Even, *only*, and Negative Polarity in Japanese

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1. The Presuppositions of *Even*

Karttunen and Peters (1979) claim that the focus particle *even* is truth-conditionally vacuous, but have a semantic contribution at the level of presupposition.[1] In particular, assuming that *even* is a sentential operator, it triggers a scalar presupposition (ScalarP, henceforth) in (1) that the relevant proposition is the least likely among a certain set of alternative propositions ([ ]$_F$ marks the element with intonational focus that is associated with *even*).[2] The LF of the sentence (2a) is given in (2b), where *even* combines with C (a silent restrictor variable) and the proposition 'that John read Book A'. Following Rooth (1985, 1992), a set of alternative propositions in (2a) is obtained by replacing Book A with elements of the same type, and C denotes a subset of such a set that only includes the propositions relevant to the context (e.g., C = {that John read Book A, that John read Book B, that John read Book C}). The ScalarP that *even* triggers is given in (2c); 'that John read Book A' is the least likely among the alternatives.

(1) $[\![even]\!]^w$ (C)(p) is defined only if $\forall q \in C[\ q \neq p \rightarrow q >_{likely} p\ ]$

(2)   a.   John even read [Book A]$_F$.
        b.   LF: [even C [John read [Book A]$_F$]]
        c. $[\![even]\!]^w$ (C)(λw.read(j,a,w)), where C $\subseteq$ {q: $\exists$x[q=λw.read(j,x,w)]}
             ScalarP: $\forall q \in C[\ q \neq \lambda$w.read(j,a,w) $\rightarrow q >_{likely} \lambda$w.read(j,a,w)]

        In a downward-entailing (DE) context, *even* introduces a different presupposition. In (3a), *even* is in the complement of the adversative predicate *surprise*, which is considered to be a DE operator (Kadmon and Landman 1993). In this case, we obtain not only the least-likely reading observed in (2a), but also the most-likely reading that Book A is the most likely book to be read by John. In the negative sentence (3b), *even* gives rise to the most-likely reading only.

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[1] Karttunen and Peters (1979) use the term *conventional implicature* rather than *presupposition*. However, they consistently use the former term to refer to implications that we usually call presuppositions, and so I use the term *presupposition* in this paper.

[2] There have been disagreements as to whether the relevant proposition is 'less' likely or the 'least' likely (Kay 1990, Rullmann 1997, Guerzoni 2003). In this paper, I simply take the latter view. Moreover, besides a ScalarP, *even* may trigger an existential presupposition. This presupposition of *even* is ignored here, since it does not affect the main content of the paper (cf. Section 2.3).

(3)   a. I was surprised that John even read [Book A]$_F$.
       b. John didn't even read [Book A]$_F$.

Two theories have been proposed to account for the most-likely reading of *even* in DE contexts. One theory holds that this reading obtains when *even* takes scope over a DE operator at the LF (scope theory: Karttunen and Peters 1979, Wilkinson 1996). The LF of (3b) is given in (4a); *even* combines with a negated proposition and triggers the ScalarP that 'that John didn't read Book A' is the least likely, as in (4b), or equivalently, 'that John read Book A' is the most likely. In this way, the DE operator *not* reverses the likelihood scale. Similarly, in (3a), it is assumed that *even* can take scope over the DE operator *surprise*, and that the likelihood scale gets reversed by *surprise*, yielding the most-likely reading.[3] *Even* can also be below *surprise* in which case we obtain the same presupposition as (2), i.e., 'that John read Book A' is the least likely. Since *surprise* is a presupposition hole (Karttunen 1973), this ScalarP is passed onto (3a) as a whole.

(4)   a. LF: [even C [not [John read [Book A]$_F$]]]
       b. $[\![even]\!]^w$(C)$(\lambda w. \neg read(j,a,w))$, where $C \subseteq \{q: \exists x[q=\lambda w.\neg read(j,x,w)]\}$
           ScalarP: $\forall q \in C[\ q \neq \lambda w.\neg read(j,a,w) \rightarrow q >_{likely} \lambda w.\neg read(j,a,w)\ ]$

The other theory holds that there are two lexical entries for *even*, the regular *even* with the ScalarP in (1) and the NPI (or negative polarity item) *even* with the ScalarP in (5) (lexical theory: Rooth 1985, von Stechow 1991, Rullmann 1997, Giannakidou to appear). The term NPI *even* obviously comes from the fact that *even* with the most-likely reading appears in contexts where NPIs can appear, roughly speaking, DE contexts (see Sections 2 and 3). Under this theory, *even* in (3b) is the NPI *even* that appears below negation, as in (6a), and triggers the ScalarP in (6b) that 'that John read Book A' is the most likely. Negation being a presupposition hole, this ScalarP holds for (3b) as a whole. In (3a), it is assumed that *even* can be either the regular or the NPI *even*. The former yields the least-likely reading, while the latter the most-likely reading. In this way, the scale reversing effect is built into the lexical meaning of the NPI *even*.[4]

(5) $[\![even_{NPI}]\!]^w$(C)(p) is defined only if $\forall q \in C[\ q \neq p \rightarrow p >_{likely} q\ ]$

(6)   a. LF: [not [even$_{NPI}$ C [John read [Book A]$_F$]]]
       b. $[\![even_{NPI}]\!]^w$(C)$(\lambda w.read(j,a,w))$, where $C \subseteq \{q: \exists x[q=\lambda w.read(j,x,w)]\}$
           ScalarP: $\forall q \in C[\ q \neq \lambda w.read(j,a,w) \rightarrow \lambda w.read(j,a,w) >_{likely} q\ ]$

One of the criticisms leveled against the scope theory is that the theory needs to posit a stipulative movement of *even* above a DE operator (Rullmann

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[3] The scope theory relies on the assumption that all DE operators reverse the likelihood scale. The validity of this assumption is left for future research (Rullmann 1997).

[4] For both theories, a question remains as to why (3b) lacks the least-likely reading. The scope theory needs to posit an obligatory movement of *even* over negation, and the lexical theory needs to assume that the regular *even* is banned in the immediate scope of negation.

