




Semantic variation in exclusive quantifiers

English *only*, Japanese *dake*, *dake-wa*, and *shika*, and the cleft construction

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Abstract

This article develops a comparative semantic analysis of representative focus-alternative quantifiers in English and Japanese: (i) *only* in English, (ii) *dake*, *dake-wa*, and *shika* in Japanese, and (iii) the cleft construction(s) in the two languages. A sentence with *only* typically, and one with *shika* invariably, conveys the “negative contribution (NC)” (exclusivity implication) as an at-issue content and the “positive contribution (PC)” (prejacent-proposition) as a (non-presuppositional) not-at-issue content. A sentence with *dake* typically conveys both PC and NC as at-issue contents, while a sentence with *dake-wa*, as well as the cleft construction, conveys the PC as an at-issue content and the NC as a not-at-issue content. *Dake-wa* and the cleft semantically contrast in two respects: (i) with the former, the NC is presuppositional, while with the latter it is non-presuppositional, and (ii) only the latter conveys, as a presupposition, that at least one of the relevant alternative propositions holds true. With appropriate contextual cues, *only* may receive the *dake*-like, symmetrical interpretation. *Dake* may receive, in limited configurations, the *dake-wa*-like interpretation where only the PC is at-issue. These findings contribute to the general-linguistic taxonomy of focus-alternative quantifiers.

Keywords Focus-alternative quantifiers · Exclusivity · Not-at-issue content · Presupposition · English · Japanese

1 Introduction

This article develops a comparative semantic analysis of representative exclusive focus-alternative quantifiers in English and Japanese, aiming to deepen our under-

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standing of how natural languages may contrast with each other in how to encode exclusivity.

The meaning of a sentence with an exclusive focus-alternative quantifier (focus-sensitive operator), such as *only*, has two components. With van Rooij and Schulz (2007), I will refer to them as (i) the Positive Contribution (PC) and (ii) the Negative Contribution (NC).

- (1) Only [Ken]_F left.
 a. PC \approx “Ken left.”
 b. NC \approx “Nobody other than Ken left.”

Following Velleman et al. (2012), I consider the *it*-cleft to be an exclusive focus-alternative quantifier, too.

- (2) It was [Ken]_F who left.
 a. PC \approx “Ken left.”
 b. NC \approx “Nobody other than Ken left.”

Japanese has three exclusive particles, (i) *dake*, (ii) *dake-wa*, and (iii) *shika*(+Neg), the semantic differences of which have been a matter of some debate. (3a, i), (3a, ii) and (3b) all convey that Ken left (PC) and that nobody other than Ken left (NC).¹

- (3) a. [Ken]_F {i. **dake** / ii. **dake-wa** } shuppatsu shita.
 K. *dake dake-wa* leave do.Pst
 (i) ‘Ken left, and the other people did not.’
 (ii) ‘Unlike the other people, Ken left.’
 b. [Ken]_F **shika** shuppatsu shinakatta.
 K. *shika* leave do.Neg.Pst
 ‘Only Ken left.’

These particles typically occur on complement nominals and adverbials. *Dake-wa* formally consists of two particles, *dake* and *wa*. The two components are hyphenated here merely for an expository purpose, without presupposing their forming a single complex or compound particle. *Shika* obligatorily occurs with a clause-mate negation, and induces the exclusive meaning in conjunction with the negation.

Japanese furthermore has a cleft construction (Cho et al. 2008; Hiraiwa and Ishihara 2012), which I refer to as the *no*-cleft for convenience.

- (4) Shuppatsu shita **no** wa [Ken]_F da.
 leave do.Pst Pro Th Ken Cop.Prs
 ‘It is Ken who left.’

¹The abbreviations in glosses are: Acc = accusative, Attr = attributive, Aux = auxiliary, Ben = benefactive auxiliary, Cl = classifier, Cop = copula, Dat = dative, DAux = discourse auxiliary, DP = discourse particle, Evid = evidential auxiliary, Gen = genitive, Ger = gerund, Inf = infinitive, Intj = interjection, Neg = negation, NegAux = negative auxiliary, Nom = nominative, Npfv = nonperfective auxiliary, Pl = plural, Plt = polite, PltAux = politeness auxiliary, Pot = potential, Pro = pronoun, Prov = provisional, Prs = present, Pst = past, Th = thematic *wa* (topic/ground-marker).

The *no*-cleft appears to be by and large synonymous to the *it*-cleft, and I will assume that the analysis of the latter discussed below carries over to the former. On the other hand, how the meanings of *dake*, *dake-wa*, and *shika* contrast with one another and with that of *only* is a rather intriguing issue. (5a) involves an instance of *only* that is most appropriately translated with *dake*, and (5b) involves one that is most appropriately translated with *shika*(+Neg).

- (5) a. (**Context:** Ken, Toru, and Masaki are competing in a round-robin chess tournament with 10 participants. The three of them are tied in the first place, each with seven wins and two losses. They will have their last match today, each playing against a different opponent.)
If **only** Ken wins, he will be the champion.
- b. (**Context:** A sees his friend B have an egg sandwich from a local sandwich shop. The shop usually has two or three types of sandwiches, but what is available changes each day. A asks, “What else did they have today?” B replies:)
They **only** had egg sandwiches today.
- (6) a. Moshi Ken {**dake** (ga) / #**dake-wa**} kateba, Ken ga
if K. *dake* Nom *dake-wa* win.Prov K. Nom
yuushoo da.
win.championship Cop.Prs
‘If only Ken wins, he will be the champion.’
- b. ??Moshi Ken **shika** katanakereba, Ken ga yuushoo
if K. *shika* win.Neg.Prov K. Nom win.championship
da.
Cop.Prs
- (7) a. Kyoo wa tamago-sandoitch {??**dake** / #**dake-wa**} utte ta.
today Th egg-sandwich *dake* *dake-wa* sell.Ger Npfv.Pst
- b. Kyoo wa tamago-sandoitchi **shika** utte nakatta.
today Th egg-sandwich *shika* sell.Ger Npfv.Neg.Pst
‘(They) only had egg sandwiches today.’

A key difference between (5a) and (5b) is that neither PC nor NC is contextually assumed to hold true in the former, while the PC is contextually assumed to hold true in the latter. These examples will be revisited in due course.

The current work is structured as follows. Section 2 puts forth the baseline analyses of *only* and the cleft, building on Beaver and Clark (2008); Coppock and Beaver (2011); and Velleman et al. (2012), according to which an *only*-sentence and a cleft share the same NC that amounts to saying that the prejacent-proposition is an exhaustive, or maximally informative, answer to the contextually prominent question.

Section 3 discusses how the three Japanese exclusive particles contrast with each other in terms of at-issue/not-at-issue (proffered/non-proffered) configurations. With a *shika*-sentence, the PC is not-at-issue (non-proffered, backgrounded), while with a *dake-wa*-sentence, the NC is not-at-issue. With a *dake*-sentence, both PC and NC are at-issue (proffered, foregrounded). Section 4 discusses how English *only*, when pragmatically coerced, allows the *dake*-like, “dual-foregrounded” interpretation, im-

plying that the so-called symmetrical approach to the meaning of *only* is not to be entirely dismissed.

Section 5 takes a closer look at the nature of the not-at-issue content of a sentence with an exclusive quantifier. It will be pointed out that the NC of a *dake-wa*-sentence is presuppositional, whereas the PC of an *only*-sentence (on its typical, asymmetrical reading), the PC of a *shika*-sentence, and the NC of a cleft are non-presuppositional. Section 6 discusses how the choice between *dake-wa* and the cleft, which have similar meanings, is made in different discourse configurations. Section 7 briefly discusses how the meaning of *dake-wa* might be related to the meaning of *wa* as an independent particle.

The English and Japanese data discussed in the current work are constructed by the author, except for the examples quoted (possibly with slight adaptations) from the cited sources. The acceptability judgements on the constructed Japanese examples are based on the author's native speaker intuition. Those on the constructed English examples are based on the author's intuition, and were checked by at least one native speaker consultant.

2 Only and the cleft: The baseline analyses

Building on the question-based theory of focus (Roberts 1996, 2012; Büring 2003; Velleman and Beaver 2014), Beaver and Clark (2008) and Coppock and Beaver (2011) argue that *only* has a meaning along the lines of (8), where (i) materials between curly braces $\{ \cdot \}$ represent not-at-issue, or projective (Tonhauser et al. 2013), contents; and (ii) CQ represents the current question—the contextually prominent question immediately addressed by the interlocutors in the discourse.²

- (8) $\text{only} \mapsto \lambda p[\lambda w[\{p(w)\}[\text{MAX}_{\text{info}}(p)(w)]]]$
- (9) $\text{MAX}_{\text{info}}(p) =_{\text{def}} \lambda w[\neg \exists q \in CQ[[q \subset p] \& q(w)]]$
- (10) $\llbracket \{ \phi \}[\alpha] \rrbracket$ is defined only if $\llbracket \phi \rrbracket = 1$; if defined, $\llbracket \{ \phi \}[\alpha] \rrbracket = \llbracket \alpha \rrbracket$.
- (11) Only [Mary]_F laughed. \mapsto
 $\lambda w[\{ \text{laughed}(\mathbf{m})(w) \}[\text{MAX}_{\text{info}}(\text{laughed}(\mathbf{m}))(w)]]$
 a. requires a question of the form “Who laughed?”;

²(8) is considerably simplified from the analysis put forth by the original authors, which is designed to be extendable to the so-called rank-based, or importance-based, interpretation of *only* illustrated in (i).

- (i) (Mary asks Peter, “Have you seen the headmaster?” and Peter says:)
 No, only the assistant received me.
 a. The assistant received the speaker, and no other person did. (entailment-based reading)
 b. The assistant is the most important person among the people who received the speaker. (rank-based reading)

(adapted from Bonomi and Casalegno 1993: 42)

This work focuses on the more typical, entailment-based reading of *only*, which is amenable to the analysis shown in (8). It bears noting that all other exclusive quantifiers discussed in the current work—the cleft and Japanese *dake*, *dake-wa*, and *shika*—invariably convey entailment-based, rather than rank-based, exclusivity, making *only* an oddball in this respect.

- b. conveys as a not-at-issue content that Mary laughed;
- c. conveys as an at-issue content that there is no true answer unidirectionally entailing that Mary laughed.

The treatment of the PC of an *only*-sentence as a not-at-issue content is motivated by a wide array of observations, including the ones illustrated below (Beaver and Clark 2008: 216–217).

(12) *Redundancy*

- a. Ken danced, and (indeed) only Ken did.
- b. ??Nobody other than Ken danced, {but/and (indeed)} only Ken did.

(13) *Causality*

(Context: Capsule A is a hypnotic and Capsule B is a digestive.)

