# Expressions of Exceeding of Expectational Limits in Japanese and English

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Keywords: scalarity, Japanese, English, mo, even

#### Abstract

We characterize elements such as English even and Japanese mo / sae / sura as expressing that the event described falls outside the speaker's range of either-way expectations, i.e. events which can occur or not occur without surprising the speaker. It is shown that the two languages differ in that in Japanese, an element expressing focus is requisite in expressing exceeding of expectational limits, while in English, a formal element is not requisite. It is suggested that this is because in English prosodic prominence serves functions which need formal expression in Japanese.

#### 1.Introduction

There are numerous studies on elements such as English even and Japanese mo<sup>1</sup>, sae, sura, sometimes called focus particles. It is generally agreed that that these are expressions of scalarity (Karttunen and Peters 1979, Yamanaka 1991), but I will argue in the second chapter that they should be more correctly characterized as expressions of exceeding of expectational limits. In the third chapter, we will see that in such expressions, we should distinguish between cases where the scale is pragmatically determined, and cases where the scale is already given in some sense, and point out that the Japanese particle mo, which expresses exceeding of expectational limits in a negative sentence with a pragmatically determined scale, expresses citation of value in a negative sentence with an inherent scale. In the fourth chapter, we will look at expressions which consist of an NP and possibly a focus particle which serve to emphasize sentential negation in the two languages, and point out that in English, an NP without the focus particle can emphasize sentential negation, but Japanese always requires the focus particle. In the fifth chapter, we argue that this difference between the two languages is due to the difference in the meanings which can be conveyed by prosodic prominence in the two languages.

<sup>&</sup>lt;sup>1</sup> Mo also has an additive meaning, but we will only be considering the scalar meaning.

#### 2. Expressions of exceeding of expectational limits

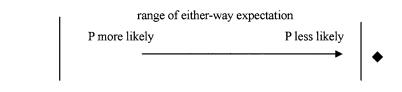
As we see in the examples below, even, mo, sae, sura may be used in both positive and negative sentences.

- 1a She even wrote a letter
- b She didn't even write a letter.
- 2a Kanozyo-wa tegami { mo / sae / sura } kai-ta.
  she Top letter mo / sae / sura write-Past
  "She even wrote a letter."
- b Kanozyo-wa tegami { mo / sae / sura } kak -ana -katta. she Top letter mo / sae / sura write-Neg-Past

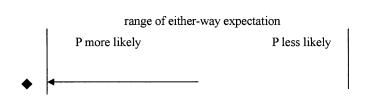
First of all, it should be pointed out that in both English and Japanese, the above examples have two interpretations each, namely, the interpretation in which the scope of even / mo / sae / sura is "write a letter" (in which case the scale concerns the things she is likely or not likely to do), and the interpretation in which the scope is "a letter" (in which case the scale concerns the things she is likely or not likely to write). In this article, we will not be concerned with scope. In either case, in the positive sentences (1a) and (2a) the event expressed by the proposition "she writes a letter" is considered as very unlikely, but took place, and in the negative sentences (1b) and (2b), the same event is considered as very likely, but did not take place. However, this characterization is not enough. There is an element of surprise and unexpectedness in these sentences<sup>2</sup>, which suggests that the speaker is surprised when certain things happen, and surprised when certain things don't happen. There must also be certain things which do not surprise the speaker either way, that is, the speaker is not surprised when they happen and is not surprised when they don't happen. The last class will be said to fall within the range of either-way expectation. In worlds where (1a) and (2a) are true (acceptable), her writing a letter was considered as unlikely to the point of not falling within the range of either-way expectation, and in worlds where (1b) and (2b) are true (acceptable), her writing a letter was considered as likely to the point that it not happening fell outside the range of either-way expectation. (1a) and (2a) may be visualized as (3), where P is the event of her writing a letter, and  $\bullet$ is the actual state of affairs (she wrote a letter). Similarly, (1b) and (2b) may be visualized as (4), where P means the same as in (3), and  $\bullet$  is the actual state of affairs (she did not write a letter).

<sup>&</sup>lt;sup>2</sup> Accordingly, Numata (2003) and her earlier studies call this "mo of unexpectedness" (igai-no "mo").

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At this point, we would like to examine the behavior of another particle in Japanese, *made*. In positive sentences, *made* expresses a meaning similar to *mo/sae/sura*, but in negative sentences, there is a difference (Teramura 1991).

