PC-15 Reconciling the Fixed Wide Scope of *dake* 'only' and its Association with Focus

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Abstract

Shibata (2015) observes that Japanese exhaustive focus particle *dake* 'only' takes wide scope with respect to *nai* 'not.' In addition, according to Aoyagi (2006), object DP-*dake* can associate with VP as well as the DP. By utilizing the fact that DP-*dake* cannot associate with a universal quantifier (UQ) and cannot attach to it, I point out that object DP-*dake* only associates with the DP. However, Shibata (2015) and Aoyagi (2006) cannot exclude UQ-*dake*. Moreover, Aoyagi's (2006) analysis does not derive the correct scope interpretation. In aim of capturing the scope fact of *dake* and its limited association with focus at the same time, I adopt Hirsch and Wagner's (2019) bipartite analysis, in which the focus particle consists of a propositional operator and a focus marker, and claim those problems do not arise in the present analysis.

1. Introduction

Japanese exhaustive focus particle *dake* 'only' is reported to show several phenomena. Among them, I focus on two phenomena. The first is the scope interaction between *dake* and *nai* 'not.' Shibata (2015) among others observes the fixed wide scope of *dake* with respect to *nai* as in (1) and (2).

- (1) Hanako-dake mizu-o nom-anakat-ta.
 - Hanako-only water-ACC drink-NEG-PAST
 - a. *dake > nai*: It is **only Hanako** that **<u>did not drink water</u>**.
 - b. * *nai > dake*: It **is not** the case that **<u>only Hanako</u>** drank water.
- (2) Hanako-wa mizu-dake nom-anakat-ta.
 - Hanako-TOP water-only drink-NEG-PAST
 - a. *dake > nai*: It is **only water** that Hanako **<u>did not drink</u>**.
 - b. * nai > dake: It **is not** the case that Hanako drank **<u>only water</u>**.

The second is association with focus. Focus sensitive operators associate with constituents in their c-command domain, and Rooth (1985) argues that depending on constituents with which they associate, truth conditions vary. As to *dake*, Aoyagi (2006) states that when *dake* attaches to an object DP, it can associate with VP as well as the DP although it does not c-command VP as in (3).

(3) Last night, Hanako came home late. She was hungry, but she was exhausted, so ...

Hanako-wa	mizu-dake	nonde	nemut-te	simat-ta
Hanako-TOP	water-only	drank	sleep-ASP	end up-PAST

'Hanako drank water and {a.DP-focus drank nothing else / b.VP-focus did nothing else}, and then she ended up sleeping.' (based on Aoyagi 2006:129)

In this paper, based on the fact that DP-*dake* cannot associate with a universal quantifier (UQ) alone and thus UQ*dake* is unacceptable, I first point out that, contrary to Aoyagi's (2006) observation, object DP-*dake* associates only with the DP. If object DP-*dake* can associate with VP, it is predicted that UQ-*dake* is acceptable in certain contexts. However, UQ-*dake* is unavailable even in those contexts, and Shibata (2015) and Aoyagi (2006) are problematic in that they cannot rule out UQ-*dake*. Moreover, Aoyagi (2006) wrongly predicts that *dake* always takes narrow scope with respect to *nai*. I claim that these problems are resolved by adopting Hirsch and Wagner's (2019) bipartite analysis proposed for focus particles nur in German and only in English.

This paper is organized as follows. In section 2, I review the previous analyses and point out their empirical problems. In Section 3, I introduce Hirsch and Wagner's (2019) bipartite approach and propose a new analysis of *dake*. In Section 4, I conclude this paper.

2. Previous Analyses

2.1. Shibata (2015)

Shibata (2015) offers an analysis to capture the first phenomenon. According to Shibata (2015), NegP is located between TP and vP, and the fixed wide scope of *dake* is explained by the obligatory late adjunction of *dake* due to the property of Trace Conversion (Fox 2002) and the obligatory movement of all the elements in vP above NegP.