1997, among others). For one thing, *even* may cross a clausal-boundary, which is unusual as a syntactic movement; in (3a), to yield the most-likely reading, the embedded *even* must take scope over *surprise* in the main clause. Furthermore, the scope of *even* differs from other focus particles like *only*; unlike *even*, *only* must be below negation in *John didn't only read* [*Book A*]ᴦ. Under the lexical theory, there is no need to stipulate a movement of *even*. More precisely, the NPI *even* is always in situ and thus the theory is immune to the problems of movement. A strong argument for the lexical theory comes from cross-linguistic studies indicating that many languages have a lexical distinction between two types of *even* (Dutch, German, Finnish, Italian, Spanish, etc.; König 1991, von Stechow 1991, Rullmann 1997, see also Giannakidou to appear for multiple *even* items in Greek). For instance, in the German examples (7), *sogar* 'even' always evokes the least-likely reading, while *auch nur* '(lit.) also only' always evokes the most-likely reading. This observation suggests that *sogar* is a regular *even* with the ScalarP in (1), whereas *auch nur* is an NPI *even* with the ScalarP in (5).

(7) a. Der Hans hat   {sogar / *auch nur}   [die Maria]ᴦ   begruesst.
        the Hans has   {even / also only}   the Maria   greeted
        'Hans even greeted Maria.'
    b. Es hat uns überrascht, das {sogar / auch nur}   [der Hans]ᴦ da   war.
        it has us   surprised   that {even / also only} the Hans   there was
        'It surprised us that even Hans was there.'
    c. Niemand hat   {*sogar / auch nur}   [die Maria]ᴦ   begruesst.
        nobody   has   { even / also only}   the Maria   greeted
        'Nobody even greeted Maria.'

    The goal of this paper is to argue for the scope theory by providing novel empirical data from Japanese. In Section 2, I show that Japanese have multiple *even* items that at first site seem to fall under the two types of *even*. However, I argue that the scope theory is more suitable for explaining the Japanese data. In Section 3, I provide a compositional analysis of the *even* items under the scope theory (à la Guerzoni 2003). Section 4 reveals that the proposed analysis extends to the data on Japanese NPIs (à la Lahiri 1998). The analysis here supports the line of research that uses the semantics of *even* as a key to understand the seemingly unrelated polarity phenomena (Heim 1984, among others). Section 5 concludes the paper and discusses some remaining issues.

2. The Japanese *Even* Items and the Scope Theory

Japanese has a variety of focus particles that correspond to the English *even*. Among them, this paper examines -*mo* 'also, even', -*demo* 'even', and -*dake-demo* '(lit.) even only'. -*Mo* corresponds to the English *also* without any prominence on the NP that -*mo* attaches to. With a focus on the NP, -*mo* retains the *even* interpretation. This paper exclusively examines cases where -*mo* attaches to a

focused element, i.e., *-mo* as *even*.[5] In this case, *-mo* seems to make the same contribution as another focus particle *-dake* with respect to scalarity, as in (8): both particles trigger the ScalarP in (1) that the relevant proposition is the least likely.[6,7]

(8)   a.   [Saru]$_F${-mo / -demo}   ki-kara   otiru.
              monkey{even / even}   tree-from   fall
              'Even a monkey falls from a tree.'
    b.   [Zidane]$_F${-mo / -demo} reddo caado-o morat-ta.
              Zidane{even / even}   red card-ACC got-PAST
              'Even Zidane got a red card.'

Another particle at issue is *-dake-demo*, which consists of two independent focus particles, *-dake* 'only' and *-demo* 'even'. Unlike *-mo/-demo* that seems to correspond to the English *even*, *-dake-demo* is unacceptable in positive contexts, as in (9a). With the DE operator *surprise*, the English *even* in (3a) evokes both the least- and most-likely readings. In the corresponding Japanese example (9b), the least-likely reading obtains with *-mo* and *-demo*, while the most-likely reading obtains with *-dake-demo*. The same pattern is observed in other DE contexts such as the antecedent of conditionals in (10). *-Mo* and *-demo* must be associated with an element that denotes the high end value on a scale of difficulty, as in (10a), while completely the opposite claim holds for *-dake-demo*, as in (10b). The data so far indicate that the Japanese *-mo/-demo* and *-dake-demo* correspond to the German *sogar* and *auch nur*, respectively. In other words, *-mo/-demo* is a regular *even*, while *-dake-demo* is an NPI *even*. However, the Japanese *even* items in negative contexts pattern differently from the German items in (7c); in (11), *-mo* and *-demo*, but not *-dake-demo*, are felicitous.

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[5] I assume that the focus particle *-mo* at issue here is lexically distinct from the universal quantifier *-mo* in (i) (Shimoyama 2001).
   (i)   Dare-mo-ga   ki-ta.
         who-MO-NOM   come-PAST   'Everyone came.'

[6] *-Demo* can be morphologically decomposed into the copular verb *-de* followed by *-mo*. However, it is not clear whether this decomposition is necessary. Indeed, *-demo* is often treated as a single lexical item corresponding to *even*, as in (i). Thus, here I treat *-demo* as a non-decomposable lexical item, and ignore subtle semantic differences between *-mo* and *-demo*. However, the degree of acceptability of *-demo* in (9-11) seems to vary among the informants, and why that is the case remains to be investigated. Furthermore, I ignore another use of *-demo* exemplified in (ii), where *-demo* takes *tea* as a typical example of things you could drink.
   (i)   John-demo   hon-o   kat-ta.
         John-even   book-ACC buy-PAST 'Even John bought a book.' (Kuroda 1965:82)
   (ii)   Ocha-demo   nomimasu-ka?
         tea-DEMO   drink-Q   'Would you like tea or something?'

[7] A focus particle in Japanese often appears as a postposition attached to a focused NP. However, a focus site can be larger than the focused NP (Aoyagi 1994). In (i), the focus particle *-mo* 'also, even' is attached to *soozi* 'cleaning', but semantically what is focused is the VP *do cleaning*. Thus, I assume that the Japanese focus particles as well as English ones are sentential operators.
   (i)   Nitiyoobi-ni   John-wa ryoori-o   tukut-ta.   [Soozi]$_F$-mo   si-ta.
         Sunday-on   John-TOP meal-ACC make-PAST [cleaning]-even do-PAST
         'On Sunday, John made a meal. (He) even did cleaning.'

(9) a. John-wa   [Hon A]_F{-mo / -demo / ??-dake-demo}   yon-da.
         John-TOP book A{-even / -even / -only-even}   read-PAST
         'John even read Book A.'
     b. John-ga   [Hon A]_F{-mo/-demo/-dake-demo} yonda-to-wa   odoroi-ta.
         John-NOM book A{-even/-even/-only-even}   read-that-TOP was surprised
         'I was surprised that John even read Book A.'