5a Kanozyo-wa tegami-made kai-ta.<sup>3</sup>
she Top lette *made* write-Past
"She even wrote a letter."

b Kanozyo-wa tegami-made kak -ana -katta.<sup>4</sup>
she Top letter *made* write-Neg-Past
"She went so far as to not write a letter."

(5b) is not ungrammatical, but it expresses something different from (1b) and (2b). It expresses that the event expressed by the proposition "she does not write a letter" was so unlikely as to fall outside the range of either-way expectations but took place. What (1b) and (2b) express, that the event expressed by the positive proposition "she writes a letter" was so likely as to fall outside the range of either-way expectations but did not take place, and what (5b) expresses, that the event expressed by the negative proposition "she does not write a letter" was so unlikely as to fall outside the range of either-way expectations but took place, seems to be the same, but when we look at the possibility of their co-occurrence with *itido-mo* "(not) once", a negative polarity item, there is a difference.

<sup>&</sup>lt;sup>3</sup> Standard word order in Japanese is SOV. The subject marker is ga, the object marker is a, and the topic marker (Top) is aa. The subject marker and object marker usually do not appear when a focus particle is present. In the example sentences, the subject is marked with the topic particle to make them more natural sounding

example sentences, the subject is marked with the topic particle to make them more natural sounding.

The following sentence is grammatical and more frequently used than (5b), but means something different from (1b) and (2b), and we will not be discussing it.

<sup>(</sup>i) Kanozyo-wa tegami-made-wa kak -ana -katta. she Top letter *made wa* write-Neg-Past "She didn't go so far as to write a letter."

6a Kanozyo-wa itido-mo tegami {mo / sae / sura } kak-ana-katta.

she Top once mo letter mo / sae / sura write -Neg-Past

"She did not write a letter even once."

b \*Kanozyo-wa itido-mo tegami-made kak-ana-katta. she Top once *mo* letter *made* write -Neg-Past

The NPI *itido-mo* "(not) once" is generally licensed in a negative environment. (6a) is grammatical but (6b) is not. This suggests that in (6a) the scope of *mo / sae / sura* is the predicate (or the proposition) not including the negation, but in (6b) the scope of *made* is the predicate (or the proposition) including the negation. In other words, in (6a) P is a positive proposition and in (6b) (and hence 5b) P is a negative proposition.

In the examples that have been discussed, there were scales of likelihood of a certain event taking place, which is determined pragmatically. The likelihood of a certain event will depend on encyclopedic knowledge (such as the relation that an act of writing a letter has to other acts and events) and the speaker's judgments based on experience concerning the person in question and past events. Since the scales are determined pragmatically, they differ according to the context. But there also exist scales which are not pragmatically determined but are already given, and focus particles interact with such scales differently, as we will see in the next chapter.

#### 3. Scales which are not determined pragmatically

Scales which are not pragmatically determined are scales which exist inherently within certain lexical items. One type of such scales is the quantificational scale. When the scale is quantificational, there are differences in both English and Japanese. First of all, in English, even cannot express exceeding of expectational limits in positive sentences involving a quantificational scale, as in (7a), although it can do so in corresponding negative sentences as in (7b). In Japanese, sae and sura do not express exceeding of expectational limits when the scale is quantificational, as we see in (8)(Teramura 1991). From now on, we will use the abbreviation "Foc" to refer to elements expressing exceeding of expectational limits, and "Lex" to refer to elements which Foc relates to. The relation is clearer in Japanese, an agglutinative language, than in English. In (7) and (8), even, mo, sae, sura is Foc, and \$1000 is Lex. When Lex is the smallest value in the quantificational scale excepting zero, Lex + Foc emphasizes sentential negation. These will be dealt with in the next chapter.

7a \*He spent even \$1000. 5

 <sup>(</sup>i) is grammatical, but the scope of even in (i) is "spend \$1000", and the scale is a pragmatically determined one.
 (i) He even spent \$1000.

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b He didn't spend even $10.
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8a Kare-wa 1000-doru- { mo / *sae / *sura } tukat-ta.

he Top dollar mo / sae / sura spend-Past

"He spent more than $1000."
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b Kare-wa 10-doru- {mo/\*sae/\*sura} tukaw-ana-katta. he Top dollar mo/sae/sura spend-Neg-Past

We should note that a quantificational expression can be a value in a pragmatically determined scale. If the quantificational Lex is seen as having a certain meaning within the context, the scale may be a pragmatically determined one, which makes it possible to use *sae* and *sura*, as seen in (9).

