

Focus particle stacking

How a contrastive particle with ONLY and EVEN

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Outline

- 1 Introduction
- 2 What contrastive *wa* means
- 3 Focus particle clustering
- 4 *Wa* and ONLY
- 5 *Wa* and EVEN
- 6 Other types of of FP clusters
- 7 Conclusion

Aim

This talk addresses: (i) what the contrastive particle *wa* means, and (ii) how it interacts with *dake* 'only' and *made* 'even' and.

- (1) John-**dake-wa** kita.
J.-only-*wa* come.Pst
'John came (while all others did not come).'
- (2) John-ni-**made-wa** katenakatta.
J.-Dat-even-*wa* win.Pot.Neg.Pst
'It is not the case that I could even win against John.'
(Pot=potential)

Background

It is widely acknowledged that the Japanese particle *wa* has two distinct uses, which have been labeled as “thematic” (or “topic-marking”) and “contrastive” (Kuno 1973; Teramura 1991; Heycock 2008, among others).

(3) Thematic *wa*

- A: Smith-sensei-**wa** dare-ga mukae-ni iku-no?
 S.-*wa* who-Nom pick.up.Inf-Dat go.Prs-DP
 ‘Who will go pick up Prof. Smith?’
- B: Smith-sensei-**wa** watashi-ga mukae-ni ikimasu.
 S.-*wa* I-Nom pick.up.Inf-Dat go.Prs
 ‘As for Prof. Smith, I will go pick him up.’
 (DP = discourse particle)

Background

(4) Contrastive *wa*

A: Dare-ga kita-no?
who-Nom come.Pst-DP
'Who came?'

B: Suzuki-to Yamada-**wa** kimashita-ga, hoka-ni-wa
S.-and Y.-*wa* come.Pst-but otherwise
dare-mo kimasen deshita.
anybody come.Neg Aux.Pst
'Suzuki and Yamada came, but nobody other than
them came.'

Background

Thematic *wa* marks an element within information-structural ground; contrastive *wa*, on the other hand, marks a (and typically, *the*) focus element.

- Consequently, most often disambiguation is possible based on tonal grounds (Kori 1997; Nakanishi 2001, 2008; Sugahara 2003; Tomioka 2009).

Background

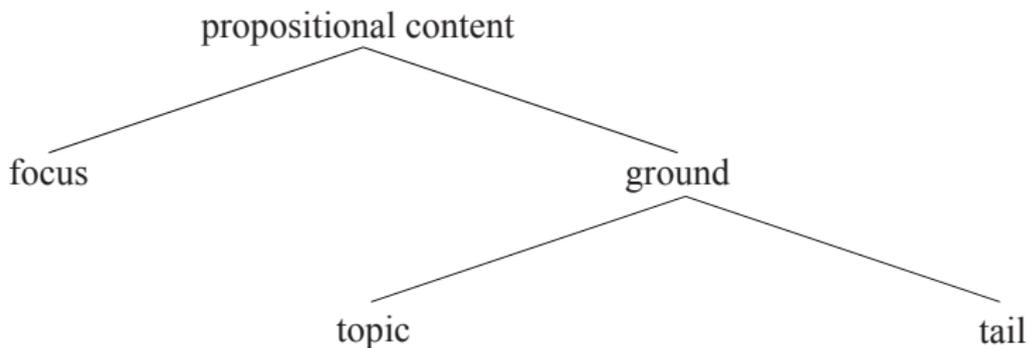


Fig. 1: The tripartite distinction of pragmatic functions (e.g., Lambrecht 1994, Vallduví & Engdahl 1996)

Background

(5) (I will meet Prof. Brown at the airport myself.)
As for [Prof. Smith]_{TOP}, [Ken]_F will go pick him up.

(6) *focus: ken*
ground: $\lambda y[\lambda w[\mathbf{pick.up}(w, y, \mathbf{smith})]]$
topic: smith
tail: $\lambda x[\lambda y[\lambda w[\mathbf{pick.up}(w, y, x)]]]$

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Wa as a focus particle

In many previous works (e.g., Numata 1986; Hara 2008; Oshima 2008), it has been claimed that contrastive *wa* has a meaning comparable to those of focus particles (FPs) such as additives (TOO), scalar additives (EVEN) and exclusives (ONLY).

- (7) a. [John]_F-**mo** gookaku-shita.
 J.-also pass.Pst
 'John passed (the exam) too.'
 ⇒ John is "like" some other person.
- b. [John]_F-**wa** gookaku-shita.
 J.-*wa* pass.Pst
 'John_{wa} passed (the exam).'
- ⇒ John is "unlike" some other person.

