On the availability of a scalar usage of the Japanese exclusive focus particle *dake*

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Abstract In the literature, it has sometimes been assumed that the Japanese exclusive focus particle *dake* has the same semantics as the English exclusive focus particle *only*, because they share the same two meaning components, positive and exclusive ones. However, extending Kuno's (1999) influential observations of Japanese exclusive focus particles, recent studies (e.g. Ido & Kubota 2021; Oshima 2023; Tomioka 2024a,b) reveal that these two components behave differently in *dake* and *only*, and offer novel analyses of this difference. At the same time, various empirical findings on *only* have been accumulated in the recent literature. In particular, Klinedinst (2005) and Alxatib (2020) point out that two different usages of *only*, non-scalar and scalar ones, are subject to different constraints, but there are few previous attempt to compare *dake* with *only* in light of these new findings on *only*. Against this backdrop, this paper examines whether *dake* has two usages analogous to those of *only* and these two focus particles obey the same restrictions, and claims that *dake* lacks a scalar usage and follows almost the same constraints as those of non-scalar *only*.

Keywords semantics, exclusive focus particles, scalar and non-scalar usages, *dake*, *only*

1. Introduction

Since Horn (1969), it has been widely accepted that *only* has two meaning components. The first is a positive component that conveys the prejacent (i.e. a proposition obtained from removing *only*) is true. The second is an exclusive/negative component that conveys every relevant proposition other than the prejacent is false. The following example illustrates this point:[1]

(1) a. John only invited Mary_{F}.

b. John invited Mary. (positive component)

c. Every relevant proposition other than the prejacent (e.g. *John invited Tom*) is false.
⇔John invited nobody other than Mary. (exclusive component)

The Japanese exclusive focus particle *dake* also has the same two components:

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[1] In what follows, an F-marking (e.g. Jackendoff 1972) indicates a focused constituent, which contributes to determine what propositions are negated in exclusive component. For more details, see the discussions below.

(2) a. Taro-wa Hanako$_{F}$-dake-o syootaisita.
Taro-TOP Hanako-*dake*-ACC invited
'Taro only invited [Hanako]$_{F}$.'

b. Taro invited Hanako. (positive component)

c. Taro invited nobody other than Hanako. (exclusive component)

Due to this similarity, it has been sometimes assumed that sentences with *dake* are truth conditionally equivalent to those with *only*. However, with Kuno's (1999) influential observations about Japanese exclusive focus particles as a starting point, recent studies (e.g. Ido & Kubota 2021; Oshima 2023; Tomioka 2024a,b) reveal that the two meaning components have a different status in *dake* and *only*, and they propose new analyses of this difference.

At the same time, new findings on *only* have been accumulated in the recent literature. As pointed out by Bonomi & Casalegno (1993) and Krifka (1993), among others, *only* has two different usages: the first is a logical, non-scalar usage where negated propositions in exclusive component are determined based on logical strength (i.e. entailment relationship) and the second is a non-logical, scalar usage where the negated propositions are determined based on non-logical strength. In addition, Klinedinst (2005) and Alxatib (2020) observe that the two usages obey similar but slightly different constraints. However, few previous attempts are made to contrast *dake* and *only* in view of these new discoveries about *only*.[2] Against this backdrop, this paper addresses the following two questions:

(3) a. Question 1
Does *dake* have the same two usages as those of *only*?

b. Question 2
Is *dake* subject to the same constraints as those of *only*?

The structure of this paper is as follows. Section 2 reviews observations of the two usages of *only* made by Klinedinst (2005) and Alxatib (2020). Based on these observations, Section 3 compares *dake* with *only* and claims that *dake* does not have a non-logical, scalar usage and that it obeys almost the same restrictions as those of logical, non-scalar usage of *only*.[3] Section 4 concludes this paper with a few comments on possible directions for future research.

