

Questions, particles, and intervention*

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1 Intervention effects

“Intervention effects” refer here to the fact that there seems to be a certain class of things that causes problems when located between a *wh*-word and the interrogative complementizer with which it is interpreted. One of the earliest observations of this phenomenon was made by Hoji (1985) for Japanese.

Japanese is an SOV language with relatively free word order (although heads are quite strictly final). The subject and object can be flipped around freely.

- (1) a. John-ga nani-o nomimasita ka?
John-NOM what-ACC drank Q
(‘What did John drink?’)
b. nani-o John-ga nomimasita ka?
what-ACC John-NOM drank Q
(‘What did John drink?’)

There is a circumstance in which this freedom is curtailed, when something like *John-ka Bill* ‘John or Bill’ is involved. The *wh*-word must precede such phrases.

- (2) a. ?* [John-ka Bill]-ga nani-o nomimasita ka?
John-or Bill-NOM what-ACC drank Q
(‘What did John or Bill drink?’)
b. nani- o_i [John-ka Bill]-ga t_i nomimasita ka?
what-ACC John-or Bill-NOM drank Q
(‘What did John or Bill drink?’)
c. dare-ga [sake-ka biiru(ka)]-o nomimasita ka?
who-NOM sake-or beer(or)-ACC drank Q
(‘Who drank either sake or beer?’)

*Thanks, L^AT_EX, for making this all take so long to write.

There are a number of other things in Japanese that have this effect, including *dareka* ‘someone’, *daremo* ‘everyone’, and *NP-sika* ‘only_{NPI} NP’.

Since then, similar effects have been observed in a wide range of languages. Beck’s (2006) introduction has a nice brief overview, and gives examples from Hindi, Japanese, Mandarin, Malayalam, Turkish, German, Korean, French, Dutch, English, Passamaquoddy, and Thai. She lists (3) as commonly occurring intervenors in languages (although it is important to note that between languages, the list of intervenors seems to vary).

- (3) only, even, also, not, (almost) every, no, most, few (and other nominal quantifiers),
always, often, never (and other adverbial quantifiers)

There are two major questions to address:

- What causes intervention effects?
- What makes an intervenor intervene? (What characterizes the intervenors?)

2 We can probably rule out phonetics

Several different approaches have been taken to these facts, which we can divide this way:

Syntactic. Intervenors block a movement/agreement relation between C and the *wh*-word.

Semantic. Intervenors disrupt the semantic interpretation.

Pragmatic. Intervenors can’t be topics, but are forced to be in the relevant configurations.

3 Once upon a time... in syntax ...

3.1 Japanese, its questions, and its morphology

- (4) Taroo-ga hon-o kaimasita.
Taro-NOM book-ACC bought.POLITE
‘Taro bought a book.’
- (5) Taroo-ga hon-o kaimasita **ka**?
Taro-NOM book-ACC bought.POLITE Q
‘Did Taro buy a book?’
- (6) Taroo-ga nani-**ka** kaimasita.
Taro-NOM what-Q bought.POLITE
‘Taro bought something.’
- (7) Taroo-ga nani-o kaimasita **ka**?
Taro-NOM what-ACC bought.POLITE Q
‘What did Taro buy?’

- (8) Taroo-ga nani-o kaimasita **ka**?
 Taro-NOM what-ACC bought.POLITE Q
 ‘What did Taro buy?’
- (9) John-**ka** Bill-(**ka**-)ga hon-o katta.
 John-Q Bill-(Q-)NOM book-ACC bought
 ‘John or Bill bought books.’
- (10) Taroo-sika LGB-o kaw-anakat-ta.
 Taro-only_{NPI} LGB-ACC buy-NEG-PAST
 ‘Only Taro bought LGB.’

3.2 Some observations, hypotheses, and assumptions

Initial observations...

Observation 1. The indefinite in (6), the disjunction in (9), and the NPI in (10) are all intervenors.

Observation 2. They also all seem to have *ka* in them.

Observation 3. Questions, like (5) and (7), have a *ka* at the end.

