

## When ‘What’ Means ‘Why’: On Accusative Wh-adjuncts in Japanese\*

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### 1. Introduction

#### (1) *Our main claims*

- a. Japanese accusative wh-adjuncts are licensed in a functional projection (FP) related to the speaker’s illocutionary force.
- b. There are two types of reason adjuncts: the ones licensed in the FP-related position and the ones licensed in a VP-adjoined position.

#### (2) **Accusative wh-adjuncts** (Kurafuji 1996, 1997; Ochi 1999)

- a. The accusative-marked wh-phrase *nani-o* ‘what-Acc’ can be used with an intransitive verb ((3a)) or a transitive verb ((3b)).
- b. The accusative *nani-o* is usually translated as ‘why’, in the same way as the Japanese reason wh-phrase *naze* ((4)).

(3) a. Kare-wa **nani-o** sawai-dei-ru no?  
He-Top **what-Acc** make-noise-Prog-Pres Q  
“Why is he making a noise?”

b. (??)Kare-wa **nani-o** henna uta-o utat-tei-ru no?<sup>1</sup>  
He-Top **what-Acc** funny song-Acc sing-Prog-Pres Q  
“Why is he singing a funny song?”

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<sup>1</sup> Kurafuji (1997) judges this example as marginal, due to the Double-*o* constraint (See (32)). Nevertheless, an Accusative wh-adjunct is compatible with a transitive verb if the direct object is marked with a focus particle (such as *-bakari* ‘only’) rather than an Accusative Case marker *-o*.

(i) John-wa **nani-o** henna uta-bakari utat-tei-ru no?  
John-Top **what-Acc** funny song-only sing-Prog-Pres Q  
“Why is John singing only funny songs?”

On the other hand, Ochi (1999) claims that the Double-*o* constraint is not observed in sentences like (3b).

- (4) a. Kare-wa **naze** sawai-deu-ru no?  
 He-Top **why** make-noise-Prog-Pres Q  
 “Why is he making a noise?”
- b. Kare-wa **naze** henna uta-o utat-tei-ru no?  
 He-Top **why** funny song-Acc sing-Prog-Pres Q  
 “Why is he singing a funny song?”

(5) *What is interesting about (3)*

- a. Intransitive verbs assign Accusative Case to *nani-o*? ((3a))  
 b. Transitive verbs assign two Accusative Cases? ((3b))

(6) *Accusative wh-adjuncts ≠ naze ‘why’*

- a. Accusative wh-adjuncts have some special speaker’s inference.  
 b. Accusative wh-adjuncts have an animacy restriction on the subject.  
 c. Accusative wh-adjuncts are incompatible with sluicing.  
 d. To explain these differences, we claim that Accusative wh-adjuncts, unlike *naze* ‘why’, are licensed in an FP.

(7) *On the status of the accusative:*

Although Kurafuji (1996, 1997) argues that Accusative wh-adjuncts have a structural Case, we claim that they have an inherent Case.

## 2. Adjunct status of Accusative wh-adjuncts

(8) Accusative wh-adjuncts are sensitive to the same LF islands as *naze* ‘why’ (ECP phenomena: (9)-(11)), unlike argument *nani-o* ‘what-Acc’.

(9) Bridge verb vs. Non-bridge verb

- a. John-wa [karera-ga **nani-o** si-tei-ta to] *it-ta/sasayai-ta* no?  
 John-Top they-Nom **what-Acc** do-Prog-Past C *say-Past/whisper-Past* Q  
 “What did John say/whisper [that they were doing t]?”
- b. John-wa [karera-ga **naze/nani-o** sawai-dei-ta to]  
 John-Top they-Nom **why/what-Acc** make-noise-Prog-Past C  
*it-ta/?\*sasayai-ta* no?  
*say-Past/?\*whisper-Past* Q  
 “Why did John say/whisper [that they were making a noise]?”

(10) Complex NP

- a. John-wa [**nani-o** si-tei-ru] hito-tati-o keebetusi-tei-ru no?  
John-Top **what-Acc** do-Prog-Pres people-Acc despise-Prog-Pres Q  
“What is John despising people [who are doing t]?”
- b. \*John-wa [**naze/nani-o** sawai-dei-ru] hito-tati-o  
John-Top **why/what-Acc** make-noise-Prog-Pres people-Acc  
keebetusi-tei-ru no?  
despise-Prog-Pres Q  
“Why is John despising people [who are making a noise t]?”