- a. Ken fell asleep because he {i. also/ii. #only} took Capsule A.
- b. Ken is still awake because he {i. #also/ii. only} took Capsule B.
- cf. Ken is still awake because he did not take {i. Capsule A /ii. any medicine other than Capsule B}.

(14) *Emotive Evaluation*

I regret that I only ordered a hamburger.

↪ “I regret that I did not order anything other than a hamburger.”

↯ “I regret that I ordered a hamburger.”

The first clause of (12a) is equivalent to the PC of the second, and the first clause of (12b) is equivalent to the NC of the second. That (12b) sounds redundant while (12a) does not suggests that an *only*-sentence proffers the NC but not the PC. (13) and (14) support the same conclusion, on the reasonable premise that only the at-issue content, and not the not-at-issue content, matters for the causality expressed by *because* and for the emotive evaluation expressed by *regret*.

If the PC of an *only*-sentence is not-at-issue, it is expected to be projective. This expectation is by and large borne out. Horn (1969: 69), for example, observes that discourse segments (15a, b) are much more naturally followed by (16a, b) than by (16c).

(15) a. {It’s not true that/not} only Muriel voted for Hubert.

- b. Did only Muriel vote for Hubert? — No, ...

(16) a. Lindon did too.

- b. Somebody else did as well, but I forgot who.
- c. #She didn’t.

There are, on the other hand, reasons to believe that the PC of an *only*-sentence is *not always* projective/not-at-issue. I will come back to this matter in Sect. 4.

Regarding the cleft construction, Velleman et al. (2012) propose that it involves the semantic operator CLEFT whose meaning is symmetrical to that of *only*.

(17) CLEFT =_{def} λp[λw[{MAX_{info}(p)(w)}][p(w)]]

- (18) It was [Mary]_F who laughed. \mapsto
 $\text{CLEFT}(\lambda w[\text{laughed}(\mathbf{m})](w)) \Rightarrow$
 $\lambda w[\{\text{MAX}_{\text{info}}(\text{laughed}(\mathbf{m})(w))\}[\text{laughed}(\mathbf{m})(w)]$
 a. requires a question of the form “Who laughed?”;
 b. conveys as a not-at-issue content that there is no true answer unidirectionally entailing that Mary laughed;
 c. conveys as an at-issue content that Mary laughed.

Velleman et al. (2012) successfully account for the inference patterns illustrated below:

- (19) It was [Mary]_F who laughed.
 \rightsquigarrow “It is not the case that Mary and John laughed.”
 \rightsquigarrow “Nobody other than Mary laughed.”
 \rightsquigarrow “Mary laughed.”
- (20) It was not [Mary]_F who laughed. ([#Mary and) John]_F did.)
 \rightsquigarrow “It is not the case that Mary and John laughed.”
 $\not\rightsquigarrow$ “Nobody other than Mary laughed.”
 $\not\rightsquigarrow$ “Mary laughed.”
- (21) Maybe it was [Mary]_F who laughed. (But it is also plausible that it was [#Mary and) John]_F who laughed.)
 \rightsquigarrow “It is not the case that Mary and John laughed.”
 $\not\rightsquigarrow$ “Nobody other than Mary laughed.”
 $\not\rightsquigarrow$ “Mary laughed.”

Besides the not-at-issue exhaustivity implication (backgrounded NC), the cleft has been said to convey an existence presupposition—the projective implication that at least one focus alternative proposition holds true. I will come back to this point in Sect. 6.1.

An important empirical question concerning the meanings of an *only*-sentence and a cleft is that whether their not-at-issue components—the PC for the former and the NC for the latter—are presuppositions or not. I leave this issue aside for now and will take it up in Sect. 5.

3 *Dake, dake-wa, and shika*

This section discusses how the meanings of the three Japanese exclusive particles, *dake*, *dake-wa*, and *shika*, contrast with each other in terms of at-issueness. It will be claimed, in short, that a *dake*-sentence proffers both its PC and NC, a *shika*-sentence proffers only its NC, and a *dake-wa*-sentence proffers only its PC (like a cleft does).

Before moving on, I would like to make a quick note on how the three particles interact with case markers, a point of some relevance to the discussion to follow. When *shika* and *dake-wa* occur on nominative or accusative arguments, the occurrence of nominative case particle *ga* and the accusative case particle *o* is suppressed. With *dake*, on the other hand, these case particles are optionally retained.

Table 1 Alternative analyses of *dake*, *dake-wa*, and *shika*

	Kuno (1999a,b), etc.	Oshima (2015)	The current work
<i>dake</i>	proffers only PC	proffers only NC	proffers both PC/NC
<i>dake-wa</i>	(not discussed)	proffers only PC	proffers only PC
<i>shika</i>	proffers only NC	(not discussed)	proffers only NC

- (22) a. Ken {i. *ga* / ii. **dake(-wa)** / iii. **dake(*-wa)** *ga* } *kita*.
 K. Nom *dake(-wa)* *dake(-wa)* Nom come.Pst
 ‘(Only) Ken came.’
- b. Ken {i. **shika** / ii. ***shika** *ga* } *konakatta*.
 K. *shika shika* Nom come.Neg.Pst
 ‘Only Ken came.’

Other case particles, such as dative *ni*, are not suppressed. They may either precede or follow *dake* (*ni-dake(-wa)* or *dake-ni(-wa)*), but always precede *shika* (*ni-shika*; **shika-ni*).

3.1 The (not-)at-issueness of the PC and NC

The question of how the Japanese exclusive quantifiers *dake*, *dake-wa*, and *shika* semantically contrast with one another has attracted a good deal of attention in Japanese linguistics (e.g., Teramura 1991; Kuno 1999a,b; Numata 2000; Hara 2007, 2014; Yoshimura 2007; Ido and Kubota 2021). I will review existing comparative discussions of (i) *dake* and *shika* (Kuno 1999a,b; among others) and (ii) *dake* and *dake-wa* (Oshima 2015), and point out some unresolved issues. I will then propose a novel analysis under which a *dake*-sentence proffers both PC and NC (Table 1), and argue that it successfully accounts for a fuller range of data.

3.1.1 *Dake* and *shika*

Regarding the contrast between *dake* and *shika*, Kuno (1999a,b) argues that (i) a *dake*-sentence conveys the PC as its “primary proposition (primary assertion)” and the NC as its “secondary proposition (secondary assertion)” and (ii) a *shika*-sentence, in contrast, conveys the NC as its “primary proposition” and the PC as its “secondary proposition.” This idea is anticipated by Teramura (1991: 164–169), who uses the terms *omote no imi* ‘meaning on the surface’ and *kage no imi* ‘meaning in the shade’; positions in line with these authors’ are adopted by Numata (2000) and Yoshimura (2007) too.

Kuno (1999a,b) presents utterance pairs (23) and (24) as evidence for his analysis.

- (23) Sekai-ryokoo o suru no ni wa,
 world-trip Acc do.Prns Comp Dat Th
 ‘In order to make an around-the-world trip,’

- a. eigo to furansugo **dake** (o) hanasereba yoi.
English and French *dake* Acc speak.Pot.Prov good.Prs
'it is sufficient if you can speak only English and French.'
- b. #eigo to furansugo **shika** hanasenakereba yoi.
English and French *shika* speak.Pot.Neg.Prov good.Prs
'it is sufficient if you can speak only English and French.'
- (adapted from Kuno 1999a: 147)

- (24) Sekai-ryokoo o suru no ni wa,
world-trip Acc do.Prs Comp Dat Th
'In order to make an around-the-world trip,'
- a. ?/?/#nihongo **dake** (o) hanasete mo yoi.
Japanese *dake* Acc speak.Pot.Ger also good.Prs
'it is all right even if you can speak only Japanese.'
- b. nihongo **shika** hanasenakute mo yoi.
Japanese *shika* speak.Pot.Neg.Ger also good.Prs
'it is all right even if you can speak only Japanese.'
- (adapted from Kuno 1999a: 149)

The “S-(r)eba yoi” construction in (23) and the “S-te mo yoi” construction in (24) are instances what Kaufmann (2018) calls “conditional evaluative constructions.” Kuno (1999a) assigns the former the translation ‘It is sufficient if S,’ and the latter the translation ‘It is all right even if S.’

Kuno’s notions of primary and secondary propositions seem to correspond closely to the notions of at-issue (proffered) and not-at-issue (non-proffered) contents, which became increasingly accepted in the subsequent formal-semantic literature.

- (25) A possible rendition of Kuno’s analysis of “dake’(*p*)”
At-Issue Content: “*p* holds true.” (PC)
Not-At-Issue Content: “There is no true answer to the CQ that unidirectionally entails *p*.” (NC)
- (26) A possible rendition of Kuno’s analysis of “shika’+Neg(*p*)”
At-Issue Content: “There is no true answer to the CQ that unidirectionally entails *p*.” (NC)
Not-At-Issue Content: “*p* holds true.” (PC)

The “S-(r)eba yoi” and “S-te mo yoi” constructions can sensibly be regarded as expressing a qualification of the at-issue content, rather than of the not-at-issue content, of the conditional antecedent (= S). Accordingly, under the illustrated analysis, (23b)/(24a) can be understood to be pragmatically odd for the same reasons as (27b)/(28a) are.

- (27) a. In order to make an around-the-world trip, it is sufficient if you can speak English and French.
b. #In order to make an around-the-world trip, it is sufficient if you cannot speak any languages other than English and French.
- (28) a. #You can make an around-the-world trip even if you can speak Japanese.

- b. You can make an around-the-world trip even if you cannot speak any languages other than Japanese.

The contrast between (29a) with *dake* and (29b) with *shika* can be accounted for in a similar manner.

- (29) (Context: Taro, Yoritomo, and Kiyomori were lost in the mountains.)
- a. Taro **dake** (ga) ikinokotta. (Taro wa) fuyu no soobi o shite
 T. *dake* Nom survive.Pst T. Th winter Gen gear Acc do.Ger
 ita kara da.
 Npfv.Pst because Cop.Prs
 ‘Only Taro survived. It was because (he/Taro) had winter gear.’
 - b. #Taro **shika** ikinokoranakatta. (Taro wa) fuyu no soobi o shite
 T. *shika* survive.Neg.Pst T. Th winter Gen gear Acc do.Ger
 ita kara da.
 Npfv.Pst because Cop.Prs
 ‘No one except for Taro survived. It was because (he/Taro) had winter gear.’

(adapted from Kuno 1999a: 154)

The causality expressed in the second sentences of (29a, b) can reasonably be taken to target the at-issue content of the corresponding first sentence (cf. (13)). Under the accounts presented in (25)/(26), whereas (29a) implies Taro’s having winter gear was the cause of his survival, (29b) implies that Taro’s having winter gear was the cause of his companions’ deaths, which is pragmatically inconceivable.