In the Minimalist Program, the copy theory of movement is adopted, where traces are no longer assumed. Instead of them, copies are left as a result of movement. Because of this, Traces and Pronouns Rule, which is proposed in order to interpret movement chains in Heim and Kratzer (1998), is no longer available. Given this, Fox (2002) proposes Trace Conversion, which converts copies into the equivalents of traces as in (4).

(4) Trace Conversion

a. Variable Insertion:	(Det) Pred \rightarrow (Det) [Pred $\lambda y(y = x)$]	
b. Determiner Replacement:	(Det) [Pred $\lambda y(y = x)$] \rightarrow the [Pred $\lambda y(y = x)$]	(Fox 2002: 67)

(5) Illustration

a. Input: every book:	b. Variable Insertion:	c. Determiner Replacement:
[_{DP} every [_{NP} book]]	[_{DP} every [$\lambda y.y$ is a book $\wedge y = x$]]	[DP the [$\lambda y.y$ is a book $\wedge y = x$]]

Trace Conversion applies to a lower copy and converts it into a definite expression. The crucial point is that Determiner Replacement applies only to a determiner. Following Aoyagi (2006), Shibata (2015) assumes that *dake* is an adjunct. Because Determiner Replacement does not target adjuncts, *dake* is left unaffected after Trace Conversion. This means that when *dake* attaches to a moved element at its base-generated position, it appears twice at higher and lower copies. However, the multiple occurrences of *dake* result in an improper interpretation. In order to avoid this problem, *dake* is forced to be adjoined to the highest copy by some form of late adjunction proposed by Lebeaux (1988) and interpreted only at the final landing site of the moved element.

Moreover, according to Shibata (2015), V, v, Neg, and T form a single word via morphological merger, and elements in vP obligatorily move above NegP as in (6).

(6) $[_{TP} XP_i [_{TP} YP_j [_{TP} ZP_k [_{NegP} [_{\nu P} XP_i [_{VP} YP_j [ZP_k V]] \nu] Neg] T]]]$

Shibata (2015) argues that this movement is necessary in order for a derivation to avoid being filtered out at the morphological component, and that morphological merger is conditioned by the structural adjacency in (7).

(7) X and Y are structurally adjacent if and only if there is no overt Z which is asymmetrically c-commanded by X and symmetrically c-commands Y.
 (Shibata 2015: 146)

Due to this condition, derivations survive only if all elements in vP move above NegP. Considering these, *dake* is required to be late adjoined into the highest copy of moved elements located higher than NegP. Since there is no copy of *dake* below NegP, *dake* always takes wider scope than *nai*. Finally, Shibata (2015) claims that during the syntax-semantics mapping, *dake* attaches to TP. Given his analysis, the scope fact between *dake* and *nai* results from the derivation in (8).

(8) $[TP \ \underline{dake} [TP \ [Hanako \ \underline{dake}]_i [TP \ [water]_k \ [NegP \ [\nu P \ [Hanako]_i \ [\nu P \ [water]_k \ nom] \ \nu] \ \underline{anakat}] ta]]]$

2.2. Aoyagi (2006)

As to the association with focus of *dake*, Aoyagi (2006) argues that object DP-*dake* can associate with VP due to the covert movement of *dake* and the percolation of focus feature. Independent of Aoyagi's (2006) analysis, it is well known that there is a condition on the relationship between focus operators and their focus associates. For instance, Tancredi (1990) argues that focus operators must have their focus associates in their c-command domain as in (9).

(9) Principle of Lexical Association

An operator like only must be associated with a lexical constituent in its c-command domain. (Tancredi 1990: 30)

Given this principle, it is unclear why object DP-*dake* can associate with VP while it does not c-command VP. In order to resolve this puzzle, Aoyagi (2006) proposes the covert movement of focus particles. According to him, focus particles are a kind of quantifier, and *dake* raises to *v* just as quantifiers raise to set the scope. Since *dake* at *v* c-commands VP, *dake* can associate with VP as in (10).