(11) Adjunct island

- a. John-wa [karera-ga **nani-o** si-ta kara] okot-tei-ru no?  
John-Top [they-Nom **what-Acc** do-past because] be-upset-Prog-Pres Q  
“What is John upset [because they did t]?”
- b. \*?John-wa [karera-ga **naze/nani-o** sawai-da kara]  
John-Top [they-Nom **why/what-Acc** make-noise-Past because  
okot-tei-ru no?  
be-upset-Prog-Pres Q  
“Why is John upset [because they made a noise t]?”

(12) Accusative wh-adjuncts behave in the same way as other wh-adjuncts with respect to islands.

### 3. Accusative wh-adjuncts are different from *naze* ‘why’

#### 3.1. Animacy restriction and speaker inference

(13) *Our observation 1*

- a. The subject of a question with accusative wh-adjuncts needs to be a (higher) animate individual ((14)).
- b. Questions with accusative wh-adjuncts have a special connotation that the speaker is **surprised at** or is **disapproval of** the animate subject’s unexpected behavior.<sup>2</sup>
- c. There is no such inference in questions with *naze* ‘why’. ((16))

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<sup>2</sup> Although he does not discuss the animacy effect, Ochi (1999: 155) also notes that ‘wh-questions the adjunct wh-NP are most appropriate in a context in which the speaker is emotionally affected (i.e. puzzled, annoyed, etc.) to a certain degree.’

- (14) a. *Ano hito-wa nani-o yuka-de korogat-tei-ru* no?  
*That person-Top what-Acc floor-on roll-Prog-Pres* Q  
 “Why is that person rolling on the floor?”
- b. #*Ano booru-wa nani-o yuka-de korogat-tei-ru* no?  
*That ball-Top what-Acc floor-on roll-Prog-Pres* Q  
 “Why is that ball rolling on the floor?”
- (15) Speaker’s inference in (14a)  
 “That person *shouldn’t be* rolling on the floor. Why is he doing that!?”
- (16) a. *Ano hito-wa naze yuka-de korogat-tei-ru* no?  
*That person-Top why floor-on roll-Prog-Pres* Q  
 “Why is that person rolling on the floor?”
- b. *Ano booru-wa naze yuka-de korogat-tei-ru* no?  
*That ball-Top why floor-on roll-Prog-Pres* Q  
 “Why is that ball rolling on the floor?”
- (17) *Our analysis*
- a. Licensing of the Accusative wh-adjunct *nani-o* ‘what-Acc’ is related to the speaker’s attitude/illocutionary force.
- b. There is a functional projection (i.e. FP) that is related to such an illocutionary force.
- c. *Nani-o* is licensed in FP (tentatively, [Spec, FP]: (18)).
- (18) [<sub>CP</sub> [<sub>FP</sub> **nani-o** [<sub>IP</sub> kare-wa [<sub>VP</sub> sawai] dei-ru] F] no]  
 what-Acc he-Top make.noise Prog-Pres Q  
 “Why is he making a noise?” (= (3a))

- (19) a. In (18), *nani-o* is generated inside FP: higher than the whole IP.  
 b. The word order in (3) is derived by scrambling of the (topicalized) subject.<sup>3</sup>  
 c. The surface order in (18) is also possible.
- (20) *Test for scrambling: numeral quantifiers* (Miyagawa 1989)  
 a. A numeral classifier and the NP it modifies are in a mutual c-commanding relation in their base-positions ((21a-c)).  
 b. The modified DP separated with the numeral quantifier indicates that it has undergone scrambling ((21d)).
- (21) a. Gakusei-ga    **san-nin**            hon-o        yon-da.  
 Student-Nom    **3-CL(person)**    book-Acc    read-Past  
 “Three students read books.”  
 b. Gakusei-ga    hon-o        **san-satsu**    yon-da.  
 Student-Nom    book-Acc    **3-CL(book)**    read-Past  
 “Students read three books.”  
 c. \*Gakusei-ga    hon-o        **san-nin**            yon-da.  
 Student-Nom    book-Acc    **3-CL(people)**    read-Past  
 “Three students read books.”  
 d. Hon-o<sub>1</sub>    gakusei-ga    t<sub>1</sub>    **san-satsu**    yon-da.  
 Book-Acc    students-Nom    **3-CL(book)**    read-Past  
 “Students read three books.”

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<sup>3</sup> Kurafuji (1996: 86) observes that an Accusative wh-adjunct, similarly to *naze*, shows an anti-superiority effect (Watanabe 1992).