2. Two usages of *only* and their distributions

Let us begin with introducing a textbook lexical entry of logical, non-scalar *only*. Horn (1969) points out that the positive and exclusive components of *only* behave differently in negative and interrogative sentences. As shown below, unlike the exclusive component, the truth of the positive component survives under negation and the interrogative operator:[4]

[2] Oshima (2023:fn.2) in passing states that *dake* and other Japanese exclusive focus particles do not have a scalar usage (in his term, a rank-based or importance-based interpretation), but provides no evidence for his remark.
[3] This paper focuses on NP-*dake* in an argument position, and puts aside other usages of *dake* (e.g. numeral-*dake* in an adverbial position) and other Japanese exclusive focus particles (e.g. *sika*), and leave for future work their detailed comparison with *only* with regard to the two questions above.
[4] For ease of exposition, this paper assumes that VP-*only* takes a propositional scope in some way or another.

(4) John did not only invite Mary_{F}.

a. [not [only [John invited Mary_{F}]]] (simplified LF)

b. $\rightsquigarrow$ John invited Mary. (positive component)[5]

c. $\not\rightsquigarrow$ John invited nobody other than Mary. (exclusive component)

(5) Did John only invite Mary_{F}?

a. [? [only [John invited Mary_{F}]]] (simplified LF)

b. $\rightsquigarrow$ John invited Mary. (positive component)

c. $\not\rightsquigarrow$ John invited nobody other than Mary. (exclusive component)

Based on this fact, Horn (1969) claims that the positive component is presupposed while the exclusive component is asserted. The following is a sample lexical entry that reflects Horn's (1969) idea:

(6) a. $[\![\text{only}]\!](p)(w)$ is defined only if the prejacent p is true in w. (= positive component)

b. If defined, $[\![\text{only}]\!](p)(w)$ is true iff $\forall q[q \neq p \rightarrow \neg q(w)]$ (= exclusive component)

To the above basic lexical entry, various refinements have been made based on various empirical facts. Among them, perhaps the most famous is the focus sensitivity of *only* (see e.g. Jackendoff 1972; Rooth 1985, 1992). As the following examples indicate, the exclusive component of *only* is affected by the placement of focus and negated propositions vary according to which constituent is focused:[6]

(8) a. Mary only introduced Bill_{F} to Sue. (Rooth 1992:77)

b. Mary introduced nobody other than Bill to Sue. (exclusive component of (8a))

c. Mary only introduced Bill to Sue_{F}. (Rooth 1992:77)

d. Mary introduced Bill to nobody other than Sue. (exclusive component of (8c))

To capture this fact, Rooth (1985, 1992) proposes an alternative semantics. Simplifying considerably, under this framework, propositions negated in the exclusive component are determined based on a set of alternative propositions C_{ALT}, which consists of the prejacent and propositions obtained from replacing a focused part with contextually relevant individuals.

(9) a. $[\![\text{only}]\!](p)(w)$ is defined only if the prejacent p is true in w. (positive component)

b. If defined, $[\![\text{only}]\!](p)(w)$ is true iff $\forall q[q \in C_{\text{ALT}} \wedge q \neq p \rightarrow \neg q(w)]$ (exclusive component)

[5] The squiggle arrow indicates that the truth of a proposition is retained in a given sentence.

[6] Throughout this paper, the term *focus* is used in the following way:

(7) Focus indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions. (Krifka 2008:247)

In (8a), C_{ALT} is equivalent to a set consisting of the prejacent and the propositions obtained from replacing *Bill* with contextually salient individuals. In (8c), on the other hand, C_{ALT} is a set consisting of the prejacent and the propositions obtained from substituting contextually relevant individuals with *Sue*. As a result, different alternative propositions are negated in the two examples and the above lexical entry captures the focus sensitivity of *only*.

However, a problem arises if *only* is permitted to negate 'every' alternative proposition other than the prejacent (see e.g. Rooth 1992; Krifka 1993). The following example is a case in point, where the focus constituent is a conjoined noun phrase:

(10) John only invited $[\text{Mary and Tom}]_{\text{F}}$.

Suppose that the contextually relevant individuals are Mary, Tom and Michael. In this case, the set of the alternative propositions in (11) is obtained.