(10) a. [Itiban   muzukasii   mondai]_F{-mo / -demo / ??-dake-demo}
          most   difficult   question{-even / -even / -only-even}
          toi-ta-ra,   A-o   mor-aeru.
          solve-PAST-if   A-ACC   get-can
          'If I solve even the most difficult question, I can get an A.'
      b. [Itiban   kantanna   mondai]_F{??-mo / ??-demo / -dake-demo}
          most   easy   question{-even / -even / -only-even}
          toi-ta-ra,   A-o   mor-aeru.
          solve-PAST-if   A-ACC   get-can
          'If I solve even the easiest question, I can get an A.'

(11) John-wa   [Hon A]_F{-mo/-demo/*-dake-demo}   yom-ana-katta.
      John-TOP   book A{-even/-even/-only-even}   read-NEG-PAST
      'John didn't even read Book A.'

Given the deviance in (11), the lexical theory faces at least two problems. First, we need to posit two types of NPI *even*, one licensed by negation (*-mo*, *-demo*) and one by other DE operators (*-dake-demo*) (but see Section 2.1 for a modification). It also seems to be problematic that the first type is identical to the regular *even*. Second, the lexical theory ignores the apparent morphological complexity of *-dake-demo* (cf. Guerzoni 2003 on German). It is clear that *-dake-demo* consists of *-dake* 'only' and *-demo* 'even', and we would want to question why that is the case. In the following, I show that the scope theory is more suitable for explaining the Japanese data. For one thing, the scope theory has only a regular *even*, and so there is no problem of positing two types of NPI *even*. More importantly, I argue that, following Guerzoni's (2003) analysis on German *auch nur*, *-dake-demo* needs to be decomposed into *-dake* and *-demo*, and that this decomposition naturally explains why *-dake-demo* behaves like an NPI.

2.1. -Mo and -Demo

Let us first examine the distribution of *-mo* and *-demo*. The example (9a) indicates that these items trigger a ScalarP in (1). Unlike the English example in (3a), however, *-mo/-demo* in the complement of an adversative predicate evokes only the least-likely reading, as shown in (9b). This fact is explained by assuming that these items are always in the scope of *surprise* at the LF. Then *even* combines with the proposition 'that John read book A' and triggers the ScalarP that this proposition is the least likely. Since *surprise* is a presupposition hole, this ScalarP is passed onto (9b) as a whole. Exactly the same analysis applies to *-mo/-demo* in

the antecedent of conditionals in (10): *-mo/-demo* is below *if*, and the presupposition it triggers there is passed onto (10) as a whole, because *if* is a presupposition hole. In this way, under the scope theory, we can account for the lack of the most-likely reading in (9b) and (10) by simply assuming that the movement of *even* is clause-bound. In contrast, under the lexical theory, we need to somehow prohibit *-mo/-demo* to be the NPI *even* in the complement of adversative predicates and in the antecedent of conditionals, even though these items do behave like an NPI in negative contexts, as in (11).

Turning now to negative contexts, consider the example (12a), where the focus particle *-dake* 'only' co-occurs with negation. The sentence can mean that John read everything but Book A. This reading obtains when *-dake* takes scope over negation. Crucially, unlike the corresponding English sentence, (12a) lacks the reading where negation takes scope over *-dake*, namely, the reading that there is some book other than Book A that John didn't read. In the same vein, the universal quantifier *subete* 'all' in (12b) also takes scope over negation, i.e., the only reading available in (12b) is that John read no books. Then it is not unreasonable to assume that *-mo/-demo* 'even' is also above negation, yielding the LF in (4a) above. This LF gives us the most-likely reading, which is consistent with the judgment given in (11). In this way, in Japanese, there is no need to stipulate a special movement just for *-mo/-demo* 'even'; the scope of *-mo/-demo* is in accord with the scope of *-dake* 'only' and of *subete* 'all'.

(12)   a.   John-wa   [Hon A]$_F$-dake   yom-ana-katta.
            John-TOP   Book A-only   read-NEG-PAST
            'John didn't read only Book A.'   only $>$ ¬, *¬ $>$ only
        b.   John-wa   subete-no hon-o   yom-ana-katta.
            John-TOP   all-GEN   book-ACC   read-NEG-PAST
            'John didn't read all the books.' $\forall >$ ¬, *¬ $> \forall$

The inverse-scope where negation is above *-mo/-demo* obtains when negation is not local to *-mo/-demo*, more specifically, when negation is in the main clause and *-mo/-demo* is in the embedded clause, as in (13a). Assuming the LF in (13b), *even* combines with the proposition 'that John read Book A', and triggers the ScalarP that this proposition is the least likely. Since negation is a presupposition hole, this ScalarP holds for the entire sentence.

(13)   a.   John-wa   [Hon A]$_F${-mo / -demo}   yonda-wake-de-wa-nai.
            John-TOP   Book A{-even / -even}   read-it is not the case
            'It is not the case that John even read Book A.'
        b.   LF: [not [even C [John read [Book A]$_F$]]]

One may say that the lexical theory is indeed capable of accounting for the data presented so far. Suppose that *-mo/-demo* is a regular *even*. Then it makes sense that the items yield only the least-likely reading in (9) and (10). Regarding (11), we have seen in (12) that the scope of negation in Japanese is narrow, or in other words, negation is low at the LF. Then the LF where *-mo/-demo* is above

negation comes for 'free' without stipulating any unusual movement. Granted this LF, the lexical theory would provide exactly the same analysis of (11) as the scope theory: -mo/-demo combines with the negated proposition 'that John didn't read Book A', and that yields the most-likely reading. However, it is not always the case that negation takes the narrowest scope. For example, (14) shows that an indefinite or a numeral can take either wide or narrow scope with respect to negation; (14) can mean that there is a book or one book that John didn't read, or that John read no book. Given that negation is not always lower than other scope-bearing elements at the LF, we do need to stipulate that -mo/-demo (as well as -dake 'only' and subete 'all') moves above negation to achieve a wide-scope effect. Put it differently, the wide scope of -mo/-demo is not given for free; rather, we gain it by moving -mo/-demo above negation.