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9a Kare-wa (ano daizi-na) 1000-doru- { sae / sura } tukat-ta.

he Top that precious dollar sae / sura spend-Past

"He even used (our precious) 1000 dollars."

b Kare-wa (syoogaku-sihei-no) 10-doru- { sae / sura } tukaw-ana-katta.

he-Top small bill dollar sae / sura spend-Neg-Past

"He didn't spend even 10 dollars (, which is a small bill).
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Let us here examine (8b) with mo. It has been pointed out that a negative sentence with mo and a quantificational scale has two interpretations, 'large' and 'small' (Takahashi 1978, Numata 1986).

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10a Kare-wa 10-doru-mo tukaw-ana-katta. [10 dollars is a small amount]
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b Kare-wa 10-doru-mo tukaw-ana-katta. [10 dollars is a large amount]

Under the interpretation (10a), 10 dollars is a small amount and the sentence expresses that this small amount was not spent. Under the interpretation (10b), 10 dollars is a large amount, and the sentence expresses that the amount of money not spent is this large. Recall that when the scale was a pragmatically determined one, a negative sentence with *mo* had only one interpretation, that something was so likely to take place as to fall outside of the range of either-way expectation. But (10b) means that his *not* using 10 dollars was so unlikely as to fall outside of the range of either-way expectation. It has the usual unexpected flavor, and the fact that it is acceptable shows that when the scale is quantificational and Foc is *mo*, P in (3) may be a negative proposition.<sup>6</sup>

Let us consider next the other interpretation (10a), which seems to express exceeding of

<sup>&</sup>lt;sup>6</sup> In English, P is a negative proposition with a pragmatically determined scale when *even* is higher than negation, as in (i).

<sup>(</sup>i) She even didn't write a letter.