Observation 4. The path along which intervenors seem to be prohibited is the path between the *wh*-word and the CP of the interrogative clause it is interpreted with. Where *ka* is.

Leading to a pretty straightforward way to understand intervention effects...

Assumption 1. Movement is constrained by minimality (shortest move).

Hypothesis 1. The *ka* that appears above is the same basic morpheme in all the examples.

Hypothesis 2. The *ka* reaches the clause periphery in questions by moving there. Rather like deriving (8) from (6), see (11).

Hypothesis 3. The initial position of *ka* is right next to the *wh*-word (except...)

(11) dare-ga t_{ka} hon-o kaimasita (ka)?

3.3 Interaction of intervention effects and islands

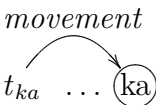
Assumption 2. Movement is constrained by islands.

If movement cannot cross islands (Assumption 2), ...
 ... *ka* is going to reach the end of the clause by moving (Hypothesis 2) ...
 ... from next to the *wh*-word (Hypothesis 3)...
 ... then a *wh*-word should not be allowed in an island.
 Great, a prediction. Let's see. (12) should be bad.

- (12) Mary-wa [John-ga nani-o katta atode] dekaketa no?
 Mary-TOP John-NOM what-ACC bought after left Q
 'Mary left before John bought what? (lit.)'

Except, hmm... it *isn't* bad. That didn't quite work out as well as we might have hoped. Well, there's pretty much just one option left, then.

Hypothesis 4. If a *wh*-word is inside an island, the *ka* can start outside.

- (13) ... [island ... *wh* ...] t_{ka} ... (ka)
- 
- The diagram shows a curved arrow labeled 'movement' pointing from a circled 'ka' to a trace 't_ka'.

Well...

That's kind of weird. But it does make a prediction: Intervention effects should only arise along the path of *ka*-movement, so they should not arise *within* an island. And they don't.

- (14) a. ?? dareka-ga nani-o katta no?
 someone-NOM what-ACC bought Q
 ('What did someone buy?')
- b. Mary-wa [dareka-ga nani-o katta atode] dekaketa no?
 Mary-TOP someone-NOM what-ACC bought after left Q
 'Mary left before someone bought what? (lit.)'
- c. Mary-wa [nani-o dareka-ga katta atode] dekaketa no?
 Mary-TOP what-ACC someone-NOM bought after left Q
 'Mary left before someone bought what? (lit.)'

There is a sentence missing here from the paradigm, and it turns out to be important in distinguishing this syntactic account from the pragmatic account proposed by Tomioka (2007). The missing example is one with an intervention configuration in a simply embedded clause. The prediction of the syntactic account is that it will exhibit an intervention effect. The fact should be established, maybe even a place where judgment experiments might be helpful? However, the effect seen in the more complex examples below in (29) and (28a) suggests so.

Other things to consider: There is a difference between intervenors in the strength of the effect they exhibit. NPIs tend to be very strong, *ka*-formed indefinites seem to be pretty strong, *mo*-formed quantifiers seem to be relatively weak. This might be easier to establish with NPIs.

3.4 Sinhala

See, e.g., Kishimoto (1992, 2005). In Sinhala, we see the same (or very similar) range of functions for the question particle as we saw in Japanese.

- (15) Chitra ee potə gatta də?
Chitra that book bought Q
'Did Chitra buy that book?'
- (16) mahatteəṭə tee də koopī də oonə?
gentleman-DAT tea Q coffee Q necessary
'Do you (sir) want tea or coffee?'
- (17) Chitra mokak də gatta.
Chitra what Q bought
'Chitra bought something.'
- (18) Chitra mokak də gatte?
Chitra what Q bought-E
'What did Chitra buy?'
- (19) Ranjit [kau də aawe kiyəla] dannəwa.
Ranjit who Q came-E that know
'Ranjit knows who came.'
- (20) Ranjit [kau də aawa kiyəla] danne?
Ranjit who Q came that know-E
'Who does Ranjit know came?'
- (21) Ranjit [kauru aawa də kiyəla] dannəwa.
Ranjit who came Q that know
'Ranjit knows who came.'