(11) $C_{\text{ALT}} = \{$ John invited Mary, John invited Tom, John invited Michael, John invitited Mary and Tom, ... $\}$

The presupposed prejacent (i.e. *John invited Mary and Tom*) entails some of the alternative propositions in C_{ALT} (e.g. *John invited Mary*). Therefore, if every proposition other than the prejacent in C_{ALT} is negated, contradiction arises. To avoid this problem, negated propositions are restricted to those which are not entailed by the prejacent. Given this modification, the negated propositions do not include a problematic one (e.g. *John invitied Mary*) but a harmless one (e.g. *John invited Michael*), and a desired result is achieved. The lexical entry in (12) reflects this modification and is one of the textbook lexical entries of *only*.[7]

(12) a. $[\![\text{only}]\!](p)(w)$ is defined only if the prejacent p is true in w. (positive component)

b. If defined, $[\![\text{only}]\!](p)(w)$ is true iff $\forall q[q \in C_{\text{ALT}} \wedge p \not\subseteq q \rightarrow \neg q(w)]$ (exclusive component)

2.1. Scalar usage of *only*

As noted above, negated propositions in C_{ALT} are determined based on logical strength (i.e. entailment relationship). However, several authors (e.g. Bonomi & Casalegno 1993; Krifka 1993; Klinedinst 2005) observe that *only* has another reading where negated alternatives propositions are determined based on a non-logical scale. Consider the following example:

(13) I only have a $[\text{six}]_{\text{F}}$. (Klinedinst 2005:1)

Suppose that the speaker is playing a card game where a player will win if he or she has the highest card among the players. Crucially, the above example is judged to be true in a situation where the speaker has several cards in his or her hands. The analysis based on logical strength, however, wrongly predicts that the above example is judged to be false in this situation. According to (12), every alternative proposition other than the prejacent is negated because the prejacent (i.e. *I have a six*) does not entail any other alternative proposition. As

[7] In fact, the modification based on logical strength is not empirically adequate. For example, it leads to a wrong result when *only* is associated with a disjunctive noun phrase. However, the above lexical entry will suffice for the present purpose. See Fox (2007) and the subsequent papers for further remedies.

a result, the resulting truth conditions are satisfied only when the only card that the speaker has is a six, but this is not the case.

To overcome this problem, the above authors propose that in the exclusive component, every alternative proposition stronger than the prejacent on a contextually determined scale $<_C$ is negated:

(14) a. $[\![\text{only}]\!](p)(w)$ is defined only if the prejacent p is true in w. (positive component)

b. If defined, $[\![\text{only}]\!](p)(w)$ is true iff $\forall q[q \in C_{\text{ALT}} \wedge p <_C q \rightarrow \neg q(w)]$ (exclusive component)

For instance, suppose that in (13), a scale based on the value of cards is utilized. In this case, alternative propositions involving more valuable cards than a six (e.g. *I have a seven* and *I have an eight*) are negated, and the resulting truth conditions require that the speaker does not have any card more valuable than a six. Importantly, this does not exclude the possibility that the speaker has a less valuable card than a six. Thus, no problem arises in the above situation.

As for (10), the same result as (12) is retained if a scale based on logical strength (i.e. entailment relationship) is used. In this case, what is negated in the exclusive component is a logically stronger proposition than the prejacent (i.e. *John invited Mary, Tom and Michael*). Coupled with the prejacent presupposition, (10) is predicted to be true only when John invited Mary and Tom but not Michael, which is a desired result.

Hence, the lexical entry in (14) captures the two usages of *only*, the logical, non-scalar usage where negated alternative propositions are determined based on an entailment scale, and the non-logical, scalar usage where they are determined based on a non-logical scale. The following subsections introduce observations made by Klinedinst (2005) and Alxatib (2020) that indicate the two usages of *only* obey similar but slightly different restrictions.