The meaning of an additive focus particle

- (8) The interpretation of TOO(S)
- Conventional Implicature:** There is a proposition p such that $p \in \text{ALT}(\llbracket S \rrbracket^f)$, $p \not\approx \llbracket S \rrbracket^o$, and $p \in \text{CG}$.
- Entailment:** $\llbracket S \rrbracket^o$
- (9) a. $\llbracket S \rrbracket^f = \langle G, F \rangle$
 b. $\llbracket S \rrbracket^o = G(F)$
- (10) a. $\llbracket [\text{John}]_F \text{ is bright} \rrbracket^f = \langle \llbracket \mathbf{bright} \rrbracket, \llbracket \mathbf{j} \rrbracket \rangle$
 b. $\llbracket [\text{John}]_F \text{ is bright} \rrbracket^o = \llbracket \mathbf{bright} \rrbracket(\llbracket \mathbf{j} \rrbracket)$

The meaning of an additive focus particle

- (11) Let $[[\alpha]]^f$ be $\langle G, F \rangle$.
 Then: $\text{ALT}([[\alpha]]^f) =_{\text{def}}$
- (i) if F is an atomic referent, $\{G(F), G(F'), G(F''), \dots\}$ where F', F'', \dots are contextually prominent alternatives of F ;
 - (ii) if F is a sum of referents $a_1 \oplus \dots \oplus a_n$, $\{G(a_1), \dots, G(a_n), G(a'), G(a''), \dots\}$ where a', a'', \dots are contextually prominent alternatives of a_1, \dots, a_n
- (12) $p \approx \langle G, F \rangle =_{\text{def}}$
- $$\begin{cases} p = G(F) & \text{if } F \text{ is an atomic referent} \\ \bigvee_{k=1}^n p = G(a_k) & \text{if } F \text{ is a sum of referents: } a_1 \oplus \dots \oplus a_n \end{cases}$$

The meaning of an additive focus particle

Context: John, Ken, Luke, and nobody else took the exam.

- (13) a. [John]_F passed, too.
b. [John and Ken]_F passed, too.

(14) {'John passed', 'Ken passed', 'Luke passed'}

The meaning of a contrastive focus particle

A possible approximation (Noguchi & Harada 1996):

(15) The interpretation of WA(S):

CI: There is a proposition p such that $p \in ALT(\llbracket S \rrbracket^f)$, $p \not\approx \llbracket S \rrbracket^o$, and $\neg p \in CG$.

Entailment: $\llbracket S \rrbracket^o$

(16) A: Who passed the exam?

B: [John]_F-**wa** gookaku-shita. ...

J.-*wa* pass.Pst

(i) ... But Ken and Luke failed.

(ii) ... But I don't know about Ken and Luke.

The meaning of a contrastive focus particle

Another possible approximation (Oshima 2008):

(17) The interpretation of WA(S):

CI: There is a proposition p such that $p \in \text{ALT}(\llbracket S \rrbracket^f)$, $p \not\approx \llbracket S \rrbracket^o$, and $p \notin \text{CG}$.

Entailment: $\llbracket S \rrbracket^o$

(18) A: Who passed the exam?

B: [John]_F-**wa** gookaku-shita. ...

J.-*wa* pass.Pst

(i) ... But Ken and Luke failed.

(ii) ... But I don't know about Ken and Luke.

(iii) ... #And Ken and Luke passed too.

The meaning of a contrastive focus particle

Final version:

(19) The interpretation of WA(S):

CI: There is a proposition p such that $p \in \text{ALT}(\llbracket S \rrbracket^f)$, $p \not\approx \llbracket S \rrbracket^o$, and $p \notin \text{Bel}(S)$ (in other words: $\neg p$ is compatible with the speaker's current beliefs).

Entailment: $\llbracket S \rrbracket^o$

The meaning of a contrastive focus particle

Hara (2007): “[a sentence with contrastive *wa*] presupposes that there exists a stronger alternative to the asserted proposition [...] and conventionally implicates that the speaker considers the possibility that the stronger alternative is false”

The meaning of a contrastive focus particle

Hara's analysis fails to predict the contrast between (20a) and (20b).

- (20) a. Ken-to Luke-ga fugookaku-datta-ndaroo? Jaa,
 K.-and L.-Nom failure-Cop.Pst-Aux.Presumptive then
 [John- $\{ga/wa\}$ gookaku-shita] nante-koto-wa
 J.-Nom/*wa* pass.exam-Pst such-matter-*wa*
 arienai-yo.
 exist.Pot.Neg.Prs-DP
 'Ken and Luke failed the exam, right? Then it is not possible [that John_(wa) passed].'
- b. Ken-to Luke-ga gookaku-shita-no-wa tashika-da. Demo,
 K.-and L.-Nom pass.exam-Pst-Comp-*wa* certain-Cop.Pst but
 [John- $\{ga/#wa\}$ gookaku-shita] nante-koto-wa
 J.-Nom/*wa* pass.exam-Pst such-matter-*wa*
 arienai-yo.
 exist.Pot.Neg.Prs-DP
 'Ken and Luke indeed passed the exam. But it is not possible [that John passed].'

Wa and scope inversion

Under the adopted analysis, it is possible to provide a straightforward account of the “scope inversion” phenomenon illustrated below.

