to the embedded subject *John* in (ia) in his system.

31) The judgment on the acceptability for the order *DP-o-dake* 'DP-ACC-only' varies among native speakers of Japanese. Although I judge it as rather marginal, Aoyagi (1998, 2006) judges it as perfectly acceptable. See Aoyagi (1998, 2006) and references cited therein for discussion on this matter. I will put (?) here just for expository purposes, leaving an explication of this idiolectal variation to another occasion.

32) On the other hand, I take the grammaticality in (53a) as indicating that there is a phonologically null nominative case particle $\emptyset ga$ when there is no overt nominative case particle *ga* and that the subject *John-dake* at [Spec,vP] enters into Agree with the null nominative case head $\emptyset ga$ to value nominative Case-feature. I will leave open whether the subject *John-dake* overtly moves to [Spec, $\emptyset ga$ P] or stay in situ at [Spec,vP] (with no *ga*P projection). See also footnote 15. This issue might be somehow related to the facts concerning children's non-adult patterns of association with focus discussed by Endo (2004), Matsuoka (2005, 2007, in press), and Matsuoka *et al.* (2006). See also Matsuoka (2004) for discussion on the non-adult patterns of association with focus concerning the additive focus particle *mo* in Japanese. I have to relegate the investigation into this important issue to future research, though.

33) I will also include examples containing the dative-marked indirect object just to make sure that the scope fact and the (lack of) reconstruction/connectivity effects in this subsection do not necessarily relate to the major object (Hoji 1991) or the proleptic object (Takano 2003). See Ueyama (1998, 2003) for the idea of the use of the dative-marked indirect object in avoiding the possibility of the major object in Japanese.

34) See Takubo (1985) for the claim that negation in English and Japanese differ with respect to its location within syntactic structures, although he does not assume the view reflected in (67).

35) One might argue that placing NegP between vP and VP poses a problem on the basis of the following fact originally pointed out by Miyagawa (2001):

- (i) 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

Unlike in (63)/(65), (i) displays scopal ambiguity with respect to the quantificational subject DP/QP and Neg. Notice one difference between (63)/(65) and (i): In the former, the relevant scope between *mo* 'also' and Neg is calculated on the basis of the "base" positions of the two heads, viz., Foc and Neg, determined by the head-to-head selectional relation; in the latter, the relevant scope between the quantificational subject DP/QP and Neg is not determined by such a head-to-head selectional relation. One possibility is that, in the latter case, Neg can take scope under the subject DP/QP at [Spec,vP]/[Spec,gaP] or Neg can take scope over the subject DP/QP at [Spec,vP]/[Spec,gaP] after it has been raised to T by V-Neg-v-T

movement in Japanese. Hence, the scopal ambiguity in (i).

Interestingly, once such V-raising is blocked, it seems that Neg cannot take scope over the subject DP, as illustrated below (see section 3.2.1.2 for discussion on such blocking effects induced by VP-movement to [Spec,FocP]):

- (ii) Zen'in-ga sono tesuto-o uke-naku-wa/-mo at-ta (koto)
 all-NOM that test-ACC take-NEG-Cont./-also be-PAST
 '(the fact that) all did not take that test at least/as well.'
 *not > all, all > not

However, in contrast to *zen'in* 'all', *daremo* 'everyone' at the subject position has to take scope over Neg, as illustrated below:

- (iii) daremo-ga sono tesuto-o uke-nakat-ta (koto)
 everyone-NOM that test-ACC take-NEG-PAST
 '(the fact that) everyone did not take that test.'
 *not > every, every > not

daremo 'everyone' may be a kind of positive polarity items, which would resist taking scope under negation. Unfortunately, I am not sure about the exact source for the different scopal property of *zen'in* and *daremo* in Japanese at this moment.

36) Following Hoji (2003) and Ueyama (1998, 2003) *inter alia.*, I am using the pattern of *X%-izyoo-no Y 'X% or more Y'* as the antecedent of the pronominal element *soko* 'that place' in order to secure an appropriate environment for a truly quantificational relation between the pronominal element and its antecedent. See Hoji (2003) and Ueyama (1998, 2003) *inter alia.* for in-depth discussion of the necessity of this kind of control in teasing out right judgments for pronominal variable binding facts in Japanese.

37) It is true that my theory of association with focus concerning the additive focus particle *mo* 'also' in the text suggests that there can be no semantically vacuous scrambling of the unit [DP-mo] as a whole. However, it is to be noted that I am not claiming that there cannot be any instance of semantically vacuous movement of scrambling in Japanese in the sense of Saito (1989).

38) It may well be in order to mention a related issue which was not addressed in this paper in connection with the proposed theory of association with focus in Japanese. Note that my theory of association with focus leads to the conclusion that the scope of the focus-associate XP with respect to the additive focus particle *mo* is determined in overt syntax at [Spec,FocP], which is generated either TP-internally or TP-externally. Regarding the scope-taking mechanism for focus-related constructions involving focus particles in Japanese, there are roughly two types of approaches in the framework of the Minimalist Program (MP), as summarized in (i) below (see Kuroda 1969, 1970, Hoji 1985 *inter alia.* for pre-MP treatments of scope concerning phrases attached by focus particles in Japanese):

- (i) Scope-taking Mechanism:
 a. covert/LF movement approach: Sano (2001a,b) *inter alia.*
 b. overt movement approach: Yanagida (1996) *inter alia.*

The present paper will lead to endorsing the overt movement approach to the scope-taking phenomena for focus-related constructions involving focus particles in Japanese as in Yanagida (1996) among others.

However, solid justification for the option in (ib) will require careful reinterpretations of a wide variety of empirical data presented in Sano (2001a,b) among others in favor of the option in (ia). I would like to leave this important task to another occasion, though.

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