(14)   John-wa   {hon / is-satu-no   hon}-o   yom-ana-katta.
       John-TOP   {book / one-CL-GEN book}-ACC   read-NEG-PAST
       'John didn't read {a book / one book}.' $\exists > \neg, \neg > \exists$

Let us take it further and assume that the lexical theory is compatible with this type of movement of -mo/-demo. Then, there is no way of teasing apart the two theories regarding the analysis of -mo/-demo. However, a difference is apparent when it comes to the analysis of -dake-demo '(lit.) even only'. Based on (9) and (10), the lexical theory would assume that -dake-demo is an NPI *even*. Given that focus particles always take scope over negation (-mo/-demo in (11) and -dake in (12a)), the NPI -dake-demo should also be outside the scope of negation and thus it fails to be licensed in (11). However, a serious problem arises with (15), which indicates that -dake-demo cannot be licensed by negation in a higher clause. Following the discussion on (13), it is clear that -dake-demo in (15) is in the scope of negation. Then, it remains mysterious why the NPI -dake-demo is infelicitous in a legitimate NPI-licensing context.

(15)   *John-wa   [Hon A]$_F$-dake-demo yonda-wake-de-wa-nai.
        John-TOP   Book A-only-even   read-it is not the case

2.2. Guerzoni's (2003) Compositional Analysis of the German Auch nur

We have seen above that -dake-demo '(lit.) even only' cannot be treated as an NPI *even*. Abandoning the lexical theory, I propose here a compositional analysis of -dake-demo under the scope theory, based on Guerzoni's (2003) analysis of *auch nur* '(lit.) also only' in German. In particular, I argue that there is a semantic conflict between -dake 'only' and -demo 'even', and that this conflict can be resolved only in certain context (roughly, DE contexts). This analysis accounts for why the distribution of -dake-demo is restricted (i.e., NPI-like distribution) and also for why -dake-demo has only the most-likely reading.
        Inspired by Lahiri's (1998) work on Hindi NPIs, Guerzoni argues that the NPI-like distribution of *auch nur* is accounted for by examining a semantic compatibility of *auch* 'also' and *nur* 'only' (for Lahiri, what is relevant is a

compatibility of *even* and the cardinality predicate *one*; see Section 3 for details). More specifically, Guerzoni claims that *auch* and *nur* in *auch nur* mean what they mean in isolation, that is, they are two independent focus particles associated with the same focus site. *Auch* is an additive focus particle that evokes an existential presupposition (ExistP, henceforth) given in (16). *Nur* 'only', unlike *even* and *also*, has a truth-conditional contribution; specifically, *nur* contributes exclusivity to the truth-conditions (Horn 1969, among others). Moreover, *nur* triggers a factive presupposition as well as a scalar presupposition, as in (17) (see Section 2.3 for further discussion on a ScalarP of *nur*).

(16) $[\![auch]\!]^w(C)(p)$ is defined iff $\exists q \in C[\ q \neq p \wedge q(w)=1\ ]$

(17) $[\![nur]\!]^w(C)(p)$ is defined iff
         $p(w) = 1$, and $\forall q \in C[\ q \neq p \rightarrow p >_{\text{likely/insignificant...}} q\ ]$
         If defined, $[\![nur]\!]^w(C)(p) = \neg\exists q \in C[\ q \neq p \wedge q(w)=1\ ]$

Once *auch* and *nur* are decomposed, we immediately see a contradiction between the additivity of *auch* and the exclusivity of *nur*. Take (7a), where *auch nur* occurs in positive contexts. Assuming that *auch* and *nur* are both independently associated with *die Maria*, *auch* triggers the ExistP that there is some x≠Maria such that I greeted x, while *nur* contributes the meaning that there is no x≠Maria such that I greeted x. Obviously, these two are in contradiction, and this is the reason why *auch nur* is unacceptable in (7a). Now consider *auch nur* in negation contexts in (7c), repeated in (18). Note that the focus site is now doubly-bracketed, because it is associated with two independent focus particles, *auch* and *nur*. Guerzoni points out that this sentence is truth-conditionally equivalent to the corresponding sentence without *auch nur*. That is, *nur* in *auch nur* does not seem to make any truth-conditional contribution. Based on this fact, Guerzoni argues that *nur* in *auch nur* means something different from what *nur* usually means. In particular, she proposes to swap the factivity and the exclusivity, namely, the factivity is treated as a truth-conditional import and the exclusivity is treated as a presupposition. This lexical entry for *nur* in *auch nur*, called *nur₂*, is given in (19). As a piece of supporting evidence for (19), Guerzoni shows that some uses of *just* in English contributes exclusivity at the level of presupposition, but not at the level of truth conditions; in *Can you spare just 5 minutes for me?*, *just* has no truth-conditional contribution. This fact suggests that the lexical entry in (19) must exists. With (19), the semantic conflict between the additivity of *auch* and the exclusivity of *nur₂* is now at the level of presupposition.

(18)   Niemand   hat   auch nur   [[die Maria]_F]_F begruesst.
         nobody   has   also only   the Maria   greeted
         'Nobody even greeted Maria.'

(19) $[\![nur_2]\!]^w(C)(p)$ is defined iff
         $\neg\exists q \in C[\ q \neq p \wedge q(w)=1\ ]$, and $\forall q \in C[\ q \neq p \rightarrow p >_{\text{likely/insignificant...}} q\ ]$
         If defined, $[\![nur_2]\!]^w(C)(p) = p(w)$

Going back to (18), if *auch* and *nur$_2$* are both below or above *niemand* 'nobody', we always encounter a semantic conflict; as long as *auch* and *nur$_2$* target the same proposition, the ExistP of *auch* and the exclusivity presupposition of *nur$_2$* are in contradiction. Guerzoni argues that the conflict can be resolved if we assume that *auch* takes scope over negation. With this assumption, a possible LF would be the one in (20). *Auch* introduces the ExistP that there is some x≠Maria such that nobody greeted x. *Nur$_2$* evokes the exclusivity presupposition that there is no x≠Maria such that g(1) greeted x (where g is an assignment function; see Heim and Kratzer 1998). Following Heim's (1983) theory of the presupposition projection in quantificational environments that derives a universal presupposition, the final presupposition of *nur$_2$* is that there is no x≠Maria such that everybody greeted x, or equivalently, nobody greeted anybody different from Maria. This is not inconsistent with the ExistP of *auch*, indicating that *auch nur* is acceptable when there is an intervening negation, as in (20).

(20)   LF: [also C [nobody$_1$ [only C [t$_1$ greeted [[Maria]$_F$]$_F$]]]]

Another property of *auch nur* that needs to be explained is that it only has the most-likely reading. Guerzoni claims that this is due to the ScalarP of *nur$_2$* in (19). In the LF (20), *nur$_2$* introduces the ScalarP that 'that g(1) greeted Maria' is the most likely proposition. Following Heim (1983) again, the ScalarP in the end is that 'that everyone greeted Maria' is the most likely, which is what we wanted.