There is, however, a major problem with the illustrated analysis: it wrongly predicts that the NC of a *dake*-sentence is projective. If the NC of (30) is projective, then the speaker must be committed to the truth of the hearer’s not going to buy anything other than coffee. If this were the case, it would be pointless for her to ask the subsequent question. In actuality, however, the second question can naturally be interpreted as a normal, information-seeking (rather than rhetorical) question.

- (30) (Context: A and B are at a supermarket. A puts a bag of coffee in his shopping cart. B asks:)
- Koohii dake kau no? Soretomo koocha mo kau?
 coffee *dake* buy.Prs DAux or English.tea also buy.Prs
 ‘Are you going to buy just coffee? Or are you going to buy English tea, too?’
 ↗ “It is not the case that interlocutor A is going to buy coffee and something else.”

Also, utterance (31B) does not convey that the speaker is committed to the truth of the NC, i.e., the proposition that she will not eat some bananas *and* some other food item.

- (31) A: “What will you have for breakfast tomorrow?”
 B: Mada kimete nai. Banana **dake** taberu kamo.
 yet decide.Ger Npfv.Prs banana *dake* eat.Prs possible

‘I haven’t decided yet. Maybe I’ll just eat some bananas.’

↗ “It is not the case that interlocutor B will eat some bananas and some other food item.”

One might consider that the NC of a *dake*-sentence is “secondary,” or “in the shade,” in a sense different from being not-at-issue. This, however, is a costly move, adding another dimension in the taxonomy of conventionally encoded meaning (cf. Ido and Kubota 2021). I maintain that *dake* and *shika* semantically contrast solely in terms of what is not-at-issue and what is not—but not in the way suggested by Teramura (1991) and Kuno (1999a,b).

3.1.2 *Dake* and *dake-wa*

Regarding the contrast between *dake* and *dake-wa*, I claimed in Oshima (2015) that their meanings are mirror images of each other, in a way similar to how Teramura (1991) and Kuno (1999a,b) take those of *shika* and *dake* to be.³

It was contended that, while a *dake*-sentence conveys the NC as an at-issue content and the PC as a not-at-issue one, the addition of *wa* to *dake* has the effect of reversing the two components, so that with a *dake-wa*-sentence the PC is at-issue and the NC is not-at-issue. This supposition is based on data like (32)–(34) (cf. (12)–(14)).⁴

(32) *Redundancy*

Ken igai wa shiken ni gookaku shita ga, Ken {a. ??**dake** (ga) /
K. except Th exam Dat pass Pst although K. *dake* Nom
b. **dake-wa** } ochita.
dake-wa fail.Pst
‘Everyone other than Ken passed the exam, but Ken failed.’

³Hara (2014: 525; see also Hara 2007) suggests that the meaning of *dake-wa* (but not that of *dake*) involves exhaustification of potential speech acts, so that (i-a) has the same propositional content as (i-b) but conveys that “the speaker is willing to make assertions only about John and the alternative speech acts about other individuals are canceled.”

- (i) a. John **dake-wa** kita.
J. *dake-wa* come.Pst
b. John ga kita.
J. Nom come.Pst
‘John came.’

Her analysis leads to the prediction that the utterer of (i-a), like the one of (ii), is not necessarily to be regarded as being dishonest (rather than just secretive) when she indeed knew that some people other than John came.

- (ii) Regarding the question of who came, all I {am willing to/can} tell you now is this. John came.

This is problematic, as (i-a), unlike (ii), robustly supports the inference that nobody other than John came.

⁴A *dake-wa*-sentence is often amenable to translation with *at least* on its concessive reading (exemplified in “I did not win the gold medal, but at least I won the silver medal”; Nakanishi and Rullmann 2009), as in (33)/(34B). Concessive *at least* presupposes that preferable alternatives of the prejacent-proposition do not hold, and this comes close to what I will argue to be the meaning of *dake-wa* (which however does not make reference to a preference-based scale).

- (33) *Causality*
 (I was adrift on a lifeboat for seven days, without any food. But . . .)
 Mizu {a. #**dake** ga / b. **dake-wa** / c. ga } atta node, ikinobiru
 water *dake* Nom *dake-wa* Nom exist.Pst because survive.Prs
 koto ga dekita.
 matter Nom do.Pot.Pst
 ‘I was able to survive because (at least) there was water.’
- (34) *Emotive Evaluation*
 (Context: A is B’s husband. They have a daughter called Mari and a son called Yuji.)
 A: Toosan to kaasan ga Mari {a. **dake** o / b. ??**dake-wa** }
 father and mother Nom M. *dake* Acc *dake-wa*
 kawaigaru no ni wa, komaru na. Yuji ga kawaiiso da.
 love.Prs Comp Dat Th be.troubled DP Y. Nom pitiful Cop.Prs
 ‘It is unfortunate that my dad and mom only care about Mari. I feel sorry for Yuji.’
 B: Mari {a. #**dake** o / b. **dake-wa** } kawaigatte kureru koto ni
 M. *dake* Acc *dake-wa* love.Ger Ben.Prs matter Dat
 kansha shinaku cha. Watashi no ryooshin nante,
 thank do.Neg.Inf ought.not I Gen parents as.for
 mago-tachi ni mattaku kyoomi ga nai n da kara!
 grandchild-PI Dat at.all interest Nom not.exist DAux Cop.Prs DP
 ‘We should be grateful that they (at least) care about Mari. Think about my parents, they have no interest at all in their grandchildren!’

The first clause of (32) is equivalent to the NC of the second. The relative unnaturalness of (32a) can be attributed to the same content being proffered twice, and the naturalness of (32b) suggests that this redundancy is avoided, with the NC being not-at-issue. (33a) is odd because it implies that the lack of things other than water was the cause of the speaker’s survival, while (33b) is sensible because it, like (33c), implies that the existence of water was the cause of the speaker’s survival. (34A, b) is odd because it implies that A is unhappy that his parents care about his daughter (= the at-issue content of the complement clause), and (34B, a) is odd because it implies that B thinks it is a good thing that her parents-in-law do not care about her son (= the at-issue content of the complement clause).

This analysis, however, leaves unexplained why some *only*-sentences, such as (35a) (repeated from (5b)) and (36a), cannot be naturally translated with *dake*, as discussed by Yoshimura (2007: 109–111).

- (35) (Context: A sees his friend B have an egg sandwich from a local sandwich shop. The shop usually has two or three types of sandwiches, but what is available changes each day. A asks: “What else did they have today?” and B replies:)
 a. They **only** had egg sandwiches today.
 b. ??Kyo wa tamago-sandoitch **dake** utte ta.
 today Th egg-sandwich *dake* sell.Ger Npfv.Pst

- c. Kyoo wa tamago-sandoitchi **shika** utte nakatta.
today Th egg-sandwich *shika* sell.Ger Npfv.Neg.Pst
'They only had egg sandwiches today.'
- (36) (Context: The speaker is going to paint a picture, and realizes that he does not have any paint brushes.)
- a. Oh, no, I'm in trouble. I have **only** the paints.
- b. Komatta na. #Enogu **dake** aru.
be.troubled.Pst DP paint *dake* exist.Prs
- c. Komatta na. Enogu **shika** nai.
be.troubled.Pst DP paint *shika* not.exist.Prs
'I'm in trouble. I have only the paints.'

Note that this contrast is given a straightforward account under the Teramura-Kuno analysis sketched out in (25)/(26).

3.2 Reconciliation of the two accounts

I maintain that both the Teramura-Kuno account of *dake* and *shika* and Oshima's (2015) proposal as to the contrast of *dake* and *dake-wa* are partly correct and partly wrong. The former is correct that the PC of a *shika*-sentence is backgrounded while that of a *dake*-sentence is not. The latter is correct that the NC of a *dake-wa*-sentence is backgrounded while that of a *dake*-sentence is not. They both fail, however, to capture the symmetrical (dual-foreground) nature of the meaning of a *dake*-sentence.

Data like (23)/(24) and (29) merely show that the PC of a *dake*-sentence is part of the at-issue content, and not that it is the sole at-issue content. Likewise, data like (32)–(34) merely show that the NC of a *dake*-sentence is part of the at-issue content, and not that it is the sole at-issue content. I propose that, with a *dake*-sentence, *both* PC and NC are parts of the at-issue content.

The way the three Japanese exclusive quantifiers contrast with each other in terms of (not-)at-issueness can be summarized as follows. (A more refined version of this will be given in Sect. 5.3.)

- (37) “*dake*'(*p*)”
At-Issue Content (i): “*p* holds true.” (PC)
At-Issue Content (ii): “There is no true answer to the CQ that unidirectionally entails *p*.” (NC)
- (38) “*shika*' +Neg(*p*)”
At-Issue Content: “There is no true answer to the CQ that unidirectionally entails *p*.” (NC)
Not-At-Issue Content: “*p* holds true.” (PC)
- (39) “*dake-wa*'(*p*)”
At-Issue Content: “*p* holds true.” (PC)
Not-At-Issue Content: “There is no true answer to the CQ that unidirectionally entails *p*.” (NC)

This analysis provides a straightforward account of the full range of empirical observations made so far, which I will revisit below in the following order.

- (40) a. *The projection patterns* (relevant data: (6), (30), (31))
An (embedded) *dake*-sentence does not necessarily convey that the speaker is committed to the truth of either the PC or the NC. A {*dake-wa*-sentence/*shika*-sentence} implies the speaker's commitment to the truth of the {PC/NC}.
- b. *Redundancy* (relevant data: (32), (35))
A *dake*-sentence sounds awkward when the PC is common ground, as well as when the NC is common ground.
- c. *Causality* (relevant data: (29), (33), (36))
In an explicans sentence (e.g., S_2 in " S_1 because S_2 "), {*dake-walshika*} is chosen when it is the {PC/NC} that "matters" (i.e. counts as the reason); *dake* is chosen when both PC and NC matter.
- d. *Emotive evaluation* (relevant data: (34))
In the complement clause of an attitude predicate with emotive evaluation (e.g., S in "I regret that S "), {*dake-walshika*} is chosen when it is the {PC/NC} that "matters" (i.e. serves as the target of the evaluation); *dake* is chosen when both PC and NC matter.
- e. *Conditional evaluative constructions* (relevant data: (23), (24))
In the conditional antecedent (S) of the " S -(*r*)eba yoi" construction, *dake* but not *shika* can be chosen when the PC "matters" (i.e. is claimed to guarantee the satisfactoriness of the situation). In the conditional antecedent (S) of the " S -te mo yoi" construction, *shika* but not *dake* can be chosen when the NC "matters" (i.e. is claimed to be compatible with the satisfactoriness of the situation).

3.2.1 The projection patterns

In the context of (41) (repeated from (6)) only the version with *dake* is appropriate. The conditional antecedent of (41a, ii) with *dake-wa* conveys as a projective content that Toru and Masaki will not win, and that of (41b) with *shika* conveys as a projective content that Ken will win. (41a, ii) and (41b) are pragmatically deviant since the speaker here cannot be expected to be committed to either of these propositions.