expectational limit in the other direction, the same as (7b) and the sentences with *sae* and *sura* in (8b). This is not correct, however, in view of the fact that (10a) does not express unexpectedness, as did the negative sentences with *mo* and a pragmatically determined scale. Moreover, (10a) may be used in the following context, i.e. as answer to a question without any special presuppositions.

```
11 "Ikura tukat-ta?" "10-doru-mo tukaw-ana-katta." how much spend-Past dollar mo spend-Neg-past "How much did you spend?" "(I spent) less than 10 dollars."
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On the other hand, expressions of exceeding of expectational limit are not natural as answers to questions without special presuppositions, as shown in (12). This also supports the view that (10a) does not express exceeding of expectational limit.

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12a "Ikura tukat-ta?" "?1000-doru-mo tukat-ta."
how much spend-Past dollar mo spend-past
"How much did you spend?" "?(I spent) as much as 1000 dollars."

b "Kanozyo-wa nani -o si-ta?" "?Tegami {mo / sae / sura } kai-ta."
she Top what Obj do-Past letter mo / sae / sura write-Past
"What did she do?" "?She even wrote a letter."
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In addition, with (7b) there is a possibility that the amount of money spent is zero, but with (10a) the understanding is that the amount of money spent is not zero, as with the English (13).

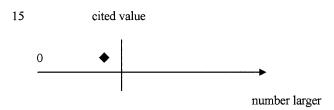
#### He spent less than \$10.

There is another piece of data which supports the view that this use of *mo* should be distinguished from the *mo* which expresses exceeding of expectational limit, which is that with the latter, *mo* cannot be deleted without altering meaning, but with (10a) the deletion of *mo* does not alter meaning.

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14 "Ikura tukat -ta?" "10-doru tukaw-ana-katta."
how much spend-Past dollar spend-Neg-past
"How much did you spend?" "(I spent) less than 10 dollars."
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This use of mo may be visualized as follows, and will be called "citation of value."

Citation of value is found only in negative sentences.<sup>7</sup>



In English, citation of value may be expressed with (13), but it is more usual to use only Lex, as in (16).

#### He didn't spend \$10.

So far we have discussed quantificational scales, which are not pragmatically determined. There is another type of scale which are not pragmatically determined, and that is the scale of qualities expressed by gradable adjectives. Adjective pairs such as "big-small", "warm-cold", and "high-low" constitute scales. Japanese *sae* and *sura* may express exceeding of expectational limit with such adjectives as seen in (17)-(18). (17a) may be said on a hot day of a room where the air conditioning is working too well. (17b) and (17c) may be uttered on a cold day. (17d) may be said of a room where there is a big fire going but the heat is not enough. These, therefore, express exceeding of expectational limit.

17a Heya-no naka-wa samuku { sae / sura } atta.

room inside-Top cold sae / sura be-Past

"It was even cold inside the room."

b Heya-no naka-wa samuku { sae / sura } nak-atta.

room inside-Top cold sae / sura Neg-Past

"It wasn't even cold inside the room."

c Heya-no naka-wa atatakaku { sae / sura } atta.

<sup>7</sup> It has been suggested that this usage is the same as the usage called, for example, "citation of estimated figure" (gaisuu hyoozi) (Takahashi 1978) seen in the protasis of a conditional sentence as in (i), and in a sentence expressing uncertainty as in (ii). Here we do not take this view. One reason is that in (i)-(ii), mo can be substituted with kurai "about", which is not possible in (11).

<sup>(</sup>i) 10-doru -mo tuka-eba zyuubun daroo.
dollar mo spend if adequate will
"If we spend, say, 10 dollars, that should suffice."

<sup>(</sup>ii) "Ikura tukat-ta?" "Soodana, 10-doru-mo tukat-ta kana."
how much spend-Past well dollar mo spend-Past maybe
"How much did you spend?" "Let me see, maybe (I spent) about 10 dollars."

room inside-Top warm sae/sura be-Past
"It was even warm inside the room."

dd Heya-no naka-wa atatakaku { sae/sura } nak-atta.
room inside-Top cold sae/sura Neg-Past
"It wasn't even warm inside the room."

However, when we substitute *mo* in the negative sentences, the interpretation is not that of exceeding of expectational limit.

- 18a Heya-no naka-wa samuku-mo nak-atta.

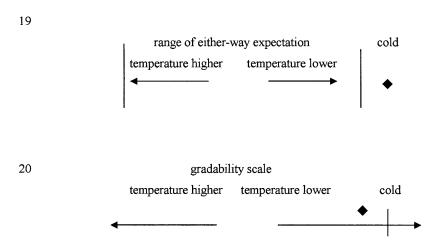
  room inside-Top cold *mo* Neg-Past

  "It was not (exactly) cold inside the room."
  - b Heya-no naka-wa atatakaku-mo nak-atta.

    room inside-Top warm *mo* Neg-Past

    "It was not (exactly) warm inside the room."