2.2. Mutually incompatible alternatives

Building on Klinedinst's (2005) observation, Alxatib (2020) claims that the two usages of *only* behave differently when alternative propositions have a special relation with each other. Suppose that a set of alternative propositions consists of two propositions as in (15):

(15) $C_{\text{ALT}} = \{$ Judy has blue eyes, Judy has brown eyes $\}$

Unlike the previous cases, the alternative propositions in (15) are mutually incompatible (i.e. cannot be true at the same time), given our world knowledge that people cannot have several eye colors at the same time. Alxatib (2020) points out that non-scalar *only* is infelicitous in such a case.

(16) a. #Does Judy only have $[\text{blue}]_{\text{F}}$ eyes?

b. #Judy only has $[\text{blue}]_{\text{F}}$ eyes.

c. #Did the coin only land $[\text{tails}]_{\text{F}}$ on that first toss?

d. #The coin only landed $[\text{tails}]_{\text{F}}$ on that first toss. (Alxatib 2020:44)

Interestingly, scalar *only* behaves differently when it is related to the above kind of alternative propositions:

(17) a. Did Jamie only get a $[\text{B}]_{\text{F}}$ on the test? (Alxatib 2020:44)

b. Jamie only got a $[\text{B}]_{\text{F}}$ on the test.

The alternatives propositions of the above examples are mutually incompatible because one person can get one grade in one test. In (17), however, *only* can be interpreted as a scalar usage. For instance, we can easily come up with a scale based on test grades. This in turn means that scalar *only* is felicitous even when it is related to mutually incompatible alternatives propositions. This observation is summarized as follows:

(18) Observation 1: Mutually Incompatible Alternatives Propositions
Logical, non-scalar *only* is infelicitous when it is related to mutually incompatible alternatives propositions, while non-logical, scalar *only* is not.

To capture the different behaviors of non-scalar and scalar *only*, Klinedinst (2005) modifies the positive component of *only* as follows:

(19) a. $[\![\text{only}]\!](p)(w)$ is defined only if $\exists q[p \leq_C q \wedge q(w)]$. (positive component)

b. If defined, $[\![\text{only}]\!](p)(w)$ is true iff $\forall q[q \in C_{\text{ALT}} \wedge p <_C q \rightarrow \neg q(w)]$ (exclusive component)

According to the modified positive component, it is presupposed that either the prejacent or a higher ranked alternative proposition on a contextually determined scale is true. Crucially, whether the truth of the prejacent is presupposed depends on what scale is utilized.

In the case of non-scalar *only*, the truth of the prejacent is presupposed. Consider (16a) and (16b) and suppose that the contextually relevant eye colors are blue and brown. Given this, the positive component requires that these example are defined if the prejacent (i.e. *Judy has blue eyes*) holds or if the logically stronger alternative proposition (i.e. *Judy has blue and brown eyes*) holds. In either case, Judy is required to have blue eyes because the logically stronger alternative entails the prejacent, and this means that the prejacent of these examples is presupposed. Importantly, given our world knowledge that one person has one eye color, the presupposed prejacent entails the exclusive component: if Judy has blue eyes, it follows that Judy does not have any other eye colors.

On the other hand, in the case of scalar *only*, the truth of the prejacent is not presupposed. Consider (17a) and (17b) and suppose that the contextually determined scale is based on test grades. According to the positive component, these examples are defined only if the prejacent (i.e. *Jamie got a B on the test*) holds or if a higher ranked alternative proposition on the non-logical scale (e.g. *Jamie got an A on the test*) holds. Crucially, unlike the previous case, the truth of the prejacent is not presupposed because there is no entailment relation between the prejacent and higher ranked alternative propositions. This in turn means that the positive component does not entail the exclusive component in this case.

Klinedinst (2005) and Alxatib (2020) attribute the contrast between (16) and (17) to the vacuity of *only*. In the former but not the latter case, the positive component and our world knowledge entail the negative component and the presence of *only* is vacuous. Alxatib (2020) states this idea as follows:

(20) The van against vacuous use of *only* (*Vac)
**only p* if the positive component of *only* entails the exclusive component.
(based on Alxatib 2020:45)

2.3. Scalar presupposition

In addition, Klinedinst (2005) observes that *only* is subject to a restriction on a position of its prejacent on a contextually determined scale. The following is an example with scalar *only*:

(21) Context: The speaker is playing the same card game as (13).
#I only have a $[\text{queen}]_{\text{F}}$. (Klinedinst 2005:9)

In (21), the prejacent (i.e. *I have a queen*) is ranked high on the scale based on the value of cards in the card game. Thus, we can see that the prejacent of scalar *only* should be placed low on a non-logical scale.