- (41) (Context: Ken, Toru, and Masaki are competing in a round-robin chess tournament with 10 participants. The three of them are tied in the first place, each with seven wins and two losses. They will have their last match today, each playing against a different opponent.)
- a. Moshi Ken {i. **dake** (ga) / ii. #**dake-wa** } kateba, Ken ga
if K. *dake* Nom *dake-wa* win.Prov K. Nom
yuushoo da.
win.championship Cop.Prs
'If only Ken wins, he will be the champion.'

- b. ??Moshi Ken **shika** katanakereba, Ken ga yuushoo
 if K. *shika* win.Neg.Prov K. Nom win.championship
 da.
 Cop.Prs

The current analysis correctly predicts that neither the PC nor NC of the embedded *dake*-sentence in (41i, a) projects through the conditional antecedent. It also conforms to the inference patterns seen in (30) and (31).

3.2.2 Redundancy due to the dual-foregroundedness of *dake*

The oddness of (42a) (= (35b)) can be attributed to the redundancy incurred by its proffering what already is common ground. In the context here, both interlocutors are aware that egg sandwiches were available, and this makes the proffered PC of the *dake*-sentence redundant.

- (42) (Context: A sees his friend B have an egg sandwich from a local sandwich shop. The shop usually has two or three types of sandwiches, but what is available changes each day. A asks: “What else did they have today?” and B replies:)
 a. ??Kyoo wa tamago-sandoitch **dake** utte ta.
 today Th egg-sandwich *dake* sell.Ger Npfv.Pst
 b. They **only** had egg sandwiches today.

In (43) (= (32a)), in contrast, it is the NC of a *dake*-sentence that is redundantly proffered, incurring oddness.

- (43) ??Ken igai wa shiken ni gookaku shita ga, Ken **dake** (ga)
 K. except Th exam Dat pass Pst although K. *dake* Nom
 ochita.
 fail.Pst

3.2.3 Misaligned causality

The oddness of (44a) can be likened to the oddness of English utterance (44b).

- (44) (I was adrift on a lifeboat for seven days, without any food. But . . .)
 a. (= (33a))
 #Mizu **dake** ga atta node, ikinobiru koto ga dekita.
 water *dake* Nom exist.Pst because survive.Prs matter Nom do.Pot.Pst
 b. #I was able to survive because there was some water and there was no food.

(44a) and (44b) both convey that if it were not the case that (i) there was some water and (ii) there was no food (e.g., if it were the case that there was both food and water), the speaker would not have survived, contradicting our common-sensical reasoning.

Likewise, the oddness of (45a) can be likened to that of (45c).

- (45) a. ??Banana **dake** tabeta kara, onaka ga suite
 banana *dake* eat.Pst because stomach Nom become.empty.Ger
 iru.
 Npfv.Prs
- b. Banana **shika** tabete inai kara, onaka ga
 banana *shika* eat.Ger Npfv.Neg.Prs because stomach Nom
 suite iru.
 become.empty.Ger Npfv.Prs
 ‘(I am hungry because I only ate some bananas.’
- c. ??I am hungry because I ate some bananas and did not eat any other
 things.

Note that, with (45a), it is the PC, rather than the NC, that interferes with the expressed causality. The oddness of (45a), as well as that of (45c), is mitigated if it is contextually assumed that the speaker ate something at least as filling as bananas—for example, if it is known that the speaker chose one of the three options: (i) to eat two bananas (for \$10), (ii) to eat one cheeseburger (for \$20), (iii) to eat both (for \$30)—because this premise validates the inference that if it were *not* the case that the speaker ate some bananas and nothing else, then he would be less hungry.

The oddness of (46a), where the second sentence is understood to explain the cause of the content of the first clause, can be likened to the oddness of English utterance (46b).

- (46) (Context: The speaker is going to paint a picture, and realizes that he does not have any paint brushes.)
- a. (≈ (36b))
 Komatta na. #Enogu **dake** aru.
 be.troubled.Pst DP paint *dake* exist.Prs
- b. Oh no, I’m in trouble. #I have the paints and I don’t have the paint brushes.

Here again, it is the PC of the *dake* that interferes with the (implicitly understood) causality.

In (47), either the version with *dake* or *dake-wa* is acceptable (cf. (29)).

- (47) (Context: Taro, Yoritomo, and Kiyomori were lost in the mountains.)
 Taro {a. **dake** (ga) / b. **dake-wa** } ikinokotta. (Taro wa) fuyu no soobi
 T. *dake* Nom *dake-wa* survive.Pst T. Th winter Gen gear
 o shite ita kara da.
 Acc do.Ger Npfv.Pst because Cop.Prs
 ‘Taro survived while the others did not. It was because (he/Taro) had winter gear.’

The acceptability of (47a) is intriguing, as it is quite weird to say that Taro’s having winter gear caused Taro’s survival *and* his companions’ deaths. I suggest that when a *dake*-clause is used, both of its two at-issue contents (PC and NC) become available as potential antecedents of anaphoric reference, and in (47a), the second sentence

anaphorically refers to the PC of the first sentences, and thereby means that the reason *why Taro survived* was that he had winter gear.

Corroborating this supposition, (48a) illustrates that the NC of a *dake*-sentence too can be anaphorically referred by an item in a subsequent sentence.⁵

(48) (Context: the same as in (47))

{ a. Taro **dake** (ga) ikinokotta. / b. Taro **shika** ikinokoranakatta. }

T. *dake* Nom survive.Pst T. *shika* survive.Neg.Pst

Yoritomo to Kiyomori wa yama ni funare datta kara

Y. and K. Th mountain Dat unexperienced Cop.Pst because

da.

Cop.Prs

‘Taro survived while the others did not. It (= that Yoritomo and Kiyomori did not survive) was because Yoritomo and Kiyomori were inexperienced in mountaineering.’

3.2.4 Emotive evaluation targeting the wrong semantic component

In the context of (34A), it is natural to use *shika* instead of *dake*.

(49) (Context: The speaker has a daughter called Mari and a son called Yuji.)

a. (≈ (34A, a))

Toosan to kaasan ga Mari **dake** o kawaigaru no ni wa,
father and mother Nom M. *dake* Acc love.Prs Comp Dat Th
komaru na. Yuji ga kawaiiso da.

be.troubled DP Y. Nom pitiful Cop.Prs

‘It is unfortunate that my dad and mom only care about Mari. I feel sorry for Yuji.’

b. Toosan to kaasan ga Mari **shika** kawaigaranai no ni wa,
father and mother Nom M. *shika* love.Neg.Prs Comp Dat Th
komaru na. Yuji ga kawaiiso da.

be.troubled DP Y. Nom pitiful Cop.Prs

‘It is unfortunate that my dad and mom only care about Mari. I feel sorry for Yuji.’

⁵It seems also possible for the conjunction of the PC and the NC of a *dake*-sentence to serve as the target of anaphoric reference. In (i), the implicit subject of the second sentence presumably makes anaphoric reference to the conjunction of the PC and NC of the first sentence.

(i) (Context: the same as in (47))

Taro **dake** (ga) ikinokotta. Taro wa tozan no keiken ga hoofu de,
T. *dake* Nom survive.Pst T. Th mountaineering Gen experience Nom rich Cop.Inf

Yoritomo to Kiyomori wa yama ni funare datta kara da.

Y. and K. Th mountain Dat unexperienced Cop.Pst because Cop.Prs

‘Taro survived while the others did not. It was because Taro had a lot of experience in mountaineering, and Yoritomo and Kiyomori were inexperienced in mountaineering.’

Under the current analysis, (49b) with *shika* expresses the speaker's negative evaluation on the fact that his parents do not care about his son, while (49a) with *dake* expresses his negative evaluation on the fact that his parents care about his daughter and do not care about his son. That your parents love some of your children and not the others could be as aggravating as, or more aggravating than, that they love none, and the two situations could be aggravating in distinct ways, too (e.g., the former more likely incurs jealousy or a feeling of unfairness). As such, the speaker's parents caring about his daughter has a potential to weigh on his negative evaluation of the situation, making the choice of *dake* sensible.

In a similar vein, either (50a) with *dake* or (50b) with *shika* can be natural, depending on the background contexts.

- (50) (Context: Mari, Emi and Yuki took an exam.)
- a. Mari **dake** gookaku shita koto ga ureshikatta.
M. *dake* pass.exam do.Pst matter Nom happy.Pst
'(I) was happy that only Mari passed the exam.'
 - b. Mari **shika** gookaku shinakatta koto ga ureshikatta.
M. *shika* pass.exam do.Neg.Pst matter Nom happy.Pst
'(I) was happy that only Mari passed the exam.'

In the situation described in (51a), where both NC and PC contribute to the positive evaluation (it is a good thing that Mari passed, and it is also a good thing that Emi and Yuki failed), either (50a) or (50b) is natural. In Situation (51a), where only the NC contributes to the positive evaluation (it is a good thing that Emi and Yuki failed, but it is neither a good thing nor a bad thing that Mari passed), (50b) is more natural than (50a).

- (51) a. The speaker likes Mari, and wanted her to prove that she was better than Emi and Yuki.
((50a): ✓, (50b): ✓)
- b. The speaker dislikes Emi and Yuki, and hoped that they would fail the exam. He is indifferent about Mari.
((50a): ??, (50b): ✓)

In (52), in contrast, only the version with *shika* is natural, because it is implausible that the speaker's having an option to eat bananas (= the PC) contributes to the expressed negative evaluation.

- (52) a. #Banana **dake** (o) taberareru no wa iya da.
banana *dake* Acc eat.Pot.Prs Comp Th annoying Cop.Prs
- b. Banana **shika** taberarenai no wa iya da.
water *shika* drink.Pot.Neg.Prs Comp Th annoying Cop.Prs
'It is annoying {if/that} (I) can eat only bananas.'

3.2.5 The "S-(r)eba yoi" and "S-te mo yoi" constructions

The current analysis can also account for the availability of *dake* in (23a), repeated as (53).

- (53) Sekai-ryokoo o suru no ni wa, eigo to furansugo **dake** (o)
 world-trip Acc do.Prs Comp Dat Th English and French *dake* Acc
 hanasereba yoi.
 speak.Pot.Prov good.Prs

(54) is a paraphrase of (53a) reflecting the dual-foregroundedness of a *dake*-clause. This is a reasonable statement, although the conjunct *and no other language* makes it sound somewhat awkward. Hence, (53a) need not be taken to favor the account of *dake* à la Kuno (1999a,b), where only the PC is foregrounded, over the proposed account.

- (54) In order to make an around-the-world trip, it is sufficient if you speak English, French, and no other language.