With these adjectives, there is a scale defined by Lex and the adjective which is Lex's pair. Note that Lex falls out of the range of either-way expectation. Taking (17a) as example, exceeding of expectational limit with *sae* and *sura* may be visualized as (19), while (18a) may be visualized as (20). In other words, in negative sentences with gradable adjectives, *sae* and *sura* express exceeding of expectational limit with adjective at either end, and *mo* express citation of value with either adjective.



English does not have Foc which expresses citation of value with gradable adjectives, so only Lex is used.

- 21a It wasn't cold in the room.
  - b It wasn't warm in the room.

#### 4. Expressions of exceeding of expectational limit as emphasizers of sentence negation

In this chapter we discuss those cases where Lex is the minimal value within the scale excepting 0. In quantificational scales, 0 is given as the smallest value. If the actual value on the scale is 0, it will be sentential negation, and from an informative point of view, expression of quantity is not necessary. For this reason, when the minimal value excepting 0 appears in a negative sentence, it functions to emphasize negation as in (22).

22a He didn't spend (even) a cent.

23a

b Kare-wa 1-sento-mo tukaw-anakat-ta. he Top cent mo spend-Neg-Past "He didn't spend a penny."

Kanozyo-wa sono kusuri

The same quantificational Lex may be interpreted as a non-minimal value as in (23a), or as the minimal value excepting 0, as in (23b). When Lex, iti-guramu 'one gram', is a non-minimal value, mo is used to express citation of value as in (23a), and when it is the minimal value excepting 0, mo expresses exceeding of expectational limit, and in this case (23b), emphasis of sentential negation.

iti -guramu-mo non-de i-nai. that medicine Obj one gram mo take-Asp-Neg "She hasn't taken as much as one gram of the medicine." (=She has taken less than one gram of the medicine.) b Kanozyo-wa sono kusuri -o iti-guramu-mo non-de i-nai. Top that medicine Obj one gram mo take-Asp-Neg "She hasn't taken a gram of the medicine." (=She hasn't taken the medicine at all.)

In fact these two interpretations can be distinguished in prominence and accentual pattern. Japanese is a pitch accent language with two pitch levels, High and Low, assigned to moras, and each lexical item has its own accentual pattern. For our purposes, it will suffice to say that all accentual patterns fall into two types, accented and unaccented (flat), one lexical item has at most one accented mora, and the first mora is always Low unless the accent is on the first mora. When Lex in its own is accented as in (24a) and is interpreted as a non-minimal value, it will retain its accent when mo attaches, as in (24b), but when Lex is the minimal value excepting 0, Lex + mo will be unaccented, as in (24c), and will also be pronounced with prominence. (\* indicates that the pitch changes from high to low at that point.)

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24a i ti gu ra mu
L- H - H* L-L
b i ti gu ra mu mo
L -H-H *L -L -L
c i ti gu ra mu mo
L-H-H-H-H
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There is a wealth of literature on focus and prosodic prominence (Rooth 1996), and it has been pointed out that scalar *mo* is pronounced with prosodic prominence (Nakanishi 2005), but in the case of Japanese, it has been pointed out that the Japanese NPIs corresponding to English *anybody, anything, anywhere, daremo, nanimo,* and *dokomo* respectively, can be seen as derived by attaching *mo* to *dare* 'who', *nani* 'what' and *doko* 'where', which are all accented, but the resulting NPIs undergo a change in accentual pattern to unaccented (Sakuma 1940, 1952). In both (23a), where *mo* expresses citation of value, and (25), where *mo* expresses exceeding of expectational limit, the accentual pattern of Lex + Foc is the same, (24b).

25 Kanozyo-wa sono kusuri -o iti-guramu-mo non-da. she Top that medicine Obj one gram *mo* take-Past "She took even one gram of the medicine."

We see, then, that the accentual pattern of Lex + Foc is the same for citation of value and exceeding of expectational limit (excluding cases where Lex is the minimal value excepting 0), and is unaccented in cases where Lex is the minimal value excepting 0 and Lex + Foc serves to emphasize sentential negation.

We would like to point out that there is another Foc in Japanese, *to*, found in sentences such as (26). *To* is found only in negative sentences with quantificational scales where there are numbers other than "1" in Lex. As can be seen in (27), sentences with *to* are not natural as answers to questions without special presuppositions. Therefore these are expressions of exceeding of limit, and are NPIs, as are emphasizers of sentential negation with "1". (26a-b) are acceptable, but appear in limited contexts; (28a-b) are similar but unacceptable. (26c-d) have lexicalized. However, the accentual pattern does not change, unlike with *mo* in emphasizing sentential negation.

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26a Mikka-to tuduk-anakat-ta.3 day to last -Neg -Past "It didn't last three days."
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- b Go-ho-to ayum-e-nakat-ta.
  - 5 steps to walk-Poss-Neg-Past