- (i) a. Dare-ga        **naze/nani-o**            sawai-dei-ru            no?  
 Who-Nom        **why/what-Acc**            make-noise-Prog-Pres    Q  
 “Who is making a noise why?”  
 b. ??**Naze/nani-o**        dare-ga            sawai-dei-ru            no?  
       **Why/What-Acc**    who-Nom            make-noise-Prog-Pres    Q  
 “Why is who making a noise?”

If *nani-o* is already higher in the structure than the subject as in our analysis, the source of the degradedness of (ib) is mysterious. However, multiple questions with the Accusative wh-adjunct are already degraded to many speakers, contra Kurafuji’s judgment on (ia). It is presumably due to the fact that, if you do not know *who* is making a noise, you cannot judge whether the action is surprising/inappropriate *for that person* or not, which makes it difficult to have the connotation in (13b).

- (22) a. A numeral classifier below *nani-o* can modify the subject in (23) (modified from Ochi 1999: 159).<sup>4</sup>  
 b. Unlike (21c), the subject in (23) has undergone scrambling.
- (23) ?Gakusei-ga      **nani-o**      **san-nin**      sawai-dei-ru      no?  
 Student-Nom      **what-Acc**      **3-CL(people)** make-noise-Prog-Pres      Q  
 “Why are three students making noise?”

- (24) *Summary*  
 a. There is an animacy restriction on Accusative wh-adjuncts.  
 b. Accusative wh-adjuncts are licensed in FP, which is related to speaker’s inference (surprise, disapproval).

### 3.2. The Accusative on Accusative wh-adjuncts as an inherent Case

- (25) *Kurafuji’s analysis* (1996; 1997)  
 a. The Accusative Case on Accusative wh-adjuncts is a structural Case.  
 b. Accusative wh-adjuncts are incompatible with passives and unaccusatives; they need a verb with an Accusative Case feature (unergatives, transitives).  
 c. Multiple Specs are allowed.  
 d. Accusative wh-adjuncts are base-generated in outer [Spec, vP] (1997).
- (26) a. **Naze/\*nani-o**      henna uta      bakari-ga      utaw-are-tei-ru      no?  
**Why/what-Acc**      funny song      only-Nom      sing-Pass-Prog-Pres      Q  
 “Why are only funny songs being sung?”  
 b. **Naze/\*nani-o**      sonnani      shocchuu      densha-ga  
**Why/what-Acc**      so      often      train-Nom  
 okurete      toochakusu-ru      no?  
 late      arrive-Pres      Q  
 “Why do trains arrive late so often?”

<sup>4</sup> This example sounds better with a particle *-mo* ‘even’ on the classifier.

(i) Gakusei-ga    nani-o      jyuunin-mo      sawai-dei-ru      no?  
 Student-Nom    what-Acc      10-CL(people)-even    make-noise-Prog-Pres    Q  
 “Why are **as many as** ten students are making a noise?”

In this sentence, *the large number* of students who are making a noise is the source of the surprise/disapproval of the speaker. Such a situation is more natural than just having an indefinite DP (*three students*) as the target of speaker’s surprise/disapproval.

(27) [<sub>CP</sub> ... [<sub>VP</sub> nani-o [<sub>V'</sub> kare-wa [<sub>VP</sub> [<sub>VP</sub> t<sub>V</sub>] sawai] dei-ru] no]?  
 What-Acc he-Top make-noise Prog-Pres Q  
 “Why is he making a noise?”

(28) *Apparent problem of ours:*

How is the Accusative Case licensed in the functional projection FP?

(29) *Our answer:*

- a. The Accusative Case on Accusative wh-adjuncts is an inherent Case.
- b. The form *nani-o* is fully lexicalized with the Case marker.
- c. Therefore, it does not have to be structurally licensed.

(30) Argument 1: Passive and unaccusative

- a. When the animacy condition ((13)) is satisfied, passives and unaccusatives are compatible with Accusative wh-adjuncts, contra Kurafuji’s examples (26).<sup>5</sup>
- b. Therefore, the argument that *nani-o* has a structural Case based on (26) is not tenable.

(31) a. Kare-wa **nani-o** minna-ni izime-rare-tei-ru no?  
 He-Top **what-Acc** everyone-Dat bully-Pass-Prog-Pres Q  
 “Why is he bullied by everyone?”

b. Kare-wa **nani-o** itsumo okurete toochakusu-ru no?  
 He-Top **what-Acc** always late arrive-Pres Q  
 “Why does he always arrive late?”