The degraded acceptability of (24a), repeated as (55), is somewhat intriguing, as its paraphrase given in (56) seems more or less as reasonable (and awkward) as (54).

- (55) ??/#Sekai-ryokoo o suru no ni wa, nihongo **dake** (o)
 world-trip Acc do.Prs Comp Dat Th Japanese *dake* Acc
 hanasete mo yoi.
 speak.Pot.Ger also good.Prs
- (56) In order to make an around-the-world trip, it is all right even if you can speak Japanese and no other language.

Note, however, that the oddness of (55) is relatively mild, as reflected by Kuno's (1999a, 1999b) marking it with “?/?/#” rather than “#” (cf. (23b)). Furthermore, pace Kuno (1999a), ‘It is all right even if S’ appears not to be an apt translation of the “S-te mo yoi” construction. To corroborate this point, utterance (57) with the “S-te mo yoi” construction, by a doctor to a patient, does not imply that drinking water is undesirable and is not amenable to translation with ‘It is all right even if S.’

- (57) (Don't eat anything for three hours before the examination. Refrain from having a drink that contains sugar or caffeine, too . . .)
 Mizu wa nonde mo yoi desu.
 water Th drink.Ger also good.Prs PltAux.Prs
 ‘It is okay (for you) to drink water.’
 (NOT: ‘It is all right even if you drink water.’)

With the alternative, and presumably more faithful, translation ‘It does not matter whether or not S’ for “S-te mo yoi,” (55) and its *shika*-variant (58) (repeated from (24b)) respectively amount to saying (59a), which sounds quite odd, and (59b), which sounds, prolixity aside, reasonable.

- (58) Sekai-ryokoo o suru no ni wa, nihongo **shika** hanasenakute
 world-trip Acc do.Prs Comp Dat Th Japanese *dake* speak.Pot.Neg.Ger
 mo yoi.
 also good.Prs

- (59) a. ??For the purpose of making an around-the-world trip, it does not matter whether or not you can speak Japanese and no other language.
 b. For the purpose of making an around-the-world trip, it does not matter whether or not you cannot speak any {language other than Japanese/foreign language}.

The oddity of (55) can plausibly be likened to that of (59a).

3.3 The PC-foregrounded interpretation of *dake*

Dake (without *wa*) occurring on a quantificational adverbial (sometimes called “floating quantifier”) may induce the PC-foregrounded, or *dake-wa*-like, interpretation, instead of the expected dual-foregrounded (symmetrical) interpretation. In other words, an analysis along the lines of Kuno (1999a,b) is appropriate for some instances of *dake*.

While the instance of *dake* in (60Ba) receives the expected dual-foregrounded interpretation, the one in (61a) receives the PC-foregrounded interpretation (*ni-joo* and *mitsu* are both quantificational adverbs).

- (60) (Context: The speaker has been feeling pain in his back and took two pain relief tablets. It is known that the medication has only a mild effect when one takes less than three tablets, while it tends to cause drowsiness when one takes three or more.)

Kono kusuri o ni-joo {a. **dake** / b. \emptyset } nonda kara, itami wa
 this medication Acc two-Cl *dake* take.Pst because pain Th
 daibu osamatta shi, nemuku naru shinpai mo nai.
 significantly subside and sleepy.Inf become.Prs worry also not.exist.Prs
 ‘I took two (and no more than two) tablets of this medication, so I feel much less pain and there is no worry that I get sleepy.’

- (61) (Context: The speaker went to a sandwich shop to buy three sandwiches for him and two friends. The speaker comes back, and one of the friends asks him: “Did they have any sandwiches left?” He replies:)

Mitsu {a. **dake** / b. \emptyset } nokotte ta kara, minna
 three.pieces *dake* remain.Ger Npfv.Pst because all
 sandoitchi ga taberareru yo.
 sandwich Nom eat.Pot.Prs DP
 ‘We all can eat a sandwich because there were three (#and no more than three) left.’

In (60a), both PC and NC of the explicans clause are relevant to the expressed causality. In (61), on the other hand, it is only the PC of the explicans clause that is relevant to the expressed causality; if there were four or more sandwiches left at the shop, the content of the explicandum clause would still hold true.

One may say that *wa* within *dake-wa* may be “left out” when the host constituent is a quantificational adverbial. When *dake* occurs on an argument nominal, the PC-foregrounded interpretation is hardly available. This can be seen with examples (32)–(34) above, as well as (62) where a quantificational adverbial (*ittoo*) and a

subject (*chairo no koushi*) exhibit a contrasting pattern (recall that *dake-wa* obligatorily suppresses the nominative marker *ga*).

- (62) (Context: It is common ground (i) that the speaker had five calves, one brown, one black-and-white, and three black, and (ii) that they were heavily sick last week.)
- a. Zannen na koto ni, ittoo {i. **dake-wa** / ii. **dake** / iii.
regrettable Cop.Attr matter Cop.Inf one.Cl *dake-wa dake*
∅ } shinde shimatta.
die.Ger end.up.Past
'Unfortunately, (#only) one of them died.'
- b. Zannen na koto ni, chairo no koushi {i.
regrettable Cop.Attr matter Cop.Inf brown Cop.Attr calf
dake-wa / ii. #**dake** ga / iii. ga } shinde shimatta.
dake-wa dake Nom Nom die.Ger end.up.Past
'Unfortunately, (#only) the brown calf died.'

(62b, ii) is odd, suggesting that some other calf's dying (in addition to or instead of the brown calf's dying) was desirable.

It appears, however, that the PC-foregrounded interpretation of a *dake* occurring on an argument nominal becomes comparatively more tolerable when it does not co-occur with a case particle such as nominative *ga* and accusative *o*.

- (63) (Context: the same as in (62))
??Zannen na koto ni, chairo no koushi **dake** shinde
regrettable Cop.Attr matter Cop.Inf brown Cop.Attr calf *dake* die.Ger
shimatta.
end.up.Past
'Unfortunately, (#only) the brown calf died.'
- (64) (≈ (33a); I was adrift on a lifeboat for seven days, without any food. But...)
??Mizu **dake** atta node, ikinobiru koto ga dekita.
water *dake* exist.Pst because survive.Prs matter Nom do.Pot.Pst
'I was able to survive because there was (#only) water.'

What factors (argumenthood, co-occurrence and relative order with a case particle, and others) weigh to what extent on the (un)availability of the PC-foregrounded interpretation of *dake*, and why these factors have such effects, are issues that call for further inquiries.

4 Only revisited

As noted in Sect. 2, it has been commonplace to suppose that an *only*-sentence conveys its PC as a not-at-issue/projective content. There are reasons, on the other hand, to believe that this is *not always* the case. To illustrate, the utterer of (65) is not taken to be committed to the truth of Seki's having taught extremely smart people, and the

utterer of (66), repeated from (5a), is not taken to be committed to the truth of Ken's winning his last match.

- (65) I asked Dr. Seki to teach me some math, which turned out to be a bad idea. We spent two hours and I did not understand a thing. I doubt he has any experiences in teaching. Or maybe he has **only** taught extremely smart people.
- (66) (Context: Ken, Toru, and Masaki are competing in a round-robin chess tournament with 10 participants. The three of them are tied in the first place, each with seven wins and two losses. They will have their last match today, each playing against a different opponent.)
If **only** Ken wins today, he will be the champion. However, the past results suggest that he has only about a 40% chance of winning against his opponent.

Such observations appear to lend support to the so-called symmetrical (conjunctive) analysis of *only*, variants of which are adopted or advocated by such authors as Taglicht (1984); Atlas (1991, 1993); and Krifka (1992a).

One way to make sense of the apparently conflicting sets of data—and to reconcile the asymmetrical and symmetrical approaches to the semantics of *only*—is to suppose that *only* is lexically ambiguous and a sentence with logical form “only’(*p*)” allows two readings. One is the PC-backgrounded reading, which can also be characterized as the “*shika*-like” reading. The other is the symmetrical reading, which can also be characterized as the “*dake*-like” reading.

- (67) “only’(*p*)” on its PC-backgrounded reading
At-Issue Content: “There is no true answer to the CQ that unidirectionally entails *p*.” (NC)
Not-At-Issue Content: “*p* holds true.” (PC)
- (68) “only’(*p*)” on its symmetrical reading
At-Issue Content (i): “*p* holds true.” (PC)
At-Issue Content (ii): “There is no true answer to the CQ that unidirectionally entails *p*.” (NC)

The two readings are, however, not on a par with each other. The symmetrical reading is marked, and is available only when the context makes it implausible that the speaker is committed to the truth of the PC, as in (65)/(66).

In what follows, *only*_A refers to *only* on its typical asymmetrical (PC-backgrounded) interpretation, and *only*_S refers to *only* on its atypical symmetrical interpretation.

5 Presuppositional vs. non-presuppositional not-at-issue contents

I have so far examined how the exclusive quantifiers under discussion contrast with each other in terms of at-issue/not-at-issue configurations. One issue I have been putting aside is the (non-)presuppositionality of the not-at-issue component (if any) of a sentence with an exclusive quantifier.

To clarify, in the current work the notion of “not-at-issue (or non-proffered) content” is understood in a relatively broad way, as an equivalent of “projective content” (Tonhauser et al. 2013) and as a category subsuming “presupposition” as well as “expressive content” (contributed by interjections, slurs, etc.)

- (69) Conventionally coded meaning
- i. **At-issue content** (= proffered content)
 - ii. **Not-at-issue content** (= non-proffered content = Tonhauser et al.’s 2013 “projective content” = “conventional implicature” in Oshima’s 2016 sense)
 - a. **Non-presuppositional not-at-issue content** (\approx “conventional implicature” in Potts’s 2005 sense)
 - b. **Presuppositional not-at-issue content** (= presupposition \approx “conventional implicature” in Karttunen and Peters’s 1979 sense)

Presuppositional not-at-issue contents, or simply presuppositions, will be understood as (i) those propositional meanings that are required to have been part of the interlocutors’ common ground prior to the utterance, plus (ii) those semantic components of non-clausal constituents (involving a so-called presupposition trigger) which potentially contribute to such propositional meanings. They correspond to “projective contents that are subject to the Strong Contextual Felicity constraint” in the taxonomy in Tonhauser et al. (2013).⁶

The presuppositionality of a not-at-issue content can be represented by making reference to the context set (CS), the intersection of all propositions acknowledged by the interlocutors as holding true. (70) and (71) exemplify how a non-presuppositional not-at-issue content (e.g. the content of a non-restrictive relative clause) and a presuppositional content (e.g. the existence implication induced by additive *too*) may be represented.