- (21) a. [Zen'in-ga]_F konakatta.
 everyone-Nom come.Neg.Pst
 'All people are such that they did not come.' ($\forall > \neg$)
 ??'It is not the case that all people came.' ($\neg > \forall$)
- b. [Zen'in]_F-*wa* konakatta.
 everyone-*wa* come.Neg.Pst
 *'All people are such that they did not come.' ($\forall > \neg$)
 'It is not the case that all people came.' ($\neg > \forall$)

Wa and scope inversion

- (22) The “ $\forall > \neg$ ” reading of “Zen’in-*wa* konakatta”
Entailment: All people are such that they did not come.
CI: The speaker considers that at least one member of the following set is possibly false: {‘Most people are such that they did not come’, ..., ‘Two people are such that they did not come’, ‘Some person is such that (s)he did not come’}
- (23) The “ $\neg > \forall$ ” reading of “Zen’in-*wa* konakatta”
Entailment: It is not the case that all people came.
CI: The speaker considers that at least one member of the following set is possibly false: {‘It is not the case that most people came’, ..., ‘It is not the case that two people came’, ‘It is not the case that some person came’}

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Focus particle clustering

Some combinations of FPs allow clustering/stacking.

- (24) a. Pan-**dake-wa** tabeta.
bread-only-*wa* eat.Pst
'I ate bread, although I did not eat any other thing.'
(**ONLY-wa**)
- b. Kuruma-**made-wa** kawanakatta.
car-even-*wa* buy.Neg.Pst
'I did not go as far as buying a car.' (**EVEN-wa**)

Focus particle clustering

- c. Konbini-**dake-demo** aite-ireba,
 convenience.store-only-even open.Ger-Ipfv.Prov
 hirugohan-ga taberareru.
 lunch-Nom eat.Pot.Prs
 'We will be able to have lunch if (unlike other stores) the convenience store is open.' (**ONLY-EVEN**)
- d. Sono kaigoo-ni-wa chiji-**{sae/sura/made}-mo**
 that assembly-Dat-*wa* governor-even-*mo*
 shusseki-shita.
 attend.Pst
 'Even the governor attended that assembly.' (**EVEN-ALSO**)
- e. Pan-**dake-shika** tabenakatta.
 bread-only-*shika* eat.Neg.Pst
 'I only ate bread.' (**ONLY-*shika***)

Focus particle nesting

FP clustering should be distinguished from “FP nesting” (Krifka 1991).

- (25) a. **Only**₁ [John]_{F1} ordered [a dessert]_{F2} **too**₂.
b. The alternative propositions relevant for *only*: {Ken ordered a dessert too, Luke ordered a dessert too, ...}

Focus particle nesting

- (26) (All the students here happen to play exactly one musical instrument. Most play the piano and nothing else. Some only play the violin.)
- a. Some students **even only** play [the clarinet]_F.
 - b. The alternative propositions relevant for *even*:
{Some students only play the piano, Some students only play the violin, ...}

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The meaning of an exclusive particle

The prejacent-presupposition analysis of ONLY (Horn 1969):

(27) The interpretation of ONLY(S):

CI: $\llbracket S \rrbracket^o \in \text{CG}$

Entailment: For all propositions p such that $p \in \text{ALT}(\llbracket S \rrbracket^f)$ and $p \not\approx \llbracket S \rrbracket^o$, $\neg p$.

Whereas “Paul speaks [French]_F too” asserts that Paul speaks French, “Paul only speaks [French]_F” presupposes that Paul speaks French.

The meaning of an exclusive particle

Focus particle clusters

D. Y. Oshima

Introduction

What contrastive *wa* means

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Wa and ONLY

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Conclusion

- (28) *Embedding under negation*
{Not/it is not case that} **only** John danced.
⇒ John danced.
⇏ Nobody other than John danced.
- (29) *Order asymmetry*
- John danced, and (indeed) **only** John danced.
 - ??Nobody other than John danced, {but/and (indeed)} **only** John danced.

The meaning of an exclusive particle

(30) *Reason clause*

(Pill A is a hypnotic and Pill B is a digestive.)
John fell asleep because he (also/#**only**) took Pill A.

(31) *Emotive factive clause*

I regret that I **only** ordered a hamburger.

⇒ I regret that I did not order things other than a
hamburger.

⇏ I regret that I ordered a hamburger.

The meaning of an exclusive particle

Under the preadjacent-presupposition analysis, B's utterance below is understood to involve accommodation.

- (32) A: I have no idea who came. Can you tell me?
B: Only Mary did.

X-dake-∅ vs. *X-dake-wa*

Japanese *dake* is amenable to the preajacent-presupposition analysis.

- But when *dake* is followed by *wa*, the assertion and the presupposition (of *dake*) are switched.

- (33) a. [Nomimono-**dake** mochikomeru]
 beverage-only bring.in.Pot.Prs
 toiu-wake-de-wa nai.
 such-Comp-Cop.Inf-*wa* Neg.Prs
 'It is not the case that one can bring in drinks only.'
 ⇒ It is okay to bring in drinks.
 ⇏ It is not okay to bring in food, etc.
- b. [Nomimono-**dake-wa** mochikomeru] toiu-wake-de-wa
 nai.
 ⇏ It is okay to bring in drinks.
 ⇒ It is not okay to bring in food, etc.

X-dake-∅ vs. *X-dake-wa*

- (34) (“Nobody other than John came. But ...”)