  - "(I) could not walk five steps."
- c Kare-wa ni-do-to ko -nakat-ta.
  - he Top 2-time to come-Neg -Past
  - "He didn't come a second time." (=He never came again.)
- d Anna hito -wa futari -to i-nai.
  - such person Top 2-person to exist-Neg
  - "Such a person, two does not exist." (=There is nobody else like her/him.)
- 27a "Dore-kurai tudui-ta?" "Mikka-mo tuduk-anakat-ta.
  - how long last-Past 3-day mo last-Neg-Past
  - "How long did it last" "It didn't last three days."
  - b "Dore-kurai tudui-ta?" "?Mikka-to tuduk-anakat-ta.
    - how long last-Past 3-day to last-Neg-Past
- 28a ?\*Yasumi-wa mikka-to nokot -te i-nai.
  - vacation Top 3-day to remain-Asp-Neg
  - "The vacation, not three days are left."
  - b ?\*Go-ho-to aruk-anakat-ta.
    - 5 steps walk-Neg -Past
    - "(I) did not walk five steps."

As can be seen in (29a-b), there is no Foc in English corresponding to this *to*, and only Lex appears. For lexicalized expressions found in (26c-d), English uses other expressions, as in (29c-d).

- 29a It didn't last three days.
  - b He couldn't walk five steps.
  - c He never came again.
  - d There is nobody like him.

Emphasizers of sentential negation in English and Japanese are as follows.

- 30(i) Foc + Lex<sup>8</sup> / Lex + Foc
  - (i-a) both Lex and Foc are used productively
  - (i-b) Lex and/or Foc is not used productively
  - (ii) Lex
    - (ii-a) Lex is used productively

<sup>&</sup>lt;sup>8</sup> Needless to say, in English Foc and Lex are not seen as forming a single NPI. Also, I have not taken into consideration the difference among NPIs found within a single language as well as across languages.

#### (ii-b) Lex is not used productively (is an NPI)

An expression of type (i-a) with Lex which is the minimal value excepting 0 is used only in negative sentences and thus are NPIs.

- 31a He didn't spend even one cent.
  - b Kare-wa iti-en-mo tukaw-anakat-ta.
    he Top 1 yen *mo* spent-Neg-Past
    "He didn't spend a penny."
- 32a She didn't come even once.
  - b Kanozyo-wa iti-do-mo ko-nakat-ta. she Top 1 time *mo* come-Neg-Past "She never came."

Type (i-b) is lexicalized. In (33) only Lex is lexicalized, in (34) only Foc is lexicalized, and in (35) both are lexicalized. In all cases Lex + Foc are NPIs. *Dani*, *tote*, *taritomo* were most likely productive focus particles, but are now only used in lexicalizations. Expressions with *to* as in (26) also belong here.

- 33a Huan-o mizin-mo mise-nakat-ta.
  anxiety bit *mo* show-Neg-Past
  "(She/he) did not show one iota of anxiety."
  - b Kore-ppotti-mo sinpai si -te-i -nai.
    this bit *mo* worry do-Asp-Neg
    "(I) am not in the least worried."
- 34a Sonna zitai-wa yosoo-dani si -te-i -nakat-ta. such state Top imagine *dani* do-Asp-Neg -Past "(We) had not even imagined such a state of affairs."
  - b Syooko -wa hitotu-tote nai.

    evidence Top one *tote* not-exist

    "As for evidence, there is not a single one."
- 35a Sono koto-ga katatoki-taritomo wasure-rare-nai. that thing-Subj halfhour *taritomo* forget -Poss-Neg "That matter, I cannot forget for a single minute."
  - b Hoka-no hito-o ikko -dani si-nakat-ta.

    other person-Obj 1-reflect dani do-Neg-Past

    "(She/he) did not give a single reflection on other people."

In the case of English, when Lex is lexicalized, Foc is not allowed, so type (i-b) does not exist.

\*He doesn't have even { a red cent / a brass farthing }.

b \*There was not even a soul to be seen.

Type (ii) includes the productive ones (ii-a) as given in (37), and the lexicalized ones (ii-b) as given in (38).

37a She didn't come once.

b He wouldn't look at it twice.

He doesn't have { a red cent / a brass farthing }.

b There was not a soul to be seen.

We have classified these items according to their form, but there have been analyses where a silent *even* is posited. Such a proposal makes sense in English, since this would account for the Lex-only type. We will argue, however, that although English does not require a formal Foc, Japanese does, and will not posit a silent *even*.

One construction in Japanese has been argued as accompanying a silent *even* in Nakanishi (2005), the "Noun + 1 +Classifer" construction as in (39).

39a Tegami ittuu yokos-anai.

letter 1-CL send-Neg

"(She/he) doesn't send even a single letter."

b Tiri hitotu nai.

dust one not-exist

"There is not one speck of dust."

However, Morishige (1954:1) states (translation, gloss by present author):

40 Ryokken-made-wa mura hitotu nai.

Röcken to Top village one not-exist

"(From here) To Röcken, there is not one single village."

The number *hitotu* 'one' does not quantify exactly its object "village", but approaches the meaning of particles such as *sae*, *dani*, *sura*, *mo*.

In this article we accept his observation, and consider that "1 + Classifer" functions as Foc. Nakanishi gives the following as data supporting her position: although (41a) cannot be followed by

mo, it can be followed by sae and demo as in (41b-c). Since sae and demo express the meanings expressed by even, we should expect that "Noun + 1 + Classifer" occur with even, and (41a) should be interpreted as containing a silent even.