- (70) Amy, who is a linguist, laughed. \mapsto
 $\lambda w[\{\mathbf{linguist}(\mathbf{a})(w)\}[\mathbf{laughed}(\mathbf{a})(w)]]]$
- a. conveys as a non-presuppositional not-at-issue content that Amy is a linguist;
 - b. conveys as an at-issue content that Amy laughed.
- (71) [Amy]_F laughed, too. \mapsto
 $\lambda w[\{CS \subseteq \lambda w'[\exists p \in CQ[p \approx \lambda w''[\mathbf{laughed}(\mathbf{a})(w'')] \& p(w')]]\}$
 $[\mathbf{laughed}(\mathbf{a})(w)]]]$
- a. requires a question of the form “Who laughed?”;

⁶Tonhauser et al. (2013) put forth a four-way classification of projective (not-at-issue) contents, where projective contents contrast in two dimensions: (i) whether or not they are subject to the Strong Contextual Felicity constraint (whether they are presuppositional or non-presuppositional), and (ii) whether or not they exhibit the Obligatory Local Effect or not—i.e., whether they make reference to the local, rather than global, context when embedded under an attitude predicate (see also Oshima 2016). Tonhauser et al. (2013) take the projective implication induced by *only*_(A) (the PC of an *only*_(A)-sentence) to be associated with the Obligatory Local Effect; I agree, and also assume that the same goes with the PC of a *shika*-sentence, the NC of a *dake-wa* sentence, and the NC of a cleft.

- b. conveys as a presuppositional not-at-issue content that some answer that is logically independent from the proposition that Amy laughed holds true;
 - c. conveys as an at-issue content that Amy laughed.
- (72) $p \approx q =_{def} \neg[p \subseteq q] \ \& \ \neg[q \subseteq p]$

5.1 The non-presuppositionality of the PC of an *only*-sentence and the NC of a cleft

In Beaver and Clark (2008), Coppock and Beaver (2011), and Velleman et al. (2012), the PC of an *only*_(A)-sentence and the NC of a cleft are referred to as “presuppositions.” This, however, does not conform to the terminology illustrated above.

In conversation (73), the use of *only* by interlocutor B is felicitous despite it not being common ground that Amy and Bruce showed up, suggesting that the PC of an *only*-sentence is non-presuppositional, making a contrast with the existence implication induced by additive *too* (see also Tonhauser et al. 2013: 103).

- (73) A: I have no clue who came and who didn’t—Who showed up?
 B: (Sadly,) **only** [Amy and Bruce]_F did.
 B’: #[Amy and Bruce]_F did **too**.

It can be shown that the not-at-issue content (NC) of a cleft is not presuppositional, either. In (74B₂), the use of the *it*-cleft is felicitous despite it being contextually plausible that three people were hired by Professor Xia. Uttering (74B₂), interlocutor B conveys that it is not the case that Amy, Bruce, and someone else (say Chris) were hired *without* taking this piece of information to be part of the common ground.

- (74) (Context: It is common ground that Professor Xia was going to hire two or three assistants for her research project, and that Amy, Bruce, Chris, Dan, Edna, Fred, and Greg applied for the positions.)
 A₁: I heard that Edna, Fred, and Greg were hired by Professor Xia.
 B₁: Who told you that? She didn’t choose any of them.
 A₂: Oh yeah?
 B₂: It was Amy and Bruce who were hired.
 ~→ “It is not the case that Amy, Bruce, and someone else were hired.”

The same point is illustrated with Japanese example (75), where the use of the *no*-cleft by interlocutor B is felicitous despite it being contextually plausible that Yamada came to talk to her on five or six days including the 5th, 9th, 15th, and 23rd.

- (75) A: “You said Yamada came to talk to you several times last month. Can you be more specific?”
 B: Wakarimashita. Eeto, ano hito ga kita no wa itsuka to undstand.Plt.Pst Intj that person Nom come.Pst Pro Th 5th.day and kokonoka to juugonichi to nijuusannichi desu.
 9th.day and 15th.day and 23rd.day Cop.Plt.Prs

‘Okay. Let me see, it was on the 5th, 9th, 15th, and 23rd that he came.’
 ~→ ‘It is not the case that Yamada came on the 5th, 9th, 15th, 23rd, and
 some other day.’

5.2 The non-presuppositionality of the PC of a *shika*(/*dake*)-sentence and the presuppositionality of the NC of a *dake-wa*-sentence

A *shika*-sentence, like an *only*_(A)-sentence, conveys its NC as a non-presuppositional, rather than presuppositional, not-at-issue content. To illustrate, (76B_a) as well as (76B_b) is a natural response to (76A), not implying that A has known or expected beforehand that B ate some bananas. Note that the naturalness of (76B_b) is not surprising given that its NC is at-issue (and thus necessarily non-presuppositional).

- (76) A: Asa wa nani o tabemashita ka?
 morning Th what Acc eat.Plt.Pst DP
 ‘What did (you) eat in the morning?’
 B_a: Banana **shika** tabete imasen.
 banana *shika* eat.Ger Npfv.Plt.Neg.Prs
 ‘(I) ate only some bananas.’
 B_b: Banana **dake** tabemashita.
 banana *dake* eat.Plt.Pst
 ‘(I) just ate some bananas.’

Likewise, (77B_a) as well as (77B_b) is a natural response to (77A), not implying that A has known or expected beforehand that Ken bought candies.

- (77) A: Suupaa de Ken wa nani o katta no?
 supermarket at K. Th what Acc buy.Pst DAux
 ‘What did Ken buy at the supermarket?’
 B_a: Ken wa okashi **shika** kawanakatta.
 K. Th candy *shika* buy.Neg.Pst
 ‘Ken only bought some candies.’
 B_b: Ken wa okashi **dake** katta.
 K. Th candy *dake* buy.Pst
 ‘Ken just bought some candies.’

The not-at-issue content (NC) of a *dake-wa* sentence, on the other hand, is presuppositional. This is evidenced by the observation that (78)/(79) do not make natural responses to (76A)/(77A).

- (78) (In reply to (76A))
 ??Banana **dake-wa** tabemashita.
 banana *dake-wa* eat.Plt.Pst
 (79) (In reply to (77A))
 #Ken wa okashi **dake-wa** katta.
 K. Th candy *dake-wa* buy.Pst

The use of *dake-wa* becomes natural when the interlocutors’ shared knowledge makes it plausible, if not guarantees, that the NC holds true.

- (80) A: Isogashikute, nani-mo taberarenakatta n ja nai?
 busy.Inf.Ger what-even eat.Pot.Neg.Pst DAXu Cop.Inf NegAux.Prs
 ‘Weren’t you too busy to eat anything?’
 B: Banana **dake-wa** tabemashita.
 banana *dake-wa* eat.Plt.Pst
 ‘I ate some bananas.’
- (81) A: Ken wa nani-mo kawanakatta mitai da ne.
 K. Th what-even buy.Neg.Pst Evid Cop.Prs DP
 ‘It appears that Ken did not buy anything.’
 B: Iya, okashi **dake-wa** katta.
 no candy *dake-wa* buy.Pst
 ‘No, (he) bought some candies.’

As such, the semantic symmetry between *dake-wa* and *shika* is not complete.

5.3 Putting the pieces together

The semantic analyses of *only* (on its asymmetrical and symmetrical readings) and the three Japanese exclusive particles, which reflect the presuppositional status of the NC induced by *dake-wa*, are shown below. Recall that *only_S* and *only_A* are semantically equivalent to *shika*+Neg and *dake*, respectively.

- (82) a. $only_S \mapsto \lambda p[\lambda w[\{p(w)\}[\text{MAX}_{\text{info}}(p)(w)]]]$
 b. $only_A \mapsto \lambda p[\lambda w[p(w) \ \& \ \text{MAX}_{\text{info}}(p)(w)]]]$
- (83) $dake \mapsto \lambda p[\lambda w[p(w) \ \& \ \text{MAX}_{\text{info}}(p)(w)]]]$
- (84) $shika+\text{Neg} \mapsto \lambda p[\lambda w[\{p(w)\}[\text{MAX}_{\text{info}}(p)(w)]]]$
- (85) $dake-wa \mapsto \lambda p[\lambda w[\{CS \subseteq \lambda w'[\text{MAX}_{\text{info}}(p)(w')]\}[p(w)]]]$

The formulation of the semantics of the cleft, slightly revised from the one given earlier in (17), follows shortly.

6 Comparison of *dake-wa* and the cleft

The proposed meaning of a *dake-wa* sentence is quite similar to the meaning of the cleft construction posited by Velleman et al. (2012). They both convey their PC as an at-issue content and their NC as a not-at-issue content. Yet, they differ considerably in terms of discourse-configurational distributions. This section discusses how the relatively small semantic difference between *dake-wa* sentences and clefts cause some of the difference in their distributions. It will be argued, contra Velleman et al., that the cleft construction conventionally encodes an existence presupposition.

6.1 Contexts that favor *dake-wa* but disfavor the cleft

(86a) with *dake-wa* is felicitous, while (86b, c) with the *nolit*-cleft is not.

- (86) (In reply to: “Did everyone pass the exam?”)
- a. Ken *igai wa* gookaku shita ga, Ken **dake-wa** ochita.
K. except Th pass Pst although K. *dake-wa* fail.Pst
‘Everyone other than Ken passed, but Ken failed.’
 - b. #Ken *igai wa* gookaku shita ga, ochita **no** wa Ken da.
K. except Th pass do.Pst although fail.Pst Pro Th K. Cop.Prs
‘Everyone except for Ken passed, but it was Ken who failed.’
 - c. #Everyone other than Ken passed, but it was Ken who failed.

Note that at the point *dake-wa*/the cleft is used, the information that nobody other than Ken failed the exam is part of the common ground, so that the NC is known to hold true.⁷ The infelicity of (86b, c) is to be attributed to the failure of the existence presupposition triggered by the cleft.

It has long been observed that, besides exclusivity, the cleft conveys an existence presupposition—the projective implication that at least one focus alternative proposition holds true (e.g. Horn 1981; Rooth 1999; Abusch 2010; Büring and Križ 2013).⁸

- (87) Maybe it was [Amy]_F who laughed.
↪ “Somebody laughed.”

Velleman et al. (2012) suggest that the putative existence presupposition of a cleft is posited as part of the coded meaning. They argue that the oddity of (88) arises from a pragmatic inference, based on the reasoning quoted below.

- (88) #It was not [Alice]_F who laughed; nobody laughed.

We will need two assumptions here. First: given the question “who laughed?” we treat “nobody laughed” as a rejection of the question rather than an answer to it [...]. Second: we assume a principle to the effect that unanswerable questions should be rejected as soon as possible—that it is misleading or uncooperative, if you know a question to be unanswerable, to go on discussing it as if nothing were wrong. On those assumptions, [(88)] involves just such a misleading or uncooperative move; for the first sentence indicates that we have a CQ along the lines of “who laughed?” while the second sentence indicates

⁷A case could be made that the *no*-cleft in (86b) is deemed inappropriate because the alternative strategy to use *dake-wa*, which marks the presuppositionality of the NC, is preferable. This account, however, cannot be extended to the inappropriateness of the *it*-cleft in (86b), which does not have a competing strategy corresponding to *dake-wa*.