Klinedinst (2005) claims that non-scalar *only* exhibits the same behavior in this point. At first sight, what kind of lowness is relevant to non-scalar *only* is obscure because the entailment scale itself does not involve a qualitative property (e.g. valuableness). However, Klinedinst (2005) points out that logical strength is correlated with quantitative/numerical strength.[8] Consider, for example, the following sentence:

(22) John only invited Mary_{F}.

In (22), the alternative propositions are obtained from replacing the focused part *Mary* with contextually salient individuals. If an alternative proposition (e.g. *John invited Mary and Tom*) entails another alternative proposition (e.g. *John invited Mary*), the number of individuals filling the focused part in the former is larger than the number of those in the latter. Thus, the higher an alternative proposition is ranked on an entailment scale, the higher the proposition is ranked on a quantitative scale. Given this, Klinedinst (2005) claims that what is relevant to non-scalar *only* in an example like (22) is quantitative lowness. As evidence for this claim, Klinedinst (2005) provides a contrast between the two examples below, where contextually relevant individuals are John, Mary, Bill, Alex, Sue and Eric.

(23) a. #The meeting was only attended by $[\text{John, Mary, and Bill}]_{\text{F}}$, a surprisingly high turnout.

b. The meeting was attended by everyone { except / but } Alex, Sue and Eric, a surprisingly high turnout. (Klinedinst 2005:12)

The two examples are truth conditionally equivalent and they are true only when nobody other than John, Mary and Bill attended the meeting. However, only the former example is incompatible with the followup comment indicating the number of the turnout is large. Klinedinst (2005) claims that this is due to the fact that the prejacent of non-scalar *only* must be ranked low on a scale correlated with logical strength (here, a quantitative scale) and that the infelicity of (23a) arises from the conflict between this requirement and the followup comment.

[8] See Guerzoni (2003:190) for the relevant discussions.

The observations so far are summarized as follows:

(24) Observation 2
The prejacent of non-scalar *only* must be ranked low on a scale correlated with a logical strength, while that of scalar *only* must be ranked low on a non-logical scale.

Klinedinst (2005:9) formulates the above observation as a presupposition of *only*, which he calls a scalar presupposition.[9]

2.4. Incompatibility with top and bottom elements

Extending Bonomi & Casalegno's (1993) observation, Alxatib (2020) claims that scalar and non-scalar *only* are incompatible with a top element on a scale. (25a) is an example with non-scalar *only* and (25b)-(25d) are those with scalar *only*:

(25) a. #Of Alex, Mel, and Charlie, Jess only spoke to [Alex, Mel and Charlie]$_F$.

b. #Wolfgang only made [field marshall]$_F$.

c. #Charlie only got an [A+]$_F$.

d. #Tal only reached [Z] in the alphabet song. (Alxatib 2020:46)

However, in the case of a bottom element, the two types of *only* exhibit different behaviors. As shown below, non-scalar *only* cannot be associated with a bottom element on an entailment scale:

(26) a. #Mel only keeps in touch with [none]$_F$ of our friends.

b. #Chris only [never]$_F$ eats fish.

c. #Dale only bet [zero]$_F$ dollars on American Pharaoh. (Alxatib 2020:46)

On the other hand, a bottom element on a non-logical scale can be a focus associate of non-scalar *only*:

(27) a. Tal only reached [A]$_F$ in the alphabet song.

b. Tal only made [second lieutenant]$_F$ (assuming that second lieutenant is the lowest rank). (Alxatib 2020:46)

These observations are summarized as follows:

(28) a. Observation 3
Scalar and non-scalar *only* cannot be associated with a top element on a scale.

b. Observation 4
Scalar *only* can be associated with a bottom element on a non-logical scale while non-scalar *only* cannot with a bottom element on an entailment scale.