And, what's particularly interesting is that the conclusion arrived at only indirectly from Japanese—that the *ka* particle (Q) sits just outside an island when the *wh*-word is inside—seems to be evident on the surface in Sinhala.

- (22) * [Chitra monəwa də kanə koṭə] Ranjit pudumə unee?
Chitra what Q ate when Ranjit surprise become-E
(‘Ranjit was surprised when Chitra ate what?’)
- (23) [Chitra monəwa kanə koṭə] də Ranjit pudumə unee?
Chitra what ate when Q Ranjit surprise become-E
'Ranjit was surprised when Chitra ate what?'
- (24) * oyaa [Chitra kaa-ṭe də dunnə potə] kiuwe?
you Chitra who-DAT Q gave book read-E
(‘You read the book that Chitra gave to whom?’)
- (25) oyaa [Chitra kaa-ṭe dunnə potə] də kiuwe?
you Chitra who-DAT gave book Q read-E
'You read the book that Chitra gave to whom?'

These are indeed islands... clefting and scrambling out of them is prohibited.

The idea: Sinhala and Japanese are basically the same, both described by (11)—the difference is that Japanese moves Q overtly whereas Sinhala moves Q covertly.

Also, check out the “-E” suffix—which basically seems to signal “there is a Q in this clause that needs to move to C.”

3.5 Tlingit

Cable (2007) has recently made some interesting proposals about Tlingit. Tlingit is, I believe, kind of an SOV language, but with very free word order—except in *wh*-questions, where the *wh*-phrase seem to need to precede the main predicate. Cable’s conclusion is that there is overt *wh*-movement. Interesting in this connection is that, apart from the overt movement part, Tlingit shows the same kind of Q-on-the-edge-of-islands property. (And Tlingit can also form indefinites from *wh*-words and Q.)

- (26) a. [[Wáa kilgéiyi _{CP}] xáat _{NP}] sá i tuwáa sigóo ?
 how it.is.big.REL fish Q you.want
 ‘How big a fish do you want?’
 b. * [[Wáa sá kilgéiyi _{CP}] xáat _{NP}] i tuwáa sigóo ?
 how Q it.is.big.REL fish you.want
 (‘How big a fish do you want?’)

There will be more to say about Cable (2007) in a while.

3.6 Migration examples

In Hagstrom (1998) I spent quite a few pages pondering the question of what it really means that Q can start at the edge of islands. It raises a bunch of questions, of course. Is it just when *wh*-words are in islands that Q can start far away from *wh*-words? When building the structure from the bottom up, how do we know whether to merge Q or not (how do we know whether we’re going to be in an island?)

The nicest conclusion would probably have been to find some justification for saying that Q simply attaches to islands when the island contains a *wh*-word. But, the problem is...

- (27) a. ?? ... [*island* ... [... Int. ... *wh* ... that] ...] Q ?
 b. ... [*island* ... [... *wh* ... Int. ... that] ...] Q ?
 c. ... [*island* ... Int. ... [... *wh* ... that] ...] Q ?
- (28) a. ?? Taro-wa [Hanako-ga [John-ka Mary-ga nani-o sita-to] itta
 Taro-TOP Hanako-NOM John-or Mary-NOM what-ACC did-that said
 atode] kaetta no?
 after go.home Q
 (‘What did Taro go home after Hanako said John or Mary did?’)

- b. Taroo-wa [Hanako-ga [nani-o John-ka Mary-ga sita-to] itta
 Taro-TOP Hanako-NOM what-ACC John-or Mary-NOM did-that said
 atode] kaetta no?
 after go.home Q
 ‘What did Taro go home after Hanako said John or Mary did?’
- c. Taroo-wa [John-ka Mary-ga [nani-o Hanako-ga sita-to] itta
 Taro-TOP John-or Mary-NOM what-ACC Hanako-NOM did-that said
 atode] kaetta no?
 after go.home Q
 ‘What did Taro go home after John or Mary said Hanako did?’