⁸It has been noted that sometimes a cleft can be felicitously used despite its existence implication not being part of the common ground. For example, in oft-cited (i), it is evident that the author does not take it to be part of the reader’s knowledge that the incident described in the *that*-clause happened (at some time).

- (i) It was ten years ago this month that young Irwin Vamplew was bopped on the head by a nightstick while smashing windows in Berkeley in order to end the war in Vietnam.
(part of a newspaper article cited by Prince 1986: 212)

It appears, on the other hand, that such instances of the cleft are confined in certain types of narratives, and are not permissible in, for example, daily conversations. I thus adopt the view that the existence commitment of a cleft is as a rule presuppositional, but this rule may be violated sometimes to incur a special stylistic effect.

that such a CQ should have been rejected all along.

(Velleman et al. 2012: 455–456)

This account, however, cannot be applied to a case like (89), where the speaker is not committed to the CQ’s having no true (positive) answer, and thus is not in a position to reject it.

- (89) #I don’t know if anyone laughed. Maybe it was [Alice]_F who laughed, but it is also plausible that nobody laughed.

To make an account along these lines work, we need the stronger assumption that it is uncooperative to make reference to a CQ (e.g. with a cleft) if one is not certain that it has at least one true answer.

The depicted pragmatic-inference-based account, however, leaves unexplained why a projective existence implication does not arise from the use of *dake-wa*, as illustrated in (90), or *dake/only_S* (see e.g. (65)).

- (90) Ken wa banana **dake-wa** tabeta kamoshirenai.
 K. Th banana *dake-wa* eat.Pst possible.Prs
 ‘It is possible that Ken ate some bananas.’
 ↗ “Ken ate something.”

Dake(-wa) and *only_S* make reference to the CQ like the cleft does, and thus, under the reasoning of Velleman et al., should signal that the speaker believes that there is at least one true answer to the CQ—which evidently is not the case in (65)/(90).

It thus seems reasonable to accept the received wisdom that the cleft encodes the existence presupposition. (91) is the version of the CLEFT operator adopted in this work, which incorporates this additional not-at-issue content.

- (91) $CLEFT_{\exists} =_{def} \lambda w[\lambda p[\{CS \subseteq \lambda w'[\exists q \in CQ[q(w')]] \& MAX_{info}(p)(w)\}\{p(w)\}]]$

6.2 Contexts that favor the cleft but disfavor *dake-wa*

In (92), the response with a cleft is felicitous, while the one with *dake-wa* is not.

- (92) (Context: Hiroshi, Iori, Jiro, Ken, Lisa, Mari, and Natsumi are shortlisted candidates for a prestigious scholarship program, which awards scholarships to two to four applicants each year.)
 A: “So, who earned a scholarship this year?”
 B_a: ??Ken to Mari **dake-wa** shoogakukin o kakutoku shita.
 K. and H. *dake-wa* scholarship Acc earn do.Pst
 ‘Ken and Mari earned a scholarship.’
 B_b: (Shoogakukin o kakutoku shita **no wa**) Ken to Mari da.
 scholarship Acc earn do.Pst Pro Th K. and M. Cop.Prs
 ‘It is Ken and Mari (who earned a scholarship).’

The infelicity of (92B_a) can be straightforwardly attributed to the presupposition failure—B cannot sensibly take it to be common ground that it is not the case that Ken, Mari, and somebody else earned a scholarship.

Next consider the discourse in (93); here too, the choice of *dake-wa* is considerably less natural than that of the cleft.

- (93) A: “I know that Ken ate just one kind of food for breakfast, but I don’t know what it is. Do you know what he ate?”
 B_a ??Tabun, Ken wa banana **dake-wa** tabeta.
 perhaps K. Th banana *dake-wa* eat.Pst
 ‘Perhaps Ken ate some bananas.’
 B_b Tabun, Ken ga tabeta **no** wa banana da.
 perhaps K. Nom eat.Pst Pro Th banana Cop.Prs
 ‘Perhaps it is some bananas that Ken ate.’

Note that here it is common ground that it is not the case that Ken ate some bananas and some other food item.

I suggest that the relative unnaturalness of (93B_a) arises from a discourse principle along the lines of Maximize Presupposition (Heim 1991). The principle of Maximize Presupposition comes in a number of different formulations, but in essence it requires that, given a set of comparable forms sharing the same proffered content but differing in what they presuppose (e.g., {*all*, *both*}), the speaker choose the one with the strongest presupposition compatible with the discourse context. This principle has been applied to the broader category of not-at-issue content (e.g. McCready 2019: 53)—making it more appropriate, under the current terminology, to call it “Maximize Not-At-Issue Content,” rather than Maximize Presupposition.

Now, how do *dake-wa* and the cleft compare with each other in terms of the strength of their not-at-issue content? The not-at-issue content of “CLEFT_∃(*p*),” i.e. (94), does not unidirectionally entail that of “*dake-wa*’(*p*),” i.e. (95), and vice versa.

- (94) (i) There is no true alternative of *p* that unidirectionally entails it and (ii) it is common ground that some alternative of *p* holds true.
 (95) It is common ground that there is no true alternative of *p* that unidirectionally entails it.

On the other hand, (94) does convey more information than (95) when the factor of presuppositionality is put aside. It seems not unreasonable to hypothesize that this makes the cleft a choice favored over *dake-wa* when the not-at-issue content of either holds true. Under this account, the unnaturalness of (93B_a) can be likened to that of (96b).

- (96) Ken closed {a. both/b. #all} of his eyes.

(96b) sounds odd, implicating that the speaker does not acknowledge that Ken does not have more than two eyes; (93B_a) sounds odd, implicating that the speaker does not acknowledge that Ken ate something (despite this information having just been presented to her).

7 The role of *wa* in *dake-wa*

The particle *wa*, which constitutes part of *dake-wa*, is said to have two uses, called thematic and contrastive. The former indicates information-structural topichood or groundhood (non-focushood) of the marked constituent (Oshima 2021); the latter is a focus-alternative quantifier, and conveys that some alternative proposition is possibly false (Oshima 2020). It is interesting to ask how the meaning of *dake-wa* might be compositionally derived with those of *dake* and *wa*.

Oshima (2020) assigns a meaning along the lines of (97) to contrastive *wa* (wa_c for short).⁹

(97) $wa_c \mapsto \lambda p[\lambda w[\{Bel(S) \not\subseteq \lambda w'[\forall q \in CQ[q \approx p \rightarrow q(w')]\}(p)(w)]]]$

(98) [Ken]_F **wa_c** shuppatsu shita.

Ken wa_c leave do.Pst
'Ken left.'

- a. requires a question of the form "Who left?";
- b. conveys as a non-presuppositional not-at-issue content that the speaker finds it possible that some answer that is logically independent from the proposition that Ken left does not hold true;
- c. conveys as an at-issue content that Ken left.

The posited not-at-issue content is strictly weaker than the exclusivity implication of *dake(-wa)*, *shika*, etc. It is plausible that the not-at-issue content induced by wa_c is inherited to a *dake-wa* sentence, but ends up being trivial and indiscernible. Sentence (99), for example, might convey three pieces of information, (99b–d), at the level of logical representation, with (99c) being redundant given (99b).

(99) [Ken]_F *dake-wa* shuppatsu shita.

Ken **dake-wa_(c)** leave do.Pst
'(Unlike the other people) Ken left.'

- a. requires a question of the form "Who left?";
- b. conveys as a presuppositional not-at-issue content that there is no true answer unidirectionally entailing that Ken left;

⁹Hara (2007) puts forth a similar analysis of contrastive *wa*, along the lines of (i):

(i) $wa_c \mapsto \lambda p[\lambda w[\{Bel(S) \not\subseteq \lambda w'[\forall q \in CQ[q \subset p \rightarrow q(w')]\}(p)(w)]]]$

It makes problematic predictions on the semantic contribution of contrastive *wa* embedded in an entailment-canceling environment. It wrongly predicts, for example, that (ii) is compatible with a situation where it is common ground that everyone other than Ken passed the exam (here, the speaker is naturally taken to find it possibly false that everyone *including Ken* passed the exam, so that the putative not-at-issue content expected from (i) is satisfied).

(ii) [[Ken]_F **wa_c** shiken ni gookaku shita] kamoshirenai.

K. wa_c exam Dat pass.exam do.Pst possible.Prs
'Ken may have passed the exam.'

↪ "It is possible that somebody other than Ken did not pass the exam."

Table 2 The contrasts between *only*, *dake*, *dake-wa*, *shika*, and the cleft in terms of at-issueness and presuppositionality

	<i>only</i>	<i>dake</i>	<i>dake-wa</i>	<i>shika</i>	cleft
PC is not-at-issue, but non-presuppositional.	✓	–	–	✓	–
Both PC and NC are at-issue.	marked	✓	–	–	–
NC is not-at-issue, but non-presuppositional.	–	–	–	–	✓
NC is (not-at-issue and) presuppositional.	–	marked	✓	–	–

- c. conveys as a non-presuppositional not-at-issue content that the speaker finds it possible that some answer logically independent from the proposition that Ken left does not hold true;
- d. conveys as an at-issue content that Ken left.

The question of how the attachment of *wa_c* affects the meaning of *dake* thus seems reducible to the question of how it triggers the “presuppositionalization” of the NC induced by *dake*. I will not pursue this issue further here. It is worth noting, however, that *dake-wa* is presumably an instance of the cross-linguistically observed, and not well-understood, phenomenon whereby more than one focus-alternative quantifier is associated with a single focus item (Krifka 1992b; Guerzoni 2003; Nakanishi 2006; De Cesare and Garassino 2015). Inquiry into *dake-wa* has a potential to contribute to a better understanding of other instances of “focus-alternative-quantifier clusters,” and vice versa.

8 Conclusion

A comparative analysis of (i) the English exclusive quantifier *only*, (ii) the three Japanese exclusive quantifiers, *dake*, *dake-wa*, and *shika*, and (iii) the cleft construction (the English *it*-cleft and the Japanese *no*-cleft), was put forth. An *only*-sentence typically, and a *shika*-sentence invariably, convey the PC as a non-presuppositional, not-at-issue content. A *dake*-sentence typically conveys both PC and NC as at-issue contents. A *dake-wa*-sentence conveys the NC as a presuppositional not-at-issue content, while the cleft conveys the NC as a non-presuppositional not-at-issue content and additionally conveys an existence presupposition. *Only* sometimes receives the *dake*-like symmetrical interpretation. *Dake* may receive the *dake-wa*-like PC-foregrounded interpretation in limited configurations. Table 2 summarizes the correspondence between these exclusive quantifiers in terms of (not-)at-issueness and presuppositionality (“✓” indicates the unmarked/default interpretation).