According to Alxatib (2020), these observations follow from the non-vacuity constraint in (20). If a top element is a focus associate of *only*, the prejacent is presupposed because there is no higher ranked alternative proposition and the positive component requires that the

[9] Alxatib (2020) claims that the scalar presupposition of *only* can be derived from the non-vacuity condition in (20). See Alxatib (2020:Ch.3) for this point.

prejacent is true. In addition, the exclusive component is vacuously true due to the absence of higher ranked alternatives. As a result, the positive component entails the exclusive component because any proposition entails a tautologous one, and the non-vacuity constraint is violated.

In the case of a bottom element, non-scalar *only* leads to the vacuity. A prejacent with a bottom element on an entailment scale (e.g. *Mel keeps in touch with none of our friends*) is presupposed because it is entailed by no other alternative proposition (e.g. *Mel keeps in touch with some of our friends* does not entail the prejacent). The positive component in turn entails the exclusive component because the presupposed prejacent entails every other negated alternative proposition (e.g. *Mel keeps in touch with none of our friends* entails *it is not the case that Mel keeps in touch with some of our friends*). Scalar *only*, on the other hand, does not lead to the vacuity. The positive component just states that the prejacent or a higher ranked alternative is true, and the prejacent is not presupposed. Hence, the positive component does not entail the exclusive component, avoiding the vacuity.

2.5. Interim summary

The four observations made by the previous analyses are summarized as follows:[10]

	non-scalar *only*	scalar *only*
mutually incompatible alternatives propositions	#	✓
a non-low element on a scale	#	#
a top element on a scale	#	#
a bottom element on a scale	#	✓

Table 1. Distribution of two types of *only*

In what follows, based on these observations, the two questions introduced in Section 1 are addressed:

(3) a. Question 1
Does *dake* have the same two usages as those of *only*?

b. Question 2
Is *dake* subject to the same constraints as those of *only*?

3. Distribution and interpretation of *dake*

3.1. Question 1

Let us begin with Question 1. As noted in the previous section, the important feature of scalar *only* is that it does not negate logically stronger alternatives but higher ranked alternatives on a non-logical scale. Accordingly, a sentence with scalar *only* is compatible with a context where an alternative proposition other than the prejacent is true (see (13)). Given

[10] In addition to the four observations reviewed in this section, Alxatib (2020) points out that *only* exhibits a curious behavior when it is associated with the quantification determiner/negative quantity adjective *few*. However, it seems that Japanese does not have any lexicalized item equivalent to *few*. For this reason, this paper does not discuss this observation (see also the discussion at the end of Section 3.2).

this, if *dake* has a scalar usage and does not negate logically stronger alternative propositions, it is predicted that a sentence with *dake* is judged to be true in such a context. However, this prediction is not borne out:

(29) a. Context
Taro is playing the same card game as (13) and has the three cards, a four, a five, and a six, in his hands.

b. Taro-wa roku-dake-o motteiru.
Taro-TOP six-*dake*-ACC have
'Taro only has a $[\text{six}]_{\text{F}}$.'

In the above context, (29b) is judged to be false. The same judgement is obtained in the context below, where Taro has cards that count as good in the card game.

(30) a. Context
Taro is playing the same card game as (13) and has the three cards, a ten, a jack and a queen, in his hands.

b. Taro-wa {zyuu / zyuu-iti / zyuu-ni}-dake-o motteiru.
Taro-TOP {ten / eleven / twelve}-*dake*-ACC have
'Taro only has { a $[\text{ten}]_{\text{F}}$ / a $[\text{jack}]_{\text{F}}$ / a $[\text{queen}]_{\text{F}}$ }.'

These judgments demonstrate that *dake* lacks a scalar usage and negates logically stronger alternative propositions.