(32) Argument 2: Double-*o* constraint (Ochi 1999: 157-159)<sup>6</sup>

- a. Japanese has a constraint against having two Accusative-marked phrases in a clause (Double-*o* constraint: Harada 1973, Shibatani 1973).
- b. Although an embedded subject in causative can be marked with either Accusative or Dative ((33a)), it cannot be marked with Accusative when there is another Accusative marked phrase in the clause ((33b)).
- c. The fact that the double-*o* constraint is absent (or weak) in (34) suggests that *nani-o* has a different status from other Accusative marked phrases.

<sup>5</sup> Ochi (1999: 165) shows that Russian (Nominative/Genitive) wh-adjuncts are compatible with unaccusatives, although he accepts Kurafuji’s data in Japanese.

<sup>6</sup> We thank Masaya Yoshida (p.c.) for pointing our attention to these data.

- (33) a. Mary-ga [IP John-**o/ni** t<sub>1</sub>] aruk<sub>1</sub>-ase-ta.  
 Mary-Nom John-**Acc/Dat** walk-make-Past  
 “Mary made John walk.”
- b. Mary-ga [IP John-**\*o/ni** [kono hon]-**o** t<sub>1</sub>] yom<sub>1</sub>-ase-ta.  
 Mary-Nom John-**\*Acc/Dat** [this book]-**Acc** read-make-Past  
 “Mary made John read this book.”
- (34) (??)Kare-wa **nani-o** henna uta-o utat-tei-ru no? (= (3b))  
 He-Top **what-Acc** funny song-Acc sing-Prog-Pres Q  
 “Why is he singing a funny song?”

(35) *Summary*

Accusative wh-adjuncts have an inherent Case, rather than a structural Case. So our proposal that they are generated inside an FP is not problematic with respect to Case theory.

### 3.3. Impossibility of sluicing

(36) *Our observation 2*

Accusative wh-adjuncts cannot undergo sluicing, unlike other wh-phrases. (*Naze* ‘why’ in (37a), an argument *nani-o* ‘what-Acc’ in (37b))

- (37) a. John-ga (aru riyuu-de) sawai-dei-ru ga,  
 John-Nom (some reason-for) make.noise-Prog-Pres but  
 watasi-wa **naze/\*nani-o** ka sira-nai.  
 I-Top **why/what-Acc Q** know-not  
 “John is making a noise (for some reason), but I don’t know why.”
- b. John-ga nanika-o kat-ta ga, watasi-wa **nani-o** ka sira-nai.  
 John-Nom something-Acc buy-Past but I-Top **what-AccQ** know-not  
 “John bought something, but I don’t know what.”

(38) **The Parallelism account** of sluicing (Fox and Lasnik 2003)

An existential in the antecedent (*a certain girl* in (39a)) and the trace of the sluiced wh-phrase (*which* in (39b)) need to be in parallel positions.

- (39) Fred said that I talked to a certain girl,  
 but I don't know **which**<sub>1</sub> [~~Fred said that I talked to t<sub>1</sub>~~].  
 a. *The antecedent: Fred said that I talked to a certain girl*

$\exists f \lambda f'$  [Fred said that I talked to **f'**(girl)]

- b. *The sluice: (which girl) Fred said that I talked to t*  
**which g girl**  $\lambda g'$  [Fred said that I talked to **g'**(girl)]

(40) *Our explanation*

- a. Suppose that an Accusative wh-adjunct is base-generated in FP as we claim ((41a)), while standard reason adjuncts are base-generated in a VP-adjoined position ((41b)).  
 b. (41a) does not satisfy Parallelism, because the trace of *nani-o* is inside FP, while *aru riyuu-de* 'for some reason' in the antecedent is in the VP-adjoined position.

- (41) [<sub>IP</sub> John-ga [<sub>VP</sub> (aru riyuu-de) [<sub>VP</sub> sawai]] dei-ru] ga, watasi-wa  
 John-Nom some reason-for make.noise Prog-Pres but I-Top  
 a. \* [<sub>CP</sub> **nani-o**<sub>1</sub> [<sub>FP</sub> t<sub>1</sub>] [<sub>IP</sub> John-ga [<sub>VP</sub> sawai] dei-ru] F] ka] sira-nai.  
**what-Acc** John-Nom make-noise Prog-Pres Q know-not  
 b. [<sub>CP</sub> **naze**<sub>1</sub> [<sub>IP</sub> John-ga [<sub>VP</sub> t<sub>1</sub>] [<sub>VP</sub> sawai]] dei-ru] ka] sira-nai.  
**why** John-Nom make-noise Prog-Pres Q know-not

(42) *Summary*

Assuming that Accusative wh-adjuncts are base-generated in a different position than other reason adjuncts (i.e. [Spec, FP]), their incompatibility with sluicing is accounted for in terms of Parallelism.