The current work contributes to the general-linguistic taxonomy of focus-alternative quantifiers, providing a systematic semantic account of representative exclusive quantifiers in two well-studied languages, English and Japanese. An exclusive quantifier may convey the PC, the NC, or neither as a not-at-issue (backgrounded) content. A backgrounded NC, and in theory a backgrounded PC too, may be either non-presuppositional or presuppositional. Additionally, some exclusive quantifiers allow the so-called rank-based interpretation (as in “Amy is *only* a sergeant (and not

a lieutenant, etc.)”), while some others do not (footnote 2). It is yet to be inquired which of the possible combinations of these features are attested across languages, how commonly and in what ways—monomorphemically, as in *only*, polymorphemically, as in *dake-wa*, or constructionally, as in clefts.

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References

- Abusch, Dorit. 2010. Presupposition triggering from alternatives. *Journal of Semantics* 27: 37–80. <https://doi.org/10.1093/jos/ffp009>.
- Atlas, Jay David. 1991. Topic/comment, presupposition, logical form and focus stress implicatures: The case of focal particles *only* and *also*. *Journal of Semantics* 8: 127–147. <https://doi.org/10.1093/jos/8.1-2.127>.
- Atlas, Jay David. 1993. The importance of being ‘only’: Testing the neo-Gricean versus neoentailment paradigms. *Journal of Semantics* 10: 301–318. <https://doi.org/10.1093/jos/10.4.301>.
- Beaver, David I., and Brady Z. Clark. 2008. *Sense and sensitivity: How focus determines meaning*. Malden: Wiley-Blackwell.
- Bonomi, Andrea, and Paolo Casalegno. 1993. ‘Only’: Association with focus in event semantics. *Natural Language Semantics* 2: 1–45. <https://doi.org/10.1007/BF01255430>.
- Büring, Daniel. 2003. On D-trees, beans, and B-accents. *Linguistics and Philosophy* 26(5): 511–545.
- Büring, Daniel, and Manuel Kríž. 2013. It’s that, and that’s it! Exhaustivity and homogeneity presuppositions in clefts (and definites). *Semantics and Pragmatics* 6(Art. 6): 1–39. <https://doi.org/10.3765/sp.6>.
- Cho, Sungdai, John Whitman, and Yuko Yanagida. 2008. Clefts in Japanese and Korean. In *Proceedings of the 44th annual meeting of the Chicago Linguistic Society*, Vol. 1, 61–77. Chicago: Chicago Linguistic Society.
- De Cesare, Anna-Maria, and Davide Garassino. 2015. On the status of exhaustiveness in cleft sentences: An empirical and cross-linguistic study of English *also/only*-clefts and Italian *anche/iso*-clefts. *Folia Linguistica* 49: 1–56. <https://doi.org/10.1515/flin-2015-0001>.
- Coppock, Elizabeth, and David Beaver. 2011. Sole sisters. In *Proceedings of SALT 21*, 197–217.
- Guerzoni, Elena. 2003. Why even ask?: On the pragmatics of questions and the semantics of answers. PhD diss, Massachusetts Institute of Technology.
- Hara, Yurie. 2007. *Dake-wa*: Exhaustifying assertions. In *New frontiers in artificial intelligence: Joint JSAI 2006 workshop post-proceedings*, eds. Takashi Washio, Ken Satoh, Hideaki Terada, and Akihiro Inokuchi, 219–231. Berlin: Springer.
- Hara, Yurie. 2014. Topics are conditionals: A case study from exhaustification over questions. In *Proceedings of the 28th Pacific Asia conference on language, information and computation*, eds. Wirete Aroonmanakun, Prachya Boonkwan, and Thepchai Supnithi, 522–531. Chulalongkorn University.
- Heim, Irene. 1991. Artikel und definitheit. In *Semantics: An international handbook of contemporary research*, eds. Arnim von Stechow and Dieter Wunderlich, 487–535. Berlin: de Gruyter. <https://doi.org/10.1515/9783110126969.7.487>.
- Hiraiwa, Ken, and Shinichiro Ishihara. 2012. Syntactic metamorphosis: Cleft, sluicing, and in-situ focus in Japanese. *Syntax* 15(2): 142–180.
- Horn, Lawrence. 1969. A presuppositional analysis of *only* and *even*. In *Papers from the 5th regional meeting of the Chicago Linguistic Society*, Vol. 5, 98–107. Chicago Linguistic Society.
- Horn, Lawrence. 1981. Exhaustiveness and the semantics of clefts. In *Proceedings of the 11th annual meeting of the North East Linguistic Society*, Vol. 11, 125–142. <https://scholarworks.umass.edu/nels/vol11/iss1/10>.

- Ido, Misato, and Yusuke Kubota. 2021. The hidden side of exclusive focus particles: An analysis of *dake* and *sika* in Japanese. *Gengo Kenkyū* 160: 183–213. https://doi.org/10.11435/genyo.160.0_183.
- Karttunen, Lauri, and Stanley Peters. 1979. Conventional implicature. In *Presupposition*, eds. Choon-Kyu Oh and David A. Dinneen. Vol. 11 of *Syntax and semantics*, 1–56. New York: Academic Press.
- Kaufmann, Magdalena. 2018. What ‘may’ and ‘must’ may be in Japanese. In *Japanese/Korean linguistics*, eds. Kensei Funakoshi, Shigeto Kawahara, and Christopher D. Tancredi, Vol. 24, 103–126. CSLI Publications.
- Krifka, Manfred. 1992a. A framework for focus-sensitive quantification. In *Proceedings of semantics and linguistic theory 2*, eds. Chris Barker and David Dowty, 215–236. Dept of Linguistics, Ohio State University. <https://doi.org/10.3765/salt.v2i0.3024>.
- Krifka, Manfred. 1992b. A compositional semantics for multiple focus constructions. In *Information-struktur und Grammatik*, ed. Joachim Jacobs, 17–53. Opladen: Westdeutscher Verlag.
- Kuno, Susumu. 1999a. The syntax and semantics of the *dake* and *shika* constructions. In *Harvard working papers in linguistics*, Vol. 7, 144–172.
- Kuno, Susumu. 1999b. *Dake/shika* koobun no imi to koozoo [The syntax and semantics of the *dake* and *sika* constructions]. In *Gengogaku to nihongo kyooiku [Linguistics and Japanese language education]*, ed. Yukiko Alam Sasaki, 191–319.
- McCready, Elin. 2019. *The semantics and pragmatics of honorification: Register and social meaning*. Oxford: Oxford University Press.
- Nakanishi, Kimiko. 2006. *Even, only*, and negative polarity in Japanese. In *Semantics and linguistic theory*, Vol. 16, 138–155. <https://doi.org/10.3765/salt.v16i0.2953>.
- Nakanishi, Kimiko, and Hotze Rullmann. 2009. Epistemic and concessive interpretations of *at least*. Paper presented at meeting of the Canadian Linguistics Association, Carleton University, Ottawa, May 24, 2009.
- Numata, Yoshiko. 2000. Toritate [Reference to alternatives]. In *Toki/hitei to toritate [Time, negation, and focus]*, eds. Yoshio Nitta and Takashi Masuoka, 151–216. Tokyo: Iwanami Shoten.
- Oshima, David Y. 2015. Focus particle stacking: How a contrastive particle interacts with ONLY and EVEN. Paper presented at Workshop on Altaic Formal Linguistics 11, University of York, June 2015.
- Oshima, David Y. 2016. The meanings of perspectival verbs and their implications on the taxonomy of projective content/conventional implicature. In *Proceedings of semantics and linguistic theory 26*, 43–60. <https://doi.org/10.3765/salt.v26i0.3789>.
- Oshima, David Y. 2020. The English rise-fall-rise contour and the Japanese contrastive particle *wa*: A uniform account. In *Japanese/Korean linguistics*, eds. Shin Fukuda, Shoichi Iwasaki, Sun-Ah Jun, Sung-Ock Sohn, Susan Strauss, and Kie Zuraw, Vol. 26, 165–175. Stanford: CSLI Publications.
- Oshima, David Y. 2021. When (not) to use the Japanese particle *wa*: Groundhood, contrastive topics, and grammatical functions. *Language* 97: 320–340. <https://doi.org/10.1353/lan.2021.0073>.
- Potts, Christopher. 2005. *The logic of conventional implicatures*. Oxford: Oxford University Press. [Revised 2003 UC Santa Cruz dissertation].
- Prince, Ellen F. 1986. On the syntactic marking of presupposed open propositions. In *Proceedings of the 22nd meeting of the Chicago Linguistic Society*, 208–222.
- Roberts, Craige. 1996. Information structure in discourse: Towards an integrated formal theory of pragmatics. In *OSU working papers in linguistics*, Vol. 49, 91–163. [Amended version reissued as Roberts 2012].
- Roberts, Craige. 2012. Information structure in discourse: Towards an integrated formal theory of pragmatics. *Semantics and Pragmatics* 1(Art. 6): 1–69. <https://doi.org/10.3765/sp.5.6>.
- Rooth, Mats. 1999. Association with focus or association with presupposition. In *Focus: Linguistic and cognitive, and computational perspectives*, eds. Peter Bosch and Rob van der Sandt, 232–244. Cambridge: Cambridge University Press.
- Taglicht, Josef. 1984. *Message and emphasis: On focus and scope in English*. London: Longman.
- Teramura, Hideo. 1991. *Nihongo no shintakusu to imi [Syntax and meaning of Japanese]*, Vol. 3. Tokyo: Kuroshio Publishers.
- Tonhauer, Judith, David Beaver, Craige Roberts, and Mandy Simons. 2013. Toward a taxonomy of projective content. *Language* 89: 66–109. <https://doi.org/10.1353/lan.2013.0001>.
- van Rooij, Robert, and Katrin Schulz. 2007. Only: Meaning and implicature. In *Questions in dynamic semantics*, ed. Maria Aloni, Alastair Butler, and Paul Dekker, 193–224. Leiden: Brill.
- Velleman, Dan Bridges, David Beaver, Emilie Destruel, Dylan Bumford, Edgar Onea, and Elizabeth Coppock. 2012. It-clefts are it (inquiry terminating) constructions. In *Proceedings of SALT 22*, 441–460.

- Velleman, Leah, and David Beaver. 2014. Question-based models of information structure. In *The Oxford handbook of information structure*, eds. Caroline Féry and Shinichiro Ishihara, 86–107. Oxford: Oxford University Press.
- Yoshimura, Keiko. 2007. What does ONLY assert and entail? *Lodz Papers in Pragmatics* 3: 97–117. <https://doi.org/10.2478/v10016-007-0007-6>.

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