John-**dake**{??∅/-**wa**} kita.J.-only-∅/*wa* come.Pst‘But only??(-*wa*) John came.’

- (35) (“I was adrift on a lifeboat for seven days, without any food. But ...”)

Mizu-**dake**{#∅/-**wa**} atta-node, ikinobiruwater-only-∅/*wa* exist.Pst-because survive.Prs

koto-ga dekita.

matter-Nom do.Pot.Pst

‘I was able to survive because there was water only#(-*wa*).’

X-dake-∅ vs. *X-dake-wa*

(36) (Husband and wife are talking about their children John and Mary.)

- H: Toosan-to kaasan-ga John-**dake**{-o/#-**wa**} kawaigaru
 father-and mother-Nom J.-only-Acc/*wa* love.Prs
 no-ni-wa, komaru-na. Mary-ga kawai-soo-da.
 Comp-Dat-*wa* be.troubled-DP M.-Nom pitiful.Prs
 'It is unfortunate that my dad and mom only(#-*wa*) care about
 John. I feel sorry for Mary.'
- W: John-**dake**{#-o/-**wa**} kawai-gatte-kureru koto-ni
 J.-only-Acc/*wa* love.Ger-Ben.Prs matter-*Dat*
 kansha-shinakucha. Watashi-no ryooshin-nante,
 thank.ought I-Gen parents-speaking.of
 mago-tachi-ni mattaku kyoomi-ga nai-nda-kara!
 grandchild-Pl-Dat at.all interest-Nom not.exist-DAux-DP
 'We should be grateful that they only#(-*wa*) care about John. Think
 about my parents, they have no interest at all in their grandchildren!'

X-dake-∅ vs. *X-dake-wa*

- (37) Some students **even only** play [the clarinet]_F, ...
- so that they cannot participate in a string quartet or piano quintet.
 - #so that they can participate in Mozart's Clarinet Quintet in A major.
- (38) Some students **even** play [the clarinet]_F, ...
- (?)so that they cannot participate in a string quartet or piano quintet.
 - so that they can participate in Mozart's Clarinet Quintet in A major.

Parallel Interpretation Rule

- (39) Suppose (i) sentence: $[\alpha X_F FP_1 \beta]$ entails E_1 and conventionally implicates C_1 , and (ii) sentence: $[\alpha X_F FP_2 \beta]$ entails E_2 and conventionally implicates C_2 . Then, $[\alpha [X_F FP_1] FP_2 \beta]$ entails E_3 and conventionally implicates C_3 , where:
- (i) $E_3 = E_2$
 (ii) $C_3 \Leftrightarrow C_2 \wedge [\neg[C_1 \Leftrightarrow [E_2 \in CG]] \rightarrow C_1] \wedge [\neg[E_1 = E_2] \rightarrow [E_1 \in CG]]$
- (40) “[John]_F-dake kita” entails E_1 & implicates C_1 .
 “[John]_F-wa kita” entails E_2 & implicates C_2 .
 “[[John]_F-dake]-wa kita” entails E_3 & implicates C_3 .

Parallel Interpretation Rule

(41) “[John]_F-dake-wa kita”
$$\mathbf{E}_1: \lambda w[\forall p[p \in \text{ALT}(\langle \lambda x[\lambda w'[\mathbf{came}(w', x)]], \mathbf{john}) \rangle] \wedge [p \neq \lambda w''[\mathbf{came}(w'', \mathbf{john})]] \rightarrow \neg p(w)]]$$

(in prose: ‘Nobody other than John came’)

$$\mathbf{C}_1: \lambda w[\mathbf{came}(w, \mathbf{john})] \in \text{CG}$$

(in prose: ‘John came’ is presupposed)

$$\mathbf{E}_2: \lambda w[\mathbf{came}(w, \mathbf{john})]$$

(in prose: ‘John came’)

$$\mathbf{C}_2: \exists p[p \in \text{ALT}(\langle \lambda x[\lambda w[\mathbf{came}(w, x)]], \mathbf{john}) \rangle] \wedge [p \neq \lambda w'[\mathbf{came}(w', \mathbf{john})]] \wedge [p \notin \text{Bel}(S)]]$$
(in prose: Somebody other than John is *x* such that the speaker finds ‘*x* came’ possibly false)
$$\mathbf{E}_3 = \mathbf{E}_2$$

$$\mathbf{C}_3 \Leftrightarrow \mathbf{C}_2 \wedge [\neg[\mathbf{C}_1 \Leftrightarrow [\mathbf{E}_2 \in \text{CG}]] \rightarrow \mathbf{C}_1] \wedge [\neg[\mathbf{E}_1 = \mathbf{E}_2] \rightarrow [\mathbf{E}_1 \in \text{CG}]]$$

$$\Leftrightarrow \mathbf{C}_2 \wedge [\mathbf{E}_1 \in \text{CG}] \Leftrightarrow [\mathbf{E}_1 \in \text{CG}]$$

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The meaning of a scalar additive

Since Karttunen and Peters (1979), it is widely considered that the semantic contribution of EVEN has two parts, which might be called the “existential” and “scalar” components.