(10) $[_{TP} [_{\nu P} [_{DP} Hanako] [_{VP} [_{DP} mizu \frac{dake_i}{a}] nom] v + dake_i] ta]$

Besides the movement of *dake*, Aoyagi (2006) proposes that a focus particle and its focus associate have focus feature. When the focus particle c-commands its focus associate, they agree via the feature, which results in the association with focus. Moreover, following Zubizarreta (1994), Aoyagi (2006) adopts the focus propagation rule in (11).

(11) Rule of focus propagation

Focus feature which is assigned to an accented word propagates from the recursive side on which embedding occurs and along the projections of the same heads. (Zubizarreta 1994: 101; cited in Aoyagi 2006: 138-139)

Aoyagi (2006) assumes that the percolation of focus feature is optional and claims that this optionality allows several patterns of focus association. The derivation for (3) is illustrated in (12).

(12) $[_{TP} [_{\nu P} [_{DP} Hanako] [_{VP[+focus]} [_{DP[+focus]} mizu_{[+focus]} dake_i] non] \nu + dake_i] da]$ Focus percolation

Dake covertly moves to *v*, and the focus feature which originates at the object, *mizu* 'water,' percolates up to VP. Because VP is c-commanded by *dake* at *v*, by Principle of Lexical Association, object DP-*dake* can associate with VP. Furthermore, if the propagation stops at the object DP, the focus associate is the DP since it is also c-commanded by *dake* at *v*.

2.3. Problems of the Previous Analyses

However, the previous studies have empirical problems. First, I point out that, contrary to Aoyagi's (2006) observation that object DP-*dake* can associate with VP, it can associate only with the DP. To begin with, observe that exhaustive focus operator *only* cannot be used vacuously as in (13).

- (13) Which of John and Mary will you invite?
 - a. Only JOHN_{Focus}, (not Mary / not both). b. #Only BOTH_{Focus}. c. BOTH_{Focus}. (Xiang 2020: 12)

Xiang (2020) explains why (13b) is infelicitous in terms of a non-vacuity presupposition of *only* which requires the existence of an excludable alternative (i.e. a false alternative). Suppose that the set of alternatives is $ALT = \{\phi_{John}, \phi_{Mary}, \phi_{John \oplus Mary}\}$, where $\phi_x = I$ will invite *x*. The proposition $\phi_{John \oplus Mary}$ (i.e. I will invite both) entails all the other alternatives in *ALT*. In other words, $\phi_{John \oplus Mary}$ is the strongest proposition in *ALT*. This means that when *only* takes $\phi_{John \oplus Mary}$ as its argument, there is no excludable alternative. This is because if $\phi_{John \oplus Mary}$ is true, ϕ_{John} and ϕ_{Mary} are true as well because

 $\phi_{John \oplus Mary}$ entails ϕ_{John} and ϕ_{Mary} . Since there is no excludable alternative, the infelicity in (13b) arises.

Similarly, dake cannot associate with a UQ. As Kishimoto (2009) notes, dake cannot attach to a UQ as in (14).

(14) # Zen'in-dake-ga ki-ta.
everyone-only-NOM come-PAST
'The only person that came was everyone.'