In sum, Guerzoni's analysis appeals to the fact that there is an inherent semantic conflict between the ExistP of *auch* and the exclusivity presupposition of *nur$_2$*. This conflict can be resolved when there is some intervening operator that makes the two presuppositions consistent. Guerzoni claims that, besides negation, any DE operator can be an intervener that solves the conflict (see Section 4 for further discussion). In this way, her analysis provides us with an account for why the distribution of *auch nur* is very much like the distribution of NPIs.

2.3. The Compositional Analysis of the Japanese -Dake-demo

Extending Guerzoni's (2003) compositional analysis to Japanese, I argue that *-dake-demo* '(lit.) even only' must be decomposed into *-dake* 'only' and *-demo* 'even'. Just like the German *nur* 'only' in *auch nur*, *-dake* 'only' in *-dake-demo* does not seem to contribute any meaning at the level of truth conditions; a sentence with *-dake-demo* is truth-conditionally equivalent to the corresponding sentence without *-dake-demo*. Thus, let us assume the same lexical entry as *nur$_2$* for *-dake* in *-dake-demo* (*-dake$_2$*, hereafter), given in (21). This entry is supported by the fact that some uses of *-dake* have no truth-conditional import, in the same way as *just* in English. For example, (22) is truth-conditionally equivalent to the corresponding sentence without *-dake*. Moreover, exclusivity contributed by *-dake* can be considered as a presupposition; there is no n≠5 such that it is easier for the addressee to spare n minutes than to spare 5 minutes.

(21)　$[\![\text{-}dake_2]\!]^w(C)(p)$ is defined iff
　　$\neg\exists q\in C[\ q\neq p \wedge q(w)=1\ ]$, and $\forall q\in C[\ q\neq p \rightarrow p >_{\text{likely/insignificant...}} q\ ]$
　　If defined, $[\![\text{-}dake_2]\!]^w(C)(p) = p(w)$

(22)　[5-hun]-dake　　　zikan-o　　　moraemasu-ka?
　　　[5-minute]-only　　time-ACC　　give me-Q
　　　'(lit.) Will you give me only 5 minutes?' = Will you give me just 5 mins?

It is controversial whether a ScalarP is always part of the meaning of *nur* (König 1991). Guerzoni (2003), following Lerner and Zimmermann (1983), assumes that a ScalarP is always present even when it is not apparent (2003:190). What is relevant here is Lerner and Zimmermann's claim that *only* may involve a different standard for evaluation. For instance, the sentence *only the prime minister came* may involve a likelihood scale with respect to cardinality, as in (23). The question then is whether *-dake₂* 'only' in *-dake-demo* '(lit.) even only' always triggers a ScalarP. Interestingly, some informants seem to obtain only this cardinality reading with *-dake-demo*. In particular, for these informants, the interpretation of (24a) is very close to that of (24b). This cardinality reading does not arise with a sentence with *-demo* 'even' (i.e., (9b) with *-demo*). This empirical fact suggests that *-dake₂* in *-dake-demo* triggers a ScalarP in terms of cardinality. This in turn supports the claim that *-dake₂* always introduces a ScalarP, as in (21).

(23)　For every $n\in N$ such that $n \neq |\{\text{the prime minister}\}|$, 'that m people came', where $m = |\{\text{the prime minister}\}|$, is more likely than 'that n people came'.

(24)　a.　John-ga　　[Hon A]$_F$-dake-demo　　yonda-to-wa　odoroi-ta.
　　　　John-NOM　book A-only-even　　　　read-that-TOP　was surprised
　　　　'I was surprised that John even read Book A.'　　　　　(=(9b))
　　　b.　John-ga　　hon-o　[is-satu]$_F$-dake-demo　yonda-to-wa　odoroi-ta.
　　　　John-NOM　book-ACC　one-CL-only-even　　read-that-TOP　was surprised
　　　　'I was surprised that John read even a single book.'

Let us now turn to the semantics of *-demo* 'even' in *-dake-demo*. In the case of the German *auch nur*, it is obvious that *auch* 'also' evokes an ExistP in (16). Similarly, the English *even* is generally considered to evoke an ExistP as well as a ScalarP (Karttunen and Peters 1979; but see, Krifka 1991, von Stechow 1991, Rullmann 1997 for counter-examples). Although *-demo* in Japanese roughly translates as *even* in English, the presence of an ExistP is much less apparent. Suppose if the only student who failed the exam was the best student John. (25) is felicitous under this scenario, indicating that *-demo* may not evoke an ExistP. Then the only presupposition introduced by *-demo* 'even' is a ScalarP, as in (26). Recall that Guerzoni's analysis appeals to the conflict between an ExistP and an exclusivity presupposition. Given that *-demo* lacks an ExistP, I instead argue that there is a systematic conflict between a ScalarP of *-demo* and a ScalarP of *-dake₂*: *-demo* requires the relevant proposition to be the least likely, as in (26), while *-dake₂* requires it to be the most likely, as in (21).

(25)   [John]$_F$-demo otita-to-wa   odoroi-ta.
         John-even   failed-that-TOP   be surprised-PAST
         'I was surprised (to find out) that even John failed.'

(26) $[\![$-*demo*$]\!]^w$ (C)(p) is defined iff $\forall q \in C[\ q \neq p \rightarrow q >_{\text{likely}} p\ ]$