- (42) Conventional implicature of EVEN(S) (analysis in line with K&P 1979):
- (i) There is some p such that $p \in \text{ALT}(\llbracket S \rrbracket^f)$, $p \not\approx \llbracket S \rrbracket^f$, and $p \in \text{CG}$, and (ii) for all q such that $q \in \text{ALT}(\llbracket S \rrbracket^f)$ and $q \not\approx \llbracket S \rrbracket^o$, q is less noteworthy than any r such that $r \approx \llbracket S \rrbracket^o$.

Under this analysis, “Even [John]_F came” presupposes that somebody other than John came and conventionally implicates that ‘John came’ is the most noteworthy among the alternative propositions.

The meaning of a scalar additive

Zeus is an exceptionally smart Chimpanzee trained to play chess. Ann, Bob, Carol, Dan, and Ed are human chess players with the ascending order of strength.

- (43) (In reply to: “Who, among the five opponents, did Zeus beat on yesterday’s test?”)
- He beat Ann, Bob, Carol, and **even** Dan. But he lost to Ed.
 - He **only** beat Dan. #And he beat {Carol/Ed} (too).

The meaning of a scalar additive

Krifka (1991) adopts the following analysis where the scalar component is weakened (and is conflated with the existential component).

- (44) Conventional implicature of EVEN(S) (analysis in line with Krifka 1991):
 There is some p such that $p \in \text{ALT}(\llbracket S \rrbracket^f)$, $p \not\approx \llbracket S \rrbracket^o$, $p \in \text{CG}$, and p is less noteworthy than any r such that $r \approx \llbracket S \rrbracket^o$.

Under this analysis, “Even [John]_F came” presupposes that some person x is (i) such that x came and (ii) such that ‘ x came’ is less noteworthy than ‘John came’.

The meaning of a scalar additive

(45) (In reply to: “Who did Zeus beat?”)

1: Let me see . . . He beat Bob.

2a: And he beat Carol, **too**. And he beat Dan, **too**.

2b: And he beat Carol, **too**. And he **even** beat Dan.

2c: And he **even** beat Carol. ??And he **even** beat Dan.

2d: And he **even** beat Dan. #And he **even** beat Carol.

The meaning of a scalar additive

(46) The interpretation of EVEN(S)

CI: There is a subset Q of $ALT(\llbracket S \rrbracket^f)$ such that (i) Q contains all p 's such that $p \approx \llbracket S \rrbracket^o$ and at least one other member, and (ii) for any q such that $q \in Q$ and $q \not\approx \llbracket S \rrbracket^o$, $q \in CG$ and q is less noteworthy than any r such that $r \approx \llbracket S \rrbracket^o$.

Entailment: $\llbracket S \rrbracket^o$

The subset relevant for “Zeus **even** beat [Dan]_F” is the union of: (i) {‘Zeus beat Dan’} and (ii) some non-empty subset of {‘Zeus beat Ann’, ‘Zeus beat Bob’, ‘Zeus beat Carol’}

The meaning of a scalar additive

Subset constancy requirement: Once an interlocutor picks a subset Q , that Q must remain, in the same stretch of discourse, the set relevant for any sentence that contains EVEN and shares the same focus alternative set.

- (47) 1. Zeus **even** beat [Dan]_F, and ...
(Q must contain 'Zeus beat Dan' as its most noteworthy member.)
2. #he **even** beat [Carol]_F.

Note that (47-1) and (47-2) share the same focus value.

X-made-∅ vs. *X-made-wa*

- The sequence of *made* 'even' and *wa* is possible only when *made-wa* co-occurs with a DE operator.
- The addition of *wa* has the effect of reversing the scope relation between *made* and the DE operator.

- (48) a. Zeus-wa Carol-ni-**made** katenakatta.
 Z.-*wa* C.-Dat-even win.Pot.Neg.Pst
 'Zeus could not even beat Carol.' (EVEN > ¬)
- b. Zeus-wa Carol-ni-**made-wa** katenakatta.
 Z.-*wa* C.-Dat-even-*wa* win.Pot.Neg.Pst
 'It is not the case that Zeus could even beat Carol.'
 (¬ > EVEN)
- (cf.) Zeus-wa Carol-ni-**made-wa** kateta.
 Z.-*wa* C.-Dat-*made-wa* win.Pot.Pst
 'Zeus could beat all the opponents up to Carol.'

X-made-∅ vs. *X-made-wa*

The parallel interpretation rule (or the nesting schema) alone does not account for the observed scope inversion phenomenon.

(49) #Zeus-wa Ann-ni-**made-wa** katenakatta.
Z.-*wa* A.-Dat-even-∅/*wa* win.Pot.Neg.Pst

(50) (assuming that $\text{EVEN} > \neg$)
Entailment: 'Zeus could not beat Ann'
CI: At least one of (51a)–(51d) is in the CG & at least one of (51a)–(51d) is such that the speaker finds it possibly false.