In addition, scalar *only*, unlike non-scalar *only*, can be used felicitously when alternative propositions are mutually incompatible. As shown below, when a non-logical scale is not easily evoked, *dake* is infelicitous when it is related to such alternative propositions:

(31) a. A: Where was Taro born?

b. B: #Taro-wa Tokyo-dake-de umareta.
Taro-TOP Tokyo-*dake*-in was.born
'Taro was only born in Tokyo_{F}.'

c. A: What eye color does John have?

d. B: #John-wa [aoi me]-dake-o siteiru.
John-TOP [blue eye]-*dake*-ACC have
'John only has $[\text{blue}]_{\text{F}}$ eyes.'

Given this, *dake*, like non-scalar *only*, is subject to the same sort of constraint as (18). Crucially, if *dake* has a scalar usage, it is predicted that it is compatible with mutually exclusive alternatives in a context where a non-logical scale is salient. However, this prediction does not hold:

(32) Context: Taro took Ling 101 and no other courses in this semester. He is a great student and everyone expected that he would get A^{+}.

a. A: How was Taro's grade in Ling 101?

b. B: #Taro-wa B-dake-o totta.
Taro-TOP B-*dake*-ACC got
'Taro only got a $[B]_F$.'

(33) Context: Hanako, a great judo player, entered one judo tournament, and everyone expected that she would win a gold medal.

a. A: How was Hanako's result in the judo tournament?

b. B: #Hanako-wa [doo medal]-dake-o totta.
Hanako-TOP [bronze medal]-*dake*-ACC won
'Hanako only won a $[\text{bronze}]_F$.'

In the above two contexts, non-logical scales are contextually salient and the prejacent propositions are located in low positions on the non-logical scales. Nonetheless, *dake* is infelicitous. The same results are obtained when the prejacent propositions are ranked high on the contextually salient non-logical scales:

(34) Context: Taro took Ling 101 and no other courses in this semester. He is not a good student and everyone expected that he would fail the course.

a. A: How was Taro's grade in Ling 101?

b. B: #Taro-wa B-dake-o totta.
Taro-TOP B-*dake*-ACC got
'Taro only got a $[B]_F$.'

(35) Context: Hanako is not a good judo player and entered one judo tournament, and everyone expected that she would not win any medal.

a. A: How was Hanako's result in the judo tournament?

b. B: #Hanako-wa [doo medal]-dake-o totta.
Hanako-TOP [bronze medal]-*dake*-ACC won
'Hanako only won a $[\text{bronze}]_F$.'

Given these judgments, it is concluded that *dake*, unlike scalar *only*, is incompatible with mutually incompatible alternatives even in a context where a non-logical scale is salient and that it lacks a scalar usage.[11]

To summarize, sentences with *dake*, unlike those with *only*, are not judged to be true in contexts where alternative propositions other than the prejacent hold, and its infelicity with

[11] The same sentences above become acceptable if they are used in other contexts:

(36) Context: Taro took Ling 101 and Ling 102 this year.

a. A: How were Taro's grades on Ling 101 and Ling 102?

b. B: Taro-wa B-dake-o totta.
Taro-TOP B-*dake*-ACC got
'Taro only got a $[B]_F$.'

mutually incompatible alternatives cannot be lifted in contexts suitable to evoke non-logical scales. Therefore, *dake*, unlike *only*, does not have a scalar usage.

3.2. Question 2

As discussed above, *dake*, like non-scalar *only*, is subject to the constraint in (18). Now, let us move on to the other three restrictions.

First, let us consider whether *dake* obeys the constraint in (24). In this connection, Tomioka (2024a) makes an interesting claim that *dake* involves a non-at-issue, mirative component (see Zeevat 2009) and the truth of the prejacent proposition should be lower than some expectation or contextually determined standard. As evidence for this claim, the following example is provided:

(38) Context
Mari, Erika, Yuka and Aya took a driver's license test. The rate of the successful examinees in the test was 75%. The result is:
#[Mari-to Erika-to Yuka]-dake-ga ukatta.
[Mari-CONJ Erika-CONJ Yuka]-dake-NOM passed
'Only [Mari, Erika and Yuka]$_{F}$ passed.' (Tomioka 2024a:240)

Given the information specified in the context, the fact that the three people passed the test is not lower than expected. Accordingly, the infelicity arises.