Alan-wa pan iti-mai(\*-mo) tabe-nakat-ta. (Nakanishi's 25)
Alan-Top bread one-CL (\*-mo) eat-Neg-Past

"Alan did not eat even a single slice of bread."

b Alan-wa pan iti -mai-sae tabe-nakat-ta. (Nakanishi's 28)
Alan-Top bread one-CL sae eat-Neg-Past

"Alan did not eat even a single slice of bread."

c Pan iti -mai(-demo) tabe-tara okoru-yo. (Nakanishi's 30)
bread one-CL (demo) eat-if get-angry

"If you eat even one slice of bread, I will be angry."

However, the construction "Noun + 1 + Classifer" is not restricted to *even*-contexts, and may occur with subject and object markers in positive sentences, as in (42a, b), *mo* expressing exceeding of expectational limit may attach to it as in (42c), and other numbers allow similar expressions, as in (43d). It is clear that "Noun + 1 + Classifier" in (42c) behaves very much like an ordinary noun, while it seems unlikely that "Noun + 1 + Classifier" in (41a) is similarly a noun to which a silent *even* is attached, since subject/object markers as well as other particles cannot attach to it (see footnote 3).

- 42a Pan iti-mai-ga hiru-gohan-da. bread 1 CL Subj lunch is "One slice of bread is (my) lunch."
  - b Hutari -de pan iti-mai-o tabe-ta.

    two people with bread 1 CL Obj eat-Past

    "The two (of us) together ate one slice of bread."
  - c Pan iti-mai-mo kityoo-da.
    bread 1 CL mo precious is
    "Even a slice of bread is precious."
  - d Pan ni-mai-ga hiru-gohan-da. bread 2 CL Subj lunch is "Two slices of bread is (my) lunch."

It seems more reasonable to assume that "1+ Classifer" functions as Foc in (39). In similar vein, we noted that negative universal quantifiers in Japanese had the form "wh-word+mo", as in nanimo '(not) anything' and daremo '(not) anybody'. There are alternative forms where hitotu 'one'

and hitori 'one person' appears in the place of mo, nani-hitotu and dare-hitori:

Nani-hitotu owar-anakat-ta.
what one finish-Neg -Past
"Not a thing was finished."
Dare-hitori ko -nakat-ta.
who one person come-Neg-Past

"Not one person came."

Thus "1 + Classifer" following a noun directly is Foc, and in Japanese, Foc is formally requisite (although Foc may be no longer productive), contrary to English.

Other expressions which can serve as Lex in Japanese in emphasizing sentential negation are "Noun +  $no^9$  + 1 + Classifier" as in (44a), "1+Classifier + no + Noun" as in (44b), and "1 + Noun" as in (44c, d). Japanese has two sets of numerals for numbers up to ten (plus a few others), the native Japanese set and the Sino-Japanese set. In (44c) the native Japanese 'one' combines with native Japanese nouns, and in (44d) the Sino-Japanese 'one' combines with Sino-Japanese words.

Tegami-no 1-tuu-mo yokos-anai.Letter no 1 CL mo send-Neg"(She/he) doesn't send one single letter."

- b 1-tuu-no tegami-mo yokos-anai.
  1 CL no letter mo send-Neg
  "(She/he) doesn't send one single letter."
- c Zisin -ga oki -tara hito-tamari-mo nai.
  earthquake-Subj happen-if 1 stand *mo* not-exist
  "If an earthquake should happen, there is nothing doing."
- d Ano hito -ni-wa iti -mensiki -mo nai.

  that person to Top 1 acquaintance *mo* not-exist

  "(I) have never been acquainted with her/him."

All in all, the following are possible as expressions of exceeding of limit which function to emphasize sentential negation. SmallNPI refers to expressions of small quantities which are no longer used productively or are semantically distinct from identical productive forms, such as *mizin*, *katatoki*, and *korepotti*.

<sup>&</sup>lt;sup>9</sup> The particle *no* expresses various relations between two noun phrases, including possession.

Lex in (45a-i) of course occurs productively in positive sentences as well. Lex in (45a-ii) is the unmarked form for expressing number in Japanese, and some expressions of this form function as positive polarity items, as in (46). Similarly, expressions of the form of Lex in (45a-iv) may function as PPIs, as in (47).

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Iti-ru-no nozomi-o kake-ta.
1 CL hope Obj hold-Past

"(I) clung to a very slight chance."
Cf. *Iti-ru-no nozomi-mo kake-nakat-ta.
1 CL hope mo hold-Neg-Past

"*(I) did not cling to a very slight chance."
Ano hito-no iu koto-ni-wa iti-ri aru. that person say thing in Top 1 reason exist

"There is a grain of truth in what she/he says."
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On the other hand, expressions of the form of Lex in (45a-iii), where "1 + Classifier" follow the noun, are not found in positive sentences. This, and the fact that "1 + Classifier" follow the noun in (45b), suggest that postpositioning of "numeral + classifier" plays a role in the formation of expressions which emphasize sentential negation, but we are not ready to offer any further analysis here.