- (51) a. 'Zeus could not beat Bob'
b. 'Zeus could not beat Carol'
c. 'Zeus could not beat Dan'
d. 'Zeus could not beat Ed'

X-made-∅ vs. *X-made-wa*

- (52) Zeus-wa igai-ni-mo Dan-ni katta. Shikashi,
 Z.-*wa* unexpectedly D.-Dat win.Pst but
 zentai-no kekka-wa imaichi-datta. Ed, Carol,
 total result-*wa* unsatisfactory-Pst E. C.
 Bob-ni-wa maketa-shi, Ann-ni-**made**
 B.-Dat-*wa* lose.Pst-and A.-Dat-even
 katenakatta.
 win.Pot.Neg.Pst
 'Unexpectedly, Zeus beat Dan. But his total results
 were unsatisfactory. He lost to Ed, Carol, and Bob, and
 he couldn't even beat Ann.'

A repair-based analysis

I suggest that the “set shrinking” caused by a scalar additive affects not only the interpretation of another scalar additive occurring in the sequel of the same discourse stretch, but also that of any FP that is “stacked” on it.

- (53) Zeus-*wa* Carol-ni-*made-wa* katenakatta.
Z.-*wa* C.-Dat-even- \emptyset /*wa* win.Pot.Neg.Pst
'It is not the case that Zeus could even beat Carol.'
(\neg >EVEN)

A repair-based analysis

- (54) a. $\exists Q[Q \subseteq \text{ALT}('Z \text{ could not beat } [C]_{F'}) \wedge \forall p[p \approx 'Z \text{ could not beat } [C]_{F'} \rightarrow p \in Q] \wedge \exists q[q \not\approx 'Z \text{ could not beat } [C]_{F'} \wedge q \in Q] \wedge \forall r[r \not\approx 'Z \text{ could not beat } [C]_{F'} \wedge r \in Q] \rightarrow [r \in \text{CG} \wedge \forall s[s \approx 'Z \text{ could not beat } [C]_{F'} \rightarrow r <_n s]]]$
- b. $\exists q[q \in \text{ALT}('Z \text{ could not beat } [C]_{F'}) \wedge q \not\approx 'Z \text{ could not beat } [C]_{F'} \wedge q \notin \text{Bel}(S)]$
- (55) $\exists Q[Q \subseteq \text{ALT}('Z \text{ could not beat } [C]_{F'}) \wedge \forall p[p \approx 'Z \text{ could not beat } [C]_{F'} \rightarrow p \in Q] \wedge \exists q[q \not\approx 'Z \text{ could not beat } [C]_{F'} \wedge q \in Q] \wedge \forall r[r \not\approx 'Z \text{ could not beat } [C]_{F'} \wedge r \in Q] \rightarrow [r \in \text{CG} \wedge \forall s[s \approx 'Z \text{ could not beat } [C]_{F'} \rightarrow r <_n s]] \wedge \exists t[t \in Q \wedge t \not\approx 'Z \text{ could not beat } [C]_{F'} \wedge t \notin \text{Bel}(S)]]$

A repair-based analysis

The resulting semantic conflict triggers a repair process, which specifically is the manipulation of the scopal relation between *made* and the negation.

(56) Zeus-*wa* Carol-ni-*made-wa* katenakatta.

Z.-*wa* C.-Dat-even- \emptyset /*wa* win.Pot.Neg.Pst

'It is not the case that Zeus could even beat Carol.'

- (57) a. $\exists Q[Q \subseteq \text{ALT}('Z \text{ could beat } [C]_F') \wedge \forall p[p \approx 'Z \text{ could beat } [C]_F' \rightarrow p \in Q] \wedge \exists q[q \not\approx 'Z \text{ could beat } [C]_F' \wedge q \in Q] \wedge \forall r[r \not\approx 'Z \text{ could beat } [C]_F' \wedge r \in Q] \rightarrow [r \in \text{CG} \wedge \forall s[s \approx 'Z \text{ could beat } [C]_F' \rightarrow r <_n s]]]$
- b. $\exists p[p \in \text{ALT}('Z \text{ could not beat } [C]_F') \wedge p \not\approx 'Z \text{ could not beat } [C]_F' \wedge p \notin \text{Bel}(S)]$

A repair-based analysis

If one starts out with the nesting schema, it will be harder to account for the empirical observations made above.

- (58) (“Speaking of the new cosmetic products, Product A sells well not only to women, but also to men. On the other hand, ...”)

Seihin B-wa, josei-ni-wa ureru-ga,
product B-*wa* female-Dat-*wa* sell(Intr.).Prs-but
dansei-ni-**made-wa** urenai.

male-Dat-even-*wa* sell(Intr.).Neg.Prs

‘Product B sells well to women, but it is not the case that it even sells well to men.’

- (59) **Entailment:** ‘It is not the case that [Product B sells well to men].’

CI: ‘Product B sells well to women’ is in the CG & the speaker finds ‘Product B even sells well to women’ possibly false.

Ordinal *made*

A sentence like the following appears to be a counterexample to the generalization that the sequence of *made* + *wa* is possible only in a DE context.