(based on Kishimoto 2009: 476)

I claim that the incompatibility of a UQ and *dake* in (14) is also explained by the non-vacuity presupposition of *dake*. Let us assume that there are three contextually salient people, *John*, *Tom* and *Mary*, and that $ALT = \{\phi_{John}, \phi_{Tom}, \phi_{Mary}, \phi_{John\oplus Tom}, \phi_{John\oplus Tom}, \phi_{John\oplus Tom\oplus Mary}\}$, where $\phi_x = x$ came. The strongest alternative in ALT is $\phi_{John\oplus Tom\oplus Mary}$ (i.e. everyone came). If $\phi_{John\oplus Tom\oplus Mary}$ is the argument of *dake*, there is no excludable alternative. The reason is that if $\phi_{John\oplus Tom\oplus Mary}$ is true, all the other alternative propositions are true as well because $\phi_{John\oplus Tom\oplus Mary}$ entails $\phi_{John}, \phi_{Tom}, \phi_{Mary}, \phi_{John\oplus Tom}, \phi_{John\oplus Tom,}, \phi_{John\oplus Mary}$ and $\phi_{Tom\oplus Mary}$. The crucial point is that if *dake* associates with a UQ, it results in the vacuity due to the lack of excludable alternatives and the sentence is judged infelicitous. This indicates that *dake* cannot associate with a UQ alone.

Keeping these in mind, let us examine whether object DP-*dake* can associate with VP or not. Since Aoyagi (2006) claims that object DP-*dake* can associate with VP, it is predicted that UQ-*dake* in the object position does not result in infelicity in a context where VP-focus is permitted. However, this prediction is not borne out as (15) indicates.

(15) Sensei-wa {a. *zen'in-dake sekkyou-si-ta / b. √zen'in-o sekkyou-si-ta-dake-da}.
 Teacher-TOP everyone-only scolded-do-PAST everyone-ACC scolded-do-PAST-only-COP Hokani-nani-mo si-nakat-ta.

else-what-also do-NEG-PAST

'A teacher {a.DP-focus*scolded only everyone / b.vP-focus v only scolded everyone}. S/he did nothing else.'

This result is unexpected in Aoyagi's (2006) analysis. Suppose that the set of alternatives is $ALT = \{\phi_{drank water}, \phi_{ran}, \phi_{sang a} song, \phi_{scolded everyone}\}$, where $\phi_P =$ a teacher *P*. Unlike the cases in (13) and (14), the present case is a VP-focus pattern, so $\phi_{scolded everyone}$ does not entail any other alternative. In other words, there are excludable alternatives in the VP-focus pattern. Given this, if UQ-*dake* can associate with VP, it should be felicitous, contrary to the fact. Because the context in (15) permits VP-focus as (15b) shows, it is concluded that UQ-*dake* is the cause of the infelicity of (15a) and that object DP-*dake* cannot associate with VP. Put differently, object DP-*dake* can only associate with the object DP.¹

In addition, Aoyagi (2006) makes a wrong prediction in terms of the scope interpretation between *dake* and *nai*. Aoyagi (2006) claims that *dake* covertly moves to *v*. However, because NegP is located above *v*P, his analysis gives rise to the wrong result that *dake* always takes narrow scope with respect to *nai*.

As to the scope interpretation between *dake* and *nai*, Shibata (2015) gains the desired result. However, like Aoyagi (2006), Shibata (2015) wrongly predicts that UQ-*dake* can be felicitously used. According to Shibata (2015), *dake* attaches to TP during the syntax-semantics mapping, and *dake* c-commands TP as in (8). Therefore, given the principle in (9), the prediction is that UQ-*dake* can associate with any constituent in TP (e.g. VP) and that UQ-*dake* is acceptable. However, this contradicts the fact that UQ-*dake* is by no means acceptable as shown in (15a).

¹ Aoyagi (2006) also claims that Japanese additive focus particle *mo* 'also' covertly raises to T. However, based on the fact that UQ-*mo* is unacceptable, Tanaka (2019) argues against this raising analysis. According to Tanaka (2019), if *mo* moves to T, UQ-*mo* should be felicitous because *mo* can associate with constituents other than a UQ (e.g. VP). For this reason, Tanaka (2019) claims that the unavailability of UQ-*mo* indicates that *mo* does not covertly move to T.