#### 5. The role of prosodic prominence in English and Japanese

In the last chapter, we suggested that in expressions of exceeding of expectational limit, Foc is not requisite in English but is in Japanese, and go on to argue that this is because in English, prosodic prominence can in itself function as Foc but in Japanese, prosodic prominence in itself is not enough to do so.

There are other meanings which may, in English, be conveyed solely by prosodic prominence, but have to be formally expressed in Japanese. One is constituent negation. In English, prosodic prominence on a constituent conveys that the negation is constituent negation, not

sentential negation. Thus sentential negation as in (48a) is not formally different from constituent negation as in (48b-d). (Italics indicate prosodic prominence.) But in Japanese, the negated constituent must be marked with *wa* as in (49), or receive prosodic prominence within a proposition marked with *noda* as in (50).

- 48a He didn't sell the car to his cousin (after all).
  - b He didn't sell the *car* to his cousin. (He sold her the *bike*.)
  - c He didn't sell the car to his *cousin*. (He sold it to his *aunt*.)
  - d He didn't *sell* the car to his cousin. (He *lent* it to her.)
- 49a Kare-wa (kekkyoku) itoko -ni kuruma-o ur-anakat-ta. he Top after all cousin-to car-Obj sell-Neg-Past
  - b Kare-wa itoko-ni kuruma-wa ur-anakat-ta. he Top cousin-to car -wa sell-Neg-Past
  - c Kare-wa itoko -ni-wa kuruma-o ur -anakat-ta. he Top cousin-to-wa car-Obj sell-Neg -Past
  - d Kare-wa itoko -ni kuruma-o uri-wa si-nakat-ta. he Top cousin -to car -Obj sell-*wa* do-Neg-Past
- 50b Kare-wa itoko -ni *kuruma-o* ut -ta -no de wa nai. he Top cousin-to car -Obj sell-Past *noda wa* Neg "It is not that he sold the *car* to his cousin."
  - c Kare-wa *itoko -ni* kuruma-o ut -ta -no de wa nai. he Top cousin-to car -Obj sell-Past *noda wa* Neg "It is not that he sold the car to his *cousin*."
  - d Kare-wa itoko -ni kuruma-o *ut -ta* -no de wa nai.

    he Top cousin-to car -Obj sell-Past *noda wa* Neg

    "It is not that he *sold* the car to his cousin."

Kuno (1983) argued that the Japanese negative particle -nai, which attaches to verbs, adjectives, and nominal predicates, has only these elements as its scope. But if this is true, that would mean that the rest of the sentence is outside the scope of negation, which would seem to mean that a sentence like (49a) is constituent negation, not sentential negation, clearly an undesirable conclusion. When -nai attaches to verbs, adjectives, and nominal predicates, then, we should assume that the negation is sentential. The difference between English and Japanese, then, is that in English, prosodic prominence in itself can convey that this constituent is negated, but in Japanese, formal expression is necessary, either by attaching wa to the negated constituent, or by attaching noda to the sentence and assigning prosodic prominence to the negated constituent.

Another meaning which in English may be conveyed by prosodic prominence only but

requires formal expression in Japanese is a certain type of metalinguistic negation discussed in Horn (1989), in which gradable adjectives are negated. We have seen that negation of such adjectives is citation of value, but as we see in (51), in English prosodic prominence on the adjective conveys that this is not the usual negation: it expresses that the actual situation lies in the opposite direction, as visualized in (53). In Japanese, metalinguistic negation would have to receive formal expression such as *nante mono de-wa nai* "is not such a thing as", as in (52).

- 51 It's not *warm* here. It's downright *hot*.
- 52 Koko-wa atatakai nante mono de-wa nai. here Top warm Comp thing *da wa* Neg "It's not such a state as warm here."



#### 6. Conclusion

In this article, we suggested that elements such as English even and Japanese mo / sae / sura express that the event falls outside of the speaker's range of either-way expectation, either by being very unlikely but taking place, or by being very likely but not taking place: either way they exceed the limit of the range of either-way expectation. We also pointed out that the scale underlying these expressions may be a pragmatically determined scale of likelihood, or a scale inherent in the lexical items used, and argued that citation of value should be distinguished from exceeding of expectational limit. Lastly we claimed that English and Japanese differ in that Japanese requires formal expression of the focus element in expressing exceeding of expectational limit, while English may express the same meaning by prosodic prominence.

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### 英語と日本語における予想越えの表現

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キーワード: 尺度性、英語、日本語、even、「も」

#### 要旨

ここではまず、英語の even や日本語の「も」「さえ」「すら」は、その事態が話者にとって起こっても意外ではないし、起こらなくても意外ではないという予想範囲を越えていることを表すと主張した。このため、あまりに起こりそうにないため起こると意外である事態、そしてあまりに起こりそうであるため起こらないと意外である事態の表現にこれらが用いられる。当然尺度が用いられるが、その尺度には語用論的に決定されるものと、語彙項目に内在するものとがある。後者において「も」が否定文で現れる場合には基準値提示という意味を区別すべきだとした。また、予想越えの表現において日本語では形式の面で予想越えを表す要素が必要であるのに対し、英語では音韻上の強調のみによって予想越えが表されると主張した。

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