- (60) Zeus-*wa* Carol-ni-*made-wa* kateta.
Z.-*wa* C.-Dat-*made-wa* win.Pot.Pst

Made occurring in a UE context and followed by *wa* can be shown not to be a scalar additive FP.

Ordinal *made*

The form *made* has several senses:

(61) scalar additive use

Ed-ni-**made** katta-no-wa odoroitte.

E.-Dat-*made* win.Pst-Pro-*wa* get.surprised.Pst

(62) endpoint-marking use

a. Gakkoo-**made** aruita.

school-*made* walk.Pst

'I walked to the school.'

b. Tokyo-**made** itta.

T.-*made* go.Pst

'I went to Tokyo.'

c. Gogo ni-ji-**made** benkyoo-shita.

afternoon 2-o'clock-*made* study.Pst

'I studied until 2 p.m.'

d. Ashita-**made** kakaru-daroo.

tomorrow-*made* take.Prs-MAux

'It will take until tomorrow.'

Ordinal *made*

- (63) temporal ordinal use
('I made a plan to do the assignments in the order of
math, science, history, and English. . . .')

Rika-made yatta tokoro-de kyuuukei-shita.

science-*made* do.Pst place-Loc rest.Pst

'I took a break when I finished the science.'

The interpretation of ordinal *made* involves a scale based on temporal order, rather than a scale based on noteworthiness.

Ordinal *made*

Is ordinal *made* a (scalar or non-scalar) additive FP? It appears not.

- (64) Moshi sengetsu *The Prisoner of Azkaban-made*
 if last.month P.A.-*made*
 yonde-okeba, kongetsu-chuu-ni zenkan
 read-do.beforehand.Prov this.month-in-Dat all.volumes
 yomioeru koto-ga dekita-daroo-ni.
 finish.reading.Prs matter-Nom do.Pot.Pst-MAux-DP
 'If I had read all the Harry Potter novels up to
The Prisoner of Azkaban last month, I would be able to finish
 all the Harry Potter novels this month.'
 ≠ The speaker has read some Harry Potter novel other than
 "The Prisoner of Azkaban".

Ordinal *made*

(65) (The interlocutors are talking about a movie trilogy.)

A: “Episode 3”-*wa* *hyooban-ga* *warui-mitaida-ne*.

E.-*wa* reputation-Nom bad-Evid.Prs-DP

Wan-to *tsuu-wa* *doo-datta-no?*

1-and 2-*wa* how-Cop.Pst-DP

‘I hear that “Episode 3” is unpopular. How were the first and second ones?’

B: *Tsuu-made-wa* [*kekkoo hyooban-ga* *yokatta*]_F-yo.

2-*made-wa* fairly reputation-Nom good.Pst-DP

‘The first two had fairly good reputation.’

I suggest that “X-*made*_{ordinal}” is roughly equivalent to “the N’s up to X” or “all N’s up to X”, where N denotes a set of entities that form an ordinal scale and contains the referent of X (e.g., “All Harry Potter novels up to *The Order of the Phoenix*”).

Ordinal *made*

A sentence like (66) is ambiguous between the scalar additive and ordinal uses.

- On the scalar additive reading, it presupposes that Zeus could beat an opponent weaker than Carol. (It is possible for Carol to be Zeus' first opponent.)
- On the ordinal reading, it entails that there was another opponent *x* such that (i) Zeus could *not* beat *x* and (ii) *x* is outranked by Carol on the relevant temporal ordinal scale. (Carol cannot be Zeus' first opponent.)

(66) Zeus-*wa* Carol-ni-*made-wa* katenakatta.
Z.-*wa* C.-Dat-*made-wa* win.Pot.Neg.Pst

Outline

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Other types of of FP clusters

Guerzoni's (2003) discussion of some FP clusters in European languages, and Nakanishi's (2006) discussion of *dake-demo* 'only-even', are highly resonant with my analysis of *dake-wa* and *made-wa*.

- (67) Niemand heeft {ook/zelfs} maar [Maria]_F begroeten.
no.one has also/even only M. greeted
'Nobody even greeted Maria.' (Dutch)

Dake-demo

- (68) [Ichiban kantan-na mondai]_F-**dake-demo** toketara,
 most easy.Attr question-only-even solve.Pot.Cond
 A-o moraeru.
 A-Acc receive.Pot.Prs
 'If you can solve even the easiest problem, you can get an A.'
- (cf.) [Ichiban {muzukashii/#kantan-na} mondai]_F-**demo**
 most difficult.Prs/easy.Attr question-only-even
 toketara, A-o moraeru.
 solve.Pot.Cond A-Acc receive.Pot.Prs
 'If you can solve even the most difficult problem, you can get
 an A.'

Guerzoni and Nakanishi argue (i) that the ONLY-item participating in FP clusters entails the preajacent-proposition and presupposes the exclusive meaning, and (ii) the semantic conflict between clustered FPs triggers a repair by means of scope manipulation.

“Ambiguity” of ONLY

Guerzoni and Nakanishi take the view that some ONLY-items (Dutch *maar*, Japanese *dake*) are underspecified between the prejacent-presupposition meaning and the prejacent-entailment meaning (cf. my Parallel Interpretation Rule).