You can imagine just how easy it was to judge these examples. But here’s what’s happening. The intervention configuration is like in (14a). This disappears in islands, as in (14b). But *it comes back* in an embedded clause within an island. That is, (28a) displays an intervention effect, and (28b) does not.

I’d be more suspicious of the judgments, except that there was a sort of similar observation made in (Watanabe, 1992, p. 59), which is not predicted by Watanabe’s proposal.

- (29) ?? [[Mary-ga nani-o katta kadooka] Tom-ni tazuneta hito]-ga
 Mary-NOM what-ACC bought whether Tom-DAT asked person-NOM
 kubininatta no?
 was.fired Q
 (‘The person who asked Tom whether Mary bought what was fired?)

This leads to a conclusion that I would not have otherwise wanted to have reached. That Q, that sits at the edge of, e.g., Sinhala islands, must have moved *there* from inside. Why? Intervention effects diagnose movement of Q, and so if there are intervention effects inside the island, Q must have been down there at some point.

But, on the other hand, in a simple island (with no embedded clause), intervention effects are gone. So, the picture we seem to have is that Q moves to (every) C (on the way to its interrogative C), but can magically fly (I called it “migrate”) to the edge of islands in some way that doesn’t involve the attraction of the features that intervenors and Q share. (Note too (28c), where if the intervenor is inside the island, but outside the clause embedded in the island, the intervention effect is gone again).

I still don’t feel like I have a very pleasing story here, but pleasing or not, the facts do seem to be pushing us to such a conclusion.

This is a *much* finer set of distinctions than are predicted (or, really, acknowledged) by Tomioka (2007) (the pragmatic account, as we’ll see). Perhaps they are an illusion, but in any event, here is one place where the facts distinguish the two approaches. Also, I deduce from examples like (28a) that the missing example showing intervention effects in a simple embedding will be bad when it is eventually verified.

These are also the cases that are not predicted by the semantic account, to be discussed below. For these accounts, islands don’t really play a role.

4 A semantic account of intervention effects

4.1 Interpreting *wh*-in-situ and focus in situ

Languages differ in how they treat their *wh*-words. Some move just one *wh*-word (English), some move all of them (Bulgarian), some don't move any (Japanese).

Why do *wh*-words move? A longstanding thought (Huang (1982), Karttunen (1977)) is that they move because it's required for interpretation.

(30) What did you buy?

(31) Tell me the *x* such that [you bought *x*].

The idea is that the trace of *wh*-movement serves as a variable for an operator that must take clausal scope. Given that "What did you buy?" means pretty much the same thing in all languages, no matter where the *wh*-word is, this suggests that even in languages where you don't see the *wh*-word taking clausal scope, it has somehow moved abstractly by the time interpretation occurs. A very similar argument was made for focus as well:

(32) John bought a LAMP_F

(33) A lamp is the (only) *x* (of the alternatives) such that John bought *x*.

The problem is that both *wh*-in-situ and focus in situ seem to be able to escape from islands, which the overt movement counterparts cannot.

(34) a. *What did John call the police after you stole?

b. Who called the police after you stole what?

c. John called the police after you stole the LAMP.

For a while it was common to assume that this means that covert movement₁ is *different* from overt movement in that it₁ is not constrained by islands.

However, the island-escaping property also seems to be an effect shared by indefinites, but not for other quantifiers—which suggests that the covert movement of other quantifiers is constrained by islands, and makes it difficult to maintain the idea that covert movement is simply island-oblivious.

(35) a. If a boy runs fast, he will join the track team.

b. *If every boy runs fast, he will join the track team.

In light of this, there was an effort to figure out how to interpret these things (focus, *wh*-words, indefinites) in situ, without having to move them around, even abstractly. Two proposals that accomplished this were choice functions (Reinhart, 1997), and alternative semantics (Hamblin, 1973; Rooth, 1985). Each of these proposals re-interpret the relation between interrogative complementizers and the *wh*-words *in situ*, and would thus locate the explanation of intervention effects in somewhat different places, perhaps more within semantics than syntax.