      Structurally, in NP-*dake-demo*, -*dake*$_2$ 'only' directly attaches to the NP, followed by -*demo* 'even', that is, -*demo* is above -*dake*$_2$ in the structure. Thus, if we were to move one of the particles to avoid a conflict with the other, it must be -*demo*. In particular, extending Guerzoni's (2003) analysis, -*demo* must scope over some operator to resolve the semantic conflict with -*dake*$_2$. If -*demo* outscopes an operator that reverses the likelihood scale, the ScalarP of -*demo* and the ScalarP of -*dake*$_2$ become consistent. Assuming that a DE operator has a scale-reversal property, a DE operator can serve as an intervener that resolve the conflict (cf. Lahiri 1998). This analysis accounts for the NPI-like distribution of -*dake-demo*; -*dake-demo* is licensed under DE contexts because a DE operator can make the ScalarPs of -*dake*$_2$ and of -*demo* consistent. In (9b), the current analysis predicts that -*dake-demo* is acceptable when its LF is (27a). -*Demo* 'even' evokes the ScalarP that 'that I was surprised that John read Book A' is the least likely, which leads to the reading that Book A is the most likely book to be read among the contextually relevant books. This is due to a scale-reversal property of *surprise*. On the other hand, -*dake*$_2$ 'only' triggers the ScalarP that 'that John read Book A' is the most likely proposition. This presupposition is passed onto (9b) as a whole, because *surprise* is a presupposition hole. There is no conflict between the two scalar presuppositions. Consider now the LF in (27b), where -*demo* is below *surprise*. In this case, -*demo* evokes the ScalarP that 'that John read Book A' is the least likely, yielding the least-likely reading. In contrast, -*dake*$_2$ triggers the ScalarP that 'that John read Book A' is the most likely. Apparently, these two presuppositions are inconsistent, thus there is no way of deriving the least-likely reading. The current analysis can also explain why -*dake-demo* is unacceptable in positive and negative contexts. In positive contexts, there is no operator that can reverse the likelihood scale of -*demo*, and so there is no way of resolving the conflict with -*dake*$_2$. Regarding negative contexts, I showed in Section 2.1 that -*demo* and -*dake* in isolation both take scope over negation ((11) and (12a), respectively). Thus, in the case of -*dake-demo*, it makes sense to assume that both -*demo* and -*dake*$_2$ are above negation at the LF, as in (27c). Then, just like in positive contexts or in (27b), there is no intervener to resolve the conflict.

(27)   a. LF: [even C [surprise [only C [John read [[Book A]$_F$]$_F$]]]]
         b. LF: *[surprise [even C [only C [John read [[Book A]$_F$]$_F$]]]]
         c. LF: *[even C [only C [not [John read [[Book A]$_F$]$_F$]]]]

2.4. Interim Summary

In this section, I showed that -*mo* and -*demo* evoke a ScalarP in (1), which yields the least-likely reading in positive contexts. In negative contexts, they only have

the most-likely reading, because they take scope over negation and thus combine with a negated proposition. Note that *-mo/-demo* is not alone in taking scope over negation; other focus particles such as *-dake* 'only' and the universal quantifier can also move above negation. Thus, in Japanese, there is no need of stipulating a special movement just for the *even* items. Indeed, in other DE contexts, only the least-likely reading is available, which indicates that *-mo/-demo* cannot take scope over a DE operator other than negation. Thus, the empirical facts here show that one of the arguments against the scope theory, i.e., stipulative movements of *even*, does not hold for Japanese.

I further argued that, following Guerzoni (2003), *-dake-demo* needs to be decomposed into *-dake₂* 'only' and *-demo* 'even'. There is an inherent conflict between the ScalarP of *-dake₂* in (21) and the ScalarP of *-demo* in (26). To resolve the conflict, *-demo* must move over a DE operator, yielding the LF: *-demo*>DE-operator>*-dake₂*. In this LF, a DE operator reverses the likelihood scale, which makes the two scalar presuppositions compatiable. Notice that the movement of *-demo* here is semantically motivated; *-demo* moves to resolve the conflict with *-dake₂*.[8] This analysis predicts that *-dake-demo* is licensed only when there is a DE operator intervening between *-demo* and *-dake₂* at the LF. Indeed, it correctly accounts for why *-dake-demo* is unacceptable in positive and negative contexts: in positive contexts, there is no DE operator and, in negative contexts, negation is unable to take scope over *-dake₂*. Furthermore, the ScalarP of *-dake₂* and the ScalarP of *-demo* with the LF: *-demo*>DE-operator>*-dake₂* both yield the most-likely reading, which is consistent with our intuition on *-dake-demo*.[9]

In this way, the distribution of the Japanese *even* items can be straightforwardly captured by the scope theory. Thus, the cross-linguistic data on multiple *even* items do not necessarily support the lexical theory, contra what has been claimed for other languages. Moreover, the scope analysis proposed here (à la Lahiri 1998, Guerzoni 2003) gives us a natural explanation for the correlation between the distribution of *even* with the most-likely reading (so-called NPI *even*) and DE contexts. In the next section, I provide a further advantage of the current analysis. In particular, I show that the current analysis is capable of explaining the distribution of certain Japanese NPIs.

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[8] Unlike NP-*dake-demo*, NP-*dake-mo* seems to be always infelicitous. This may indicate that *-demo* and *-mo* are different in that the former, but not the latter, potentially moves for semantic reasons. In other words, *-mo* cannot move even when there is a semantic conflict, and thus *-dake-mo* can never be licensed.

[9] Another argument for the scope theory of *-dake-demo* comes from Guerzoni's (2003) analysis of *auch nur* in questions. She argues that *auch nur* in questions leads to a negatively biased interpretation, and that the scope theory, but not the lexical theory, is able to account for this property (see Guerzoni 2003 for details). Indeed, the Japanese *-dake-demo* in questions seems to be negatively biased; in (i), there seems to be a strong expectation for a negative answer.

(i)   John-wa   [Hon A]$_F$-dake-demo   yon-da-no?
        John-TOP   book A-only-even   read-PAST-Q
        'Did John even read Book A?'

3. The Extension to Japanese NPIs

It has been independently argued that the theory of *even* helps us to understand seemingly unrelated phenomena of NPIs (Heim 1984, Lahiri 1998, Lee and Horn 1994, Guerzoni 2003). This line of investigation applies to a particular kind of NPIs, namely, so-called strong NPIs (or minimizer NPIs such as *lift a finger, budge an inch*). These NPIs are able to appear with an overt *even*, as in *John didn't (even) lift a finger to help Mary* (Heim 1984). Similarly, the German *auch nur* can appear with a strong NPI, as in *(auch nur) mit der Wimper zucken* '(even) bat an eyelid' (Schwarz 2005: footnote 32). Some languages are known to have NPIs with an overt *even* item (e.g., Lahiri's (1998) Hindi examples in Section 3.1). Japanese is such a language: the three *even* items in Japanese, *-mo, -demo,* and *-dake-demo*, can be a part of NPIs, as in (28). When the cardinal predicate *one* is followed by the *even* items in positive contexts, as in (28a), the sentence is unacceptable.[10,11] In negative contexts in (28b), only *one + -mo* is acceptable. The other two are acceptable in other DE contexts, as in (28c). These Japanese NPIs provide us with an interesting test case to examine whether there is any correlation between the semantics of *even* and of NPIs. In the following, I show that the scope analysis of the *even* items proposed in Section 2 directly extends to the data on NPIs. This clearly indicates that the semantics of *even* plays a crucial role to understand the nature of (at least some type of) NPIs. The finding here is not entirely new; Lahiri (1998) has convincingly shown that the distribution of Hindi NPIs can be accounted for by examining the semantics of *even* (see Section 3.1). I show below that his analysis (in conjunction with Guerzoni's) applies to the Japanese data. What is new though is the empirical observation that exactly the same analysis applies to the distribution of *even* as well as of NPIs (Lahiri's analysis targets NPIs, and Guerzoni's analysis targets *even*).