- (69) a. Hold on {just/#only} a minute!
b. Please, take {just/only} one of my books. (I need the others.)
- (70) a. If Bill smokes {just/#only} three cigarettes, his mother gets upset.
b. If John passes {just/only} one class, his mother gets upset.

“Ambiguity” of ONLY

English *just* and Japanese *dake*(- \emptyset) do allow the prejacent-entailment interpretation, but only in limited contexts such as in a request and in the antecedent of a conditional.

- (71) a. [Gofun]_F-**dake** matte-kure.
five.minute-*dake* wait.Ger-Ben.Imp
'Wait for just five minutes.' (prej-ent)
- b. [Miruku]_F-**dake** irete-kure.
milk-*dake* put.Ger-Ben.Imp
'Put only milk in it.' (prej-ps)
- (72) a. [Mizu]_F-**dake** areba, ikinobirareru-daroo.
water-*dake* exist.Prov survive.Pot.Prs-MAux
'If we just have water, we will be able to survive.' (prej-ent)
- b. [John]_F-**dake**-o yobeba, Ken-wa okoru-daroo.
J.-*dake*-Acc invite.Prov Ken-*wa* get.angry.Prs-MAux
'If we only invite John, Ken will be angry.' (prej-ps)

“Ambiguity” of ONLY

(73) (There was no food on the lifeboat. But ...)

Mizu-**dake** atta-node, ikinobiru
water-*dake* exist.Pst-because survive.Prs
koto-ga dekita.
matter-Nom do.Pot.Pst
(prej-ps reading only)

“Ambiguity” of ONLY

Dake(-∅) on the preadjacent-entailment interpretation does not merely presuppose the exclusive meaning, but further conveys that the entailed proposition is something that leads to a desirable consequence.

- (74) a. (“It is unfortunate that John and Ken cannot come ...”)
 Demo, Luke-{ga/*dake*} kureba, nantoka
 but L.-Nom/*dake* come.Prov somehow
 naru-daroo.
 become.Prs-MAux
 ‘But if Luke comes, then things will be okay.’
- b. (“I managed to convince John and Ken not to come to the party ...”)
 Demo, Luke-{ga/#*dake*} kureba, (kekkyoku)
 but L.-Nom/*dake* come.Prov after.all
 toraburu-ga okoru-daroo.
 trouble-Nom occur.Prs-MAux
 ‘But if Luke comes, we will be in trouble (anyway).’

“Ambiguity” of ONLY

(cf.) (“I managed to convince John and Ken not to come to the party ...”)

Demo, Luke-{ga/*dake-wa*} kuru. Dakara,
but L.-Nom/*dake-wa* come.Prs so

(kekkyoku) paatii-wa mechakucha-ni
after.all party-*wa* messy-Adv
naru-daroo.

become.Prs-MAux

‘But Luke will come. So, the party will be ruined
(anyway).’

“Ambiguity” of ONLY

In sum:

- It is probably necessary to acknowledge the ambiguity of *dake*, to deal with cases like “5-fun-dake matte kudasai”.
- *Dake*₂ (the prej-ent version), however, (i) is allowed only in some non-root environments, and (ii) conveys a CI concerning the desirability of the prejaacent-proposition.
- The ambiguity theory thus cannot account for the entailment/presupposition swapping observed with *dake-wa*, where *dake* conforms to neither of the two conditions.

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Conclusion

The Parallel Interpretation Rule provides the straightforward account of some types of FP clusters:

(75) Suppose (i) sentence: $[\alpha X_F FP_1 \beta]$ entails E_1 and conventionally implicates C_1 , and (ii) sentence: $[\alpha X_F FP_2 \beta]$ entails E_2 and conventionally implicates C_2 . Then, $[\alpha [X_F FP_1] FP_2 \beta]$ entails E_3 and conventionally implicates C_3 , where:

$$(i) E_3 = E_2$$

$$(ii) C_3 \Leftrightarrow C_2 \wedge [\neg[C_1 \Leftrightarrow [E_1 \in CG]] \rightarrow C_1] \wedge [\neg[E_1 = E_2] \rightarrow [E_1 \in CG]]$$

- (76) a. Pan-**dake-wa** tabeta. (ONLY-WA)
 b. Sono kaigoo-ni-wa chiji-**{sae/sura/made}**-mo shusseki-shita. (EVEN-ALSO)

Conclusion

Some other types of FP clusters involve additional complications, but the Parallel Interpretation Rule makes it easier to deal with them than the nesting schema.

- (77) a. Kuruma-**made-wa** kawanakatta. (EVEN-WA)
b. Konbini-**dake-demo** aite-ireba, hirugohan-ga
taberareru. (ONLY-EVEN)
c. Pan-**dake-shika** tabenakatta. (ONLY-SHIKA)
- (78) Niemand heeft {ook/zelfs} **maar** [Maria]_F begroeten.
({ALSO/EVEN} ONLY; Dutch)

Conclusion

This handout with the bibliography is uploaded on:

- <http://www.gsid.nagoya-u.ac.jp/oshima/docs/wafl11ho.pdf>

Thanks!

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