The above problems arise from the assumption of Shibata (2015) and Aoyagi (2006) that *dake* itself is always interpreted as an exhaustive operator which can associate with any constituent in its c-command domain. Owing to this assumption, they invariably make wrong predictions. According to Shibata (2015), since *dake* attaches to TP, the scope fact is correctly captured. However, Shibata (2015) fails to reject UQ-*dake* because it c-commands TP and should be able to associate with other constituents than a UQ. On the other hand, Aoyagi (2006) argues that *dake* moves to v and c-commands VP. Given this, Aoyagi (2006) cannot rule out UQ-*dake* either. Furthermore, because vP is located below NegP, *dake* always remains below NegP, and thus the correct scope interpretation does not obtain. Given these empirical problems, it is inevitable to adopt another approach to *dake*. In what follows, I will show that these problems do not arise in the bipartite approach, in which *dake* is composed of an exhaustive operator and a focus marker.

3. Proposal

3.1. Bipartite Approach

In order to capture the obligatory wide scope of *dake* and the restricted focus associate of object DP-*dake*, I adopt a bipartite approach (Quek and Hirsch 2017, Hirsch and Wagner 2019, and Sun 2020 a.o.). Among them, I follow Hirsch and Wagner's (2019) analysis. They propose the bipartite analysis of focus operators *nur* in German and *only* in English and argue that *nur* and *only* consist of two heads. According to them, by separating the pronounced position of an exhaustive operator from its interpreted position, otherwise mysterious facts about these particles can be explained (see Hirsch and Wagner 2019 for the detailed discussion). The points of their analysis are summarized as follows.

(16) a. A focus particle like only consists of two heads, ONLY and F.

- b. ONLY is a propositional operator which attaches to a clausal spine of type <s, t>.
- c. F is a focus marker which locally attaches to a focus associate and does not have semantic contribution.
- d. ONLY and F go through Agree via an operator-specific feature.
- e. Either ONLY or F is pronounced.

Let us illustrate how the bipartite approach works. In the bipartite approach, both (17a) and (17b) have the same structure as in (17c).

(17) a. Mary only read one_{Foc} book.

- b. Mary read only one_{Foc} book.
- c. $[_{TP} Mary_i [ONLY_{[iONLY]}]_{\nu P} t_i read [_{FP} [\underline{F}_{[uONLY]} [_{DP} one_F book]]]]]] (Hirsch and Wagner 2019: 165)$

(17a) is derived when ONLY is pronounced. On the other hand, if *only* is a phonetic realization of F, (17b) results. The relative positions between ONLY and F are not free, and must follow an independent constraint. As Jackendoff (1972) points out, *only* cannot associate backwards, that is, its focus associate cannot appear outside its scope as in (18).²

(18) *JOHN_{Focus} only gave his daughter a new bicycle. (based on Jackendoff 1972: 250)

Hirsch and Wagner (2019) also offer an example of the backward association as in (19a). In the bipartite approach, the structure of (19a) is analyzed as in (19b). This indicates that F must be in the scope of ONLY.

(19) a. *Sue_{Foc} has again only failed.

b. $*[_{TP} [_{FP} E [_{DP} Sue]_{Foc}]_i$ has [again [ONLY [$_{\nu P} t_i$ failed]]] (Hirsch and Wagner 2019: 166)

The important point of the bipartite approach is that dake is not always a propositional operator. If it is attached to a DP,

² Refer to Erlewine (2014: Ch.4) for the reason why *only* cannot associates backwards with its focus associate.

it must be a realization of the focus marker F. This property enables us to resolve the problems discussed in section 2.

3.2. Implementation

I claim that *dake* also resists the backward association, which is corroborated by Kishimoto's (2009) example in (20).

(20) * John_{Foc}-wa hon-o kat-ta-dake da.
John-TOP book-ACC buy-PAST-only COP
'The only person that bought a book is John.' (based on Kishimoto 2009: 482)

According to Kishimoto (2009), a topicalized subject cannot be the focus associate of *dake* attached to TP. He blames this impossibility on the movement of topicalized elements to TopP, which is located above TP.