(28)   a. *[Hito-ri]$_F${-mo / -demo / -dake-demo}   ki-ta.
         one-CL{-even / -even / -only-even}   come-PAST
      b. [Hito-ri]$_F${-mo / *-demo / *-dake-demo} ko-na-katta.
         one-CL{-even / -even / -only-even}   come-NEG-PAST
         '(lit.) Even one person didn't come.' = Nobody came.
      c. [Hito-ri]$_F${*-mo / -demo / -dake-demo}   kita-to-wa   odoroi-ta.
         one-CL{-even / -even / -only-even}   come-that-TOP was surprised
         '(lit.) I was surprised that even one person came.' = anybody

3.1. Lahiri's (1998) Analysis of NPIs in Hindi

Let us first summarize Lahiri's (1998) analysis of Hindi NPIs. Like Japanese NPIs, Hindi can form an NPI by combining *ek* 'one' with *bhii* 'also, even'. (29a)

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[10] Alternatively, NPIs can be formed with an indeterminate pronoun followed by an *even* item (either *-mo* or *-demo*, but not *-dake-demo*). I do not discuss this type of NPIs in this paper.

[11] Numerals in Japanese must be followed by a classifier that carries some semantic information of the associated NP. For simplicity, I ignore the existence of a classifier, because this does not affect the analysis of the paper.

shows that *bhii* corresponds to the English *even* when it attaches to a focused NP. (29b-c) show that *ek bhii* is an NPI that is licensed in negative contexts, but not in positive contexts. *Ek bhii* can be licensed in a variety of other DE contexts (e.g., in the complement of adversatives, in the antecedent of conditionals, etc.).[12]

(29)   a. [Ram]$_F$ bhii aayaa b. [Ek]$_F$ bhii nahiiN aayaa   c. *[Ek]$_F$ bhii aayaa
            Ram   even came   one even didn't came   one even came
            'Even Ram came.'   'No one came.'

Assuming that *bhii* 'even' associates with focus just like the English *even*, Lahiri argues that *bhii* in (29b) associates with the cardinality predicate *ek* 'one'. Then, the relevant alternatives would be the propositions obtained by replacing *ek* with other cardinality predicates, that is, {one came, two came, …, n came}. *Bhii* triggers the same ScalarP as English *even* in (1): 'that one came' is the least likely proposition in C. However, this is inconsistent with the meaning of *one*. For instance, if 'five came' is true, then 'one came' must be true, and if three came, one must have come. In this way, as in (30), 'that one came' is always entailed by the proposition with other cardinality predicates, i.e., the proposition with *one* is the weakest, or the most likely (cf. Chierchia 2004:77, "… being stronger entails being less likely"). This is of course inconsistent with the ScalarP of *bhii*.

(30)   ∃x[|x|=n ∧ come(x,w)] → ∃x[|x|=1 ∧ come(x,w)]

Lahiri's analysis offers a straightforward account for why *ek bhii* is acceptable in negative contexts, in conjunction with the scope theory of *even*. In particular, Lahiri argues that *bhii* 'even' is able to take scope over negation and thus combine with the proposition 'that one didn't come'. Then it evokes the ScalarP that this proposition is the least likely proposition in C, or equivalently, 'that one came' is the most likely proposition, which is consistent with the meaning of *one*. More generally, Lahiri's analysis predicts that *ek bhii* is licensed whenever *bhii* takes scope over an operator that reverses the likelihood scale. That is, *ek bhii* is licensed only if *bhii* scopes over a DE operator, giving a natural explanation for Ladusaw's (1979) generalization that NPIs are licensed only in DE contexts. It is easy to see now that the essence of Guerzoni's analysis is taken from Lahiri's analysis: given two elements in conflict, there needs to be a certain licenser. Under their analyses, the correlation between DE contexts and NPIs or between DE contexts and an NPI *even* is not arbitrary. The restricted distributions of NPIs and an NPI *even* are derived from independent properties of *even*.

3.2. Application to the Japanese NPIs

Exactly the same analysis applies to the Japanese NPI with *-mo* 'even' in positive contexts. In (28a), there is an inherent conflict between the ScalarP of *-mo* and the

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[12] Lahiri (1998) further shows that the distribution of the Hindi NPIs is not limited to DE contexts. See Section 4 below on this point.

semantics of *one*. Without a DE operator, there is no way of resolving the conflict, and thus the sentence is unacceptable. In negative contexts in (28b), recall the claim in Section 2.1 that *-mo* must be above negation, while the existential-closure of the cardinality predicate *one* can be below negation (see (14)). That is, negation can intervene between *-mo* and *one* at the LF, as in (31a). This LF is free from the semantic conflict: as in (31b), *-mo* combines with a negated proposition, and triggers the ScalarP that 'that one didn't come' is the least likely, or equivalently, 'that one came' is the most likely. This is consistent with what *one* means. In Section 2.1, we have also seen that *-mo* never moves above a DE operator other than negation, unlike the English *even* and the Hindi *bhii*. That is, in DE contexts other than in negative sentences, *-mo* is below a DE operator. Then, just like in positive contexts, there is a clash between the ScalarP of *-mo* and the semantics of *one*. This is the reason why *one + -mo* in (28c) (in the complement of *surprise*) is infelicitous.