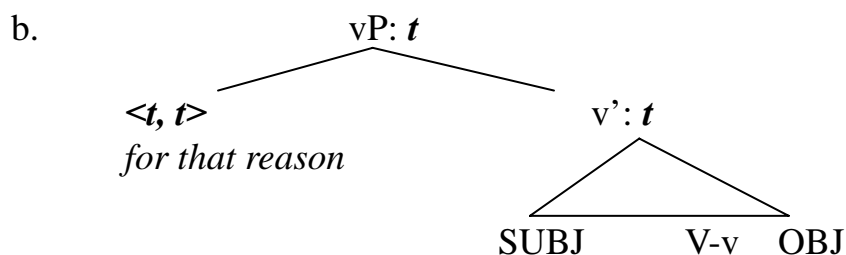
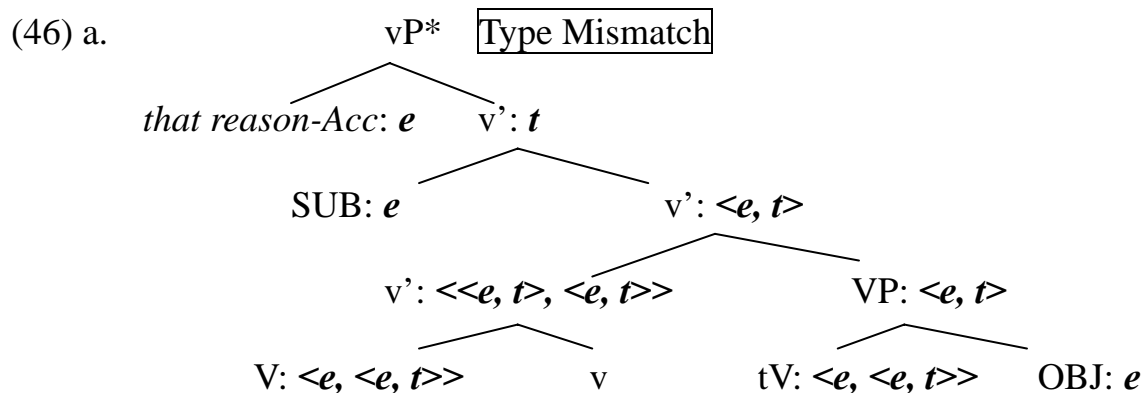
#### 4. On the peculiarity of Accusative wh-adjuncts

(43) One peculiarity of Accusative wh-adjuncts

Why cannot reason adjuncts other than wh-adjunct be licensed with Accusative Case? (e.g. *that reason* in (44))

- (44) Kare-wa [sono riyuu]-de/\*o sawai-dei-ru.  
 He-Top [that reason]-for/\***Acc** make-noise-Prog-Pres  
 "He is making a noise \*(for) that reason."

- (45) *Kurafuji's account*: Type-theoretic analysis
- DPs such as *sono riyuu* 'that reason' are of type  $e$ . When it merges with  $v'$ , which is of type  $t$ , it causes type mismatch. (46a)
  - When a DP combines with a preposition (type  $\langle e, \langle t, t \rangle \rangle$ ), it can combine with  $v'$ . (46b)
  - Reason wh-phrases such as *naze* 'why' and *nani-o* 'what-Acc' are of type  $\langle \langle t, t \rangle, t \rangle$  and they can directly Merge with  $v'$ .



- (47) A potential problem
- Why are only *naze* and *nani-o* of type  $\langle \langle t, t \rangle, t \rangle$ ?
  - Wh-expressions like *dono riyuu* 'which reason' still need to be combined with a P ((48)).
  - The semantic type account seems to be a restatement of the question, rather than a solution.

(48) Kare-wa      [dono riyuu]-**de**/\***o**      sawai-dei-ru      no?  
 He-Top      [which reason]-**for**/\***Acc**      make-noise-Prog-Pres      Q  
 “\*(For) which reason is he making a noise?”

(49) *Our explanation*

- a. The form *nani-o* is fully lexicalized with the Case marker ((29b)).
- b. It is an idiosyncratic inherent Case, which does not apply to every DP.
- c. Under this assumption, it is not problematic that it is not a productive phenomenon as shown in (44).