In (20), the subject is focused, while *dake* is pronounced at a clausal spine. This indicates that *dake* in (20) is the phonetic realization of ONLY. Given Kishimoto's (2009) analysis that topicalized elements move to TopP, the infelicity of (20) is caused by the illicit backward association structure as in (21).

(21) $*[_{TopP} [_{FP} [John]_{Foc} \underline{F}]_i [_{TP} [hon]_k [_{\nu P} [_{FP} [John]_{Foc} F]_i [_{\nu P} [hon]_k kat] v] ta] \underline{ONLY} Top]$

ONLY is adjoined to TP in (21) while the focused element escapes from the scope of ONLY (i.e. TP), and thus the backward association configuration arises, causing an improper structure.

Given the fact that *dake* does not allow the backward association and Shibata's (2015) assumption that all the elements in vP must move above NegP, the bipartite analysis can capture the fact that *dake* takes obligatory wide scope with respect to *nai* as in (22).

(22) a. [TP [TP [FP [Hanako]_{Foc} **F**]_i [TP [mizu]_k [NegP [vP [FP [Hanako]_{Foc} F]_i [VP [mizu]_k nom] v] **anakat**] ta]] **ONLY**b. [TP [TP [Hanako]_i [TP [FP [mizu]_{Foc} **F**]_k [NegP [vP [Hanako]_i [VP [FP [mizu]_{Foc} F]_k nom] v] **anakat**] ta]] **ONLY**

In (22), the focused elements are moved above NegP. In order to avoid an illicit structure, ONLY is necessarily put above the focused elements, thereby being located above NegP. This always leads to the interpretation that *dake* takes wider scope than *nai*. In addition, by pronouncing F in the higher copy of the subject and object, the correct word order is also derived. Note that the multiple occurrences of F do not cause an improper interpretation since it is semantically vacuous.

By contrast, if dake takes narrow scope with respect to nai, ONLY must be located below NegP as in (23).

(23) a. $*[_{TP} [_{FP} [Hanako]_{Foc} \underline{F}]_i [_{TP} [mizu]_k [_{NegP} [_{vP} [_{vP} [_{FP} [Hanako]_{Foc} F]_i [_{VP} [mizu]_k nom] v] \underline{ONLY}] \underline{anakat}] ta]]$ b. $*[_{TP} [Hanako]_i [_{TP} [_{FP} [mizu]_{Foc} \underline{F}]_k [_{NegP} [_{vP} [_{vP} [_{vP} [Hanako]_i [_{VP} [_{FP} [mizu]_{Foc} F]_k nom] v] \underline{ONLY}] \underline{anakat}] ta]]$

However, this configuration is excluded by an independent reason. In (23), while ONLY is below NegP, the focused elements are above NegP. Since this is a problematic backward association structure, *dake* is prevented from taking narrow scope below *nai*. Therefore, *dake* always takes wide scope with respect to *nai*.

The bipartite analysis can also deal with the fact that object DP-*dake* associates only with the DP. Recall that ONLY is required to attach to a clausal spine. This amounts to saying that DP-*dake* is never ONLY, but must be a phonetic realization of F. Recall also that in the bipartite approach, a focus marker F locally attaches to a focus associate. Therefore, DP-*dake* necessarily associates with the DP, and UQ-*dake* is ruled out since *dake* cannot associate with a UQ.

As demonstrated above, the problems are resolved by the bipartite analysis. This is because unlike the previous studies which assume that *dake* is always an exhaustive operator, the current analysis allows *dake* to be either a propositional operator or a mere realization of a semantically inert focus marker. Moreover, this analysis avoids the late adjunction of *dake* proposed in Shibata (2015). Because this operation violates the Extension Condition (Chomsky 1995),

it is conceptually problematic. Taking this into consideration, the present analysis is rendered a conceptual advantage in that it dispenses with the problematic operation.