(31)   a. LF: [even C [not [[one]$_F$ came]]]
        b. $[\![\textit{-mo}]\!]^w$ (C)(p), where $C \subseteq \{q: \exists n[q = \lambda w. \neg \exists x[|x|=n \wedge \text{come}(x,w)]\}$,
            and $p = \lambda w. \neg \exists x[|x|=1 \wedge \text{come}(x,w)]$
            ScalarP: $\forall q \in C[q \neq p \rightarrow q >_{\text{likely}} p]$

    Let us now turn to the distribution of *one + -dake-demo* '(lit.) even only'. Recall the analysis in Section 2.3 above that *-dake-demo* needs to be decomposed into *-demo* 'even' and *-dake$_2$* 'only', and that there needs to be a DE operator between the two particles at the LF. We can pursue the same analysis here. *One + -dake-demo* is unacceptable in positive and negative contexts, because there is no DE operator in positive contexts and negation cannot intervene between *-demo* and *-dake$_2$* in negative contexts, as in (32a). In Section 2.3, we have seen that *-demo* in *-dake-demo* can move above a DE operator whenever there is a semantic motivation. Thus, in (28c), we can assume that *-demo* moves over *surprise* to resolve the conflict with the ScalarP of *-dake$_2$*, yielding the LF in (32b) (cf. (27a)). Notice that the ScalarP of *-dake$_2$* in (32b) is consistent with the meaning of *one*: *-dake$_2$* triggers the ScalarP that 'that one came' is the most likely, while *one*, being the weakest predicate, implies that the proposition with *one* is the most likely among alternatives. Indeed, *one* can happily co-occur with *-dake* in any context, as in (33). Thus, in the LF (32b), the ScalarP of *-demo*, the ScalarP of *-dake$_2$*, and the semantics of *one* are all consistent.

(32)   a. LF: *[even C [only C [not [[[one]$_F$]$_F$ came]]]]
        b. LF: [even C [surprise [only C [[[one]$_F$]$_F$ came]]]]

(33)   [Hito-ri]$_F$-dake {kita / ko-na-katta   / kita-to-wa   odoroi-ta }.
        one-CL-only   {came / come-NEG-PAST / come-that-TOP was surprised}

    Finally, the analysis of *one + -demo* requires an additional assumption. In particular, I assume that *-demo* in *one + -demo* comes with a hidden *ONLY*. This is not implausible given that the distribution of *one + -demo* and *one +*

-dake-demo are the same. Moreover, *-demo* and *-dake-demo* are almost equivalent in meaning when they attach to a predicate of a minimal amount, as in (34). I further assume here that a predicate of a minimal amount is the weakest predicate, just like *one*, thus a proposition with such a predicate is the most likely among the alternatives. Then, the ScalarP of *ONLY* that the relevant proposition is the most likely makes no contribution; this presupposition is already evoked by the meaning of a minimal amount predicate. Notice that *-demo* and *-dake-demo* evoke different presuppositions when they do not attach to a predicate of a minimal amount, as in (9-11) above; *-demo* yields the least-likely reading, while *-dake-demo* yields the most-likely reading. This is because, without the presence of a minimal amount, the ScalarP of *only* does make a contribution that the relevant proposition is the most likely, which is unavailable otherwise. Thus, in this case, to convey the ScalarP of *only*, *only* needs to be overtly expressed.

(34) a. John-ga   [sukosi]$_F${-demo/-dake-demo} yonda-to-wa   odoroi-ta.
          John-NOM little-CL{-even/-only-even}   read-that-TOP was surprised
          '(I) was surprised that John read even a little.'
     b. [Go-hun]$_F${-demo/-dake-demo} ii-kara   mat-te.
          five-minute{-even/-only-even} good-because   wait-please
          '(lit.) Please wait because even five minutes is enough.'

With the assumption that *one* + *-demo* comes with *ONLY*, we would predict it to have the same distribution as *one* + *-dake-demo*. In positive contexts, *one* + *-demo* + *ONLY* is unacceptable due to the lack of a DE operator. In negative contexts, negation cannot intervene between *-demo* and *ONLY*; the LF is the same as (32a), only difference being the covertness of *only*. In other DE contexts, *ONLY* motivates the movement of *-demo*, and yields the legitimate LF in (32b).

4. Conclusion

In this paper, I proposed a compositional analysis of the Japanese *even* items under the scope theory. The distribution of the *even* items as well as of the NPIs with the *even* items is explained by the scope interaction between *even*, *only*, and a DE operator. *-Mo* and *-demo* trigger a ScalarP in (1), which yields the least-likely reading when there is no DE operator (as in positive contexts) or when *-mo*/*-demo* is under a DE operator. In contrast, the most-likely reading obtains when *-mo*/*-demo* is above a DE operator, as in negative contexts. In *-dake-demo*, *-demo* 'even' obligatorily moves above a DE operator, if there is any, to resolve a conflict between the ScalarP of *-demo* and the ScalarP of *-dake*$_2$. The resulting LF: *even* > DE-operator > *only* always yields the most-likely reading. *-Dake-demo* is infelicitous when there is no way of creating this LF (e.g., positive contexts, negative contexts with low scope negation). The proposed analysis for the *even* items directly extends to some types of NPIs, namely, the numeral predicate *one* followed by the *even* items.

As emphasized throughout the paper, one of the biggest advantages of the current analysis (as well as Guerzoni's and Lahiri's) is the fact that the well-known correlations between DE contexts and an NPI *even* and between DE contexts and (at least some types of) NPIs naturally follow from independent properties of *even*. However, the generalization here is too strong. The distribution of *-dake-demo* is not limited to DE contexts. In particular, *-dake-demo* can appear in contexts for free choice items (FCIs) (imperatives, generics, etc.), as in (35). Lahiri (1998) shows that the Hindi NPI *ek bhii* '(lit.) one even' can also appear in these contexts.[13] He argues that these contexts, as well as DE contexts, are able to resolve the semantic conflict between the ScalarP of *bhii* and the semantics of *one*. For example, according to Lahiri, imperatives can be viewed as permission statements, and *even* in (35) triggers the ScalarPs in (36) (see Lahiri 1998: Section 10 for details). These ScalarPs are satisfied, and thus (35) are acceptable. In so doing, Lahiri argues for a unified account of NPIs and FCIs (Kadmon and Landman 1993, Lee and Horn 1994, Krifka 1995). It remains to be seen whether the same unification can be achieved for the Japanese *even* items.

(35) a. [Hon A]$_F$-dake-demo   yom-inasai.
       Book A-only-even   read-IMP
       '(lit.) Read even Book A.'
    b. [Is-satu]$_F$-dake-demo   yom-inasai.
       one-CL-only-even   read-IMP
       '(lit.) Read even one book.'

(36) a. 'I permit you to read x≠Book A' $>_{likely}$ 'I permit you to read Book A'
    b. 'I permit you to read n books' (n≠1) $>_{likely}$ 'I permit you to read 1 book'

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[13] As Lahiri (1998:75) notes, the term FCI may be a misnomer for the Hindi *ek bhii*, because the relevant interpretation is somewhat different from the interpretation obtained with free-choice items in English. The same comment holds for the Japanese *one* + *-dake-demo*. For instance, (35b) does not have the reading one finds in the sentence *Read any book*. The closest translation would be 'Read even just one book.'

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