(50) Other peculiar fixed expressions with wh-phrases with special speaker's inference: NPI *nanimo* 'anything'

- a. The phrase *nanimo* in (51) and (52) are identical in form to the NPI *nanimo* 'anything.'
- b. They have special speaker inferences.
- c. They do not appear in an argument position, unlike *nanimo* in (53).

(51) a. (**Nanimo**)        anata-wa    naka    naku-te-ii.<sup>7</sup>

(**Anything**)    you-Top    cry    not-TE-good.

“You don't need to cry.” “There is nothing to cry about.”

- b. Inference: the speaker *is surprised that you are crying/thinks that you shouldn't cry*

(52) a. Watasi-wa        (**nanimo**)    sawai-de-nai.

I-Top                (**anything**)    make-noise-Prog-not

“I'm not making a noise (at all).”

- b. Inference: the speaker is being defensive after being blamed

(53) John-wa        **nanimo**        tabe-nakat-ta.

John-Top        **anything**    eat-not-Past

“John didn't eat anything.”

(54) a. Both the wh-phrase *nani-o* 'what-Acc' and the NPI *nanimo* 'anything' have a peculiar adjunct counterpart with some speaker's inferences.

- b. They are licensed in questions and negation, respectively.
- c. Something about *downward entailing contexts* is relevant to these fixed expressions? (For future research)

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<sup>7</sup> The morpheme TE is normally used to conjoin Vs.

## 5. Conclusion

### (55) *New findings*

- a. Questions with an Accusative wh-adjunct have an animacy restriction.
- b. Questions with an Accusative wh-adjunct have a special speaker's inference.
- c. Accusative wh-adjuncts are incompatible with sluicing.

### (56) *Our claims*

- a. Accusative wh-adjuncts are licensed in an FP, which is related to illocutionary force.
- b. Sluicing is not licensed with an Accusative wh-adjunct because it is not parallel in position with ordinary reason adjuncts.
- c. Accusative wh-adjuncts have an inherent Case, which is not a productively applied to other DPs.
- d. The process of 'lexicalizing DP with an inherent Case' might be related to downward entailing contexts.

## Appendix: other properties of Accusative wh-adjuncts in Japanese

(57) a. *Negation* (Ochi 1999: 187)

Accusative wh-adjuncts are incompatible with clausemate negation. (58)

b. *Intensifier* (Kurafuji 1997: 263)

In many contexts, Accusative wh-adjuncts are licensed only when there is an intensifying expression such as *sonnani* ‘so much’. (59)

(58) John-wa      **naze/\*nani-o**      nai-tei-nai      no?  
 John-Top      **why/what-Acc**      cry-Prog-not      Q  
 “Why is John not crying?”

(59) John-wa      **nani-o**      \*(sonnani issyookemee) oyoidei-ru      no?  
 John-Top      **what-Acc**      \*(so-much hard)      swim-Prog-Pres Q  
 “Why is John swimming \*(so hard)?”

(60) a. Although Ochi (1999) attributes the incompatibility with negation (58) to **island effect**, it might be possible that the data is subsumed under another condition (57b).

b. Accusative wh-adjuncts are felicitously used when *the degree of the action* is intense.

c. Predicates with simple negation cannot be intensified ((61)). Therefore, they are incompatible with Accusative wh-adjuncts.

(61) [Sono akachan-ga sonnani      nai-tei-nai      to-wa]      erai.  
 That baby-Nom so-much cry-**Prog-not**      C-Top      impressive  
 “It is impressive that the baby is not crying so much.”  
**So-much>Not only**: the baby cried a little bit.

(62) a. On the other hand, negation *inside* a progressive marker can be intensified, as shown in (63b). In this reading, the degree of *the baby’s not crying* was impressive.

b. With such type of negation, Accusative wh-adjuncts are possible. (64)

(63) [Sono akachan-ga sonnani      naka-nai-dei-ru      to-wa]      erai.  
 That baby-Nom so-much cry-**not-Prog-Pres**C-Top      impressive  
 “It is impressive that the baby is not crying so much.”  
 a. **Not>So-much**: the baby cried a little bit.  
 b. **So-much>Not**: the baby didn’t cry at all.

- (64) John-wa      **nani-o**      tata-**nai-dei-ru**      no?  
John-Top      **what-Acc**      stand-up-**not-Prog**-Pres Q  
“Why isn’t John standing?” (in a context where he’s supposed to stand up)

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