4. Conclusion

Shibata (2015) and Aoyagi (2006) provide the observations regarding *dake*. Shibata (2015) points out that *dake* always takes wider scope than *nai*, while Aoyagi (2006) reports that object DP-*dake* can associate with VP. However, by using the fact that *dake* cannot associate with a UQ and UQ-*dake* is unacceptable, I clarified that object DP-*dake* only associates with the DP. Shibata (2015) and Aoyagi (2006) are problematic in that they predict that UQ-*dake* is acceptable. Moreover, in Aoyagi's (2006) analysis, *dake* inevitably results in narrow scope with respect to *nai*. I adopt Hirsch and Wagner's (2019) bipartite analysis, in which *dake* may be interpreted either as a propositional operator or a focus marker, and demonstrate that the fixed scope of *dake* and its limited association with focus receive straightforward explanation without recourse to the conceptually undesirable operation (i.e. late adjunction).

References

Aoyagi, Hiroshi. 2006. *Nihongo-no zyoshi-to kinou hanchuu* [Japanese particles and functional categories]. Tokyo: Hitsuji Shobou.

Chomsky, Noam. 1995. The minimalist program. Cambridge, MA: MIT Press.

Erlewine, Michael Yoshitaka. 2014. Movement out of focus. Doctoral dissertation, Massachusetts Institute of Technology. Fox, Danny. 2002. Antecedent-contained deletion and the copy theory of movement. *Linguistic Inquiry* 33: 63-96.

Heim, Irene and Angelika Kratzer. 1998. Semantics in generative grammar. Oxford: Blackwell.

Hirsch, Aron and Michael Wagner. 2019. Only reconstruction and backwards association. In *Proceedings of the 22th Amsterdam Colloquium*, ed. Julian J. Schlöder, Dean McHugh, and Floris Roelofsen, 161-170. Amsterdam: Institute for Logic, Language and Computation.

Jackendoff, Ray. S. 1972. Semantic interpretation in generative grammar. Cambridge, MA: MIT Press.

Kishimoto, Hideki. 2009. Topic prominency in Japanese. Linguistic Review 26: 465-513.

- Lebeaux, David. 1988. Language acquisition and the form of the grammar. Doctoral dissertation, University of Massachusetts, Amherst.
- Quek, Yihui and Aron Hirsch. 2017. Severing focus form and meaning in Standard and Colloquial Singapore English. In Proceedings of NELS 47, ed. Lamont Andrew and Tetzloff Katerina, 15-24. Amherst: Graduate Linguistics Student Association.

Rooth, Mats. 1985. Association with focus. Doctoral dissertation, University of Massachusetts, Amherst.

Shibata, Yoshiyuki. 2015. Exploring syntax from the interfaces. Doctoral dissertation, University of Connecticut, Storrs.

- Sun, Yenan. 2020. Only-concord in Vietnamese: Support for a bipartite analysis and undermerge. In Proceedings of the 50th Annual Meeting of the North East Linguistic Society, ed. Mariam Asatryan, Yixiao Song, and Ayana Whitmal, 183-192. Amherst: Graduate Linguistics Student Association.
- Tanaka, Hideharu. 2019. Association with focus in Japanese: An event-based postsuppositional approach. In *Proceedings* of GLOW in Asia 12 & SICOGG 21, 517-526.
- Tancredi, Chris. 1990. Not only even, but even only. Manuscript, Massachusetts Institute of Technology.
- Xiang, Yimei. 2020. Function alternations of the Mandarin particle *dou*: Distributer, free choice licensor, and 'even'. *Journal of Semantics* 37: 171-217.
- Zubizarreta, María Luisa. 1994. The grammatical representation of topic and focus: Implications for the structure of the clause. *University of Venice Working Papers in Linguistics* 4: 97-126.