In Tomioka's (2024a) example, it may seem somewhat unclear whether a scale correlated with logical strength is relevant, but the following example indicates that sentences with *dake*, like those with non-scalar *only*, cannot be followed by a comment indicating that the number of individuals satisfying a predicate is large:

(39) [Taro-to Hanako-to Yoko-]dake-ga kita. Kita-hito-no kazu-wa
[Taro-CONJ Hanako-CONJ Yoko]-*dake*-NOM came. came-person-GEN number-TOP
{sukunakatta / #ookatta}.
was.small / was.large
'Only [Taro, Hanako and Yoko]$_{F}$ came. The number of people who came was { small / large }.'

Thus, *dake* obeys the same restriction as (24) and requires that the prejacent proposition should be ranked low on a quantitative scale like non-scalar *only*.

Next, let us examine whether *dake* is compatible with a tope element on an entailment

(37) Context: Hanako, a judo player, entered several judo tournaments this year.
a. A: How were Hanako's results in the judo tournaments?
b. B: Hanako-wa [doo medal]-dake-o totta.
Hanako-TOP [bronze medal]-*dake*-ACC won
'Hanako only won a [bronze]$_{F}$.'

Unlike the previous cases, the mutual exclusivity of alternative propositions does not hold here. In (37b), for example, Hanako participated in several judo tournaments and the result of one tournament does not affect those of the others. This fact indicates that the absence or presence of the mutual incompatibility of alternative propositions plays a crucial role here.

scale. Kishimoto (2009) and Tomioka (2024a) observe that *dake* cannot be used with such an element.

(40) a. #Zen'in-dake-ga kitta.
everyone-*dake*-NOM came
'Only [everyone]$_F$ came.' (based on Kishimoto 2009:476)

b. Context
The three people, Mari, Erika and Yuka, took a driver's license test. The result is:

c. #[Mari-to Erika-to Yuka]-dake-ga ukatta.
Mari-CONJ Erika-CONJ Yuka-dake-NOM passed
'Only [Mari, Erika and Yuka]$_F$ passed.' (Tomioka 2024a:237)

Hence, we can see that *dake*, just like non-scalar *only*, obeys the constraint in (28a).

Finally, let us move on to the last constraint, the incompatibility with a bottom element on an entailment scale. However, it is difficult to test this, because Japanese lacks a negative quantificational determiner. The only expressions with which I have come up so far is the numeral *zero*. As shown below, *dake* is incompatible with this expression.

(41) #Gakusei-ga zero-nin-dake kitta.
student-NOM zero-CL came
'Only no$_F$ student came.'

However, even when *dake* is removed, the resulting sentence still sounds somewhat unnatural. Moreover, it is not clear whether numeral-*dake* in an adverbial position can be equated with NP-*dake* in an argument position. For these reasons, it remains unclear whether *dake* obeys the restriction in (28b).

4. Conclusion

This paper addressed the following questions and found that *dake* does not have a scalar usage based on a non-entailment scale and that it obeys almost the same restrictions as those of non-scalar *only*.

(3) a. Question 1
Does *dake* have the same two usages as those of *only*?

b. Question 2
Is *dake* subject to the same constraints as those of *only*?

Let us conclude with some comments on possible directions for future research. As noted in Section 2, Alxatib (2020) claims that all the four observations on *only* can be subsumed under the non-vacuity constraint in (20). What plays a crucial role in his analysis is the fact that the positive component of *only* is a presupposition while the exclusive component is an assertion. This analysis, however, cannot be straightforwardly applied to *dake*, because, as noted in the introduction, the two components of *dake* have a different status from those of *only*. Hence, it remans unclear how to capture the constraints on *dake*. In addition, as noted in footnote 3, this papaer does not deal with other usages of *dake* than NP-*dake* in an

argument position and other exclusive focus particles (e.g. *sika*). Thus, the next step that should be taken is to conduct their detailed comparison with *only* with regard to the two questions in (3). To tackle these remaining issues is crucial because it will lead to a more thorough understanding of cross-linguistic differences in exclusive focus particles.

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