4.2 The semantics of questions, via Hamblin (1973)

The syntactic approach to intervention outlined above was paired with a semantic approach to interpretation of *wh*-words, although the semantics is not responsible for the ungrammaticality of intervention effect configurations. But this is a useful place to start for the purpose of setting up the later accounts.

Propositions can be either true or false (depending on the world state). But not questions. They do *communicate* something, though. For example we know from (36) that (37) but not (38) is a possible answer.

- (36) Who broke the toaster?
(37) ⊕ Homer broke the toaster.
(38) ⊕ It always rains on the Fourth of July.

Hypothesis: Questions tell us which propositions are possible answers.

For (36), answers are of the form x (*human*) *broke the toaster*.

So, the semantic denotation of the question can be taken to be the function characterizing the set containing propositions like x *broke the toaster* (where x is human):

- (39) $\lambda p. \exists x \in \text{humans} . p = \lambda w. x$ broke the toaster in w

4.3 The Hamblin semantics approach from Hagstrom (1998)

(Hamblin, 1973, p. 48) has a suggestion about how to interpret *wh*-words, which does not require moving them around.

[a]lthough we are inclined to class ‘who’ and ‘what’ with proper names we cannot by any stretch regard them as denoting individuals. But there is a simple alternative: the *can* be regarded as denoting *sets* of individuals, namely the set of humans and the set of non-humans, respectively. This does not mean, of course, that the formula ‘who walks’ asserts that the set of human individuals walks: we must modify other stipulations in sympathy. We shall need to regard ‘who walks’ as itself denoting a set, namely the set whose members are the propositions denoted by ‘Mary walks’, ‘John walks’, ... and so on for all individuals. Pragmatically speaking a question sets up a choice-situation between a set of propositions, namely, those propositions that count as answers to it.

The idea is pretty straightforward. Suppose *walk* is a function that, for any person you give it, will give you true if that person walks, or false if that person does not walk.

- (40) $\llbracket \text{walk} \rrbracket = \lambda x. x$ walks

The argument of *walk* should be of type $\langle e \rangle$, and individual. The proposal is that *who* is a *set* of individuals. And we need to define

- (41) $\llbracket \text{Mary} \rrbracket = \text{MARY}$
(42) $\llbracket \text{who} \rrbracket = \{ \text{MARY}, \text{JOHN}, \text{BILL}, \dots \}$

(43) $\llbracket \text{walk} \rrbracket(\llbracket \text{Mary} \rrbracket) = \text{true}$ iff Mary walks.

(44) $\llbracket \text{walk} \rrbracket(\llbracket \text{who} \rrbracket) = \{\text{true}$ iff Mary walks, true iff John walks, $\dots\}$

Or perhaps, closer to what Hamblin (1973) actually says:

(45) $\llbracket \text{Mary} \rrbracket = \{\text{MARY}\}$

(46) $\llbracket \text{walk} \rrbracket(\llbracket \text{Mary} \rrbracket) = \{\text{true}$ iff Mary walks $\}$

The point is that anything that takes an argument can also be interpreted if it is given a set of arguments, and what will come out is a set of results. Which is fed as an argument to the next function in the compositional structure, resulting is yet another set of results higher up.

(47) $\llbracket \text{bought} \rrbracket = \lambda x \lambda y. y$ bought x

(48) $\llbracket \text{what} \rrbracket = \{\text{cheese, milk, bread, } \dots\}$

(49) $\llbracket \text{bought} \rrbracket(\llbracket \text{what} \rrbracket) = \{\lambda y. y$ bought cheese, $\lambda y. y$ bought milk, $\dots\}$

(50) $\llbracket \text{bought what} \rrbracket(\llbracket \text{John} \rrbracket) = \{\text{true}$ iff John bought cheese, true iff John bought milk, $\dots\}$

4.4 The proposal from Beck (2006)

The compositional idea from Hamblin (1973) was used by Rooth (1985) as a way to interpret focused elements without moving them. The idea is that focus seems to evoke (and in fact refer to) alternatives to the thing in focus. The alternatives are very much like the alternatives Hamblin (1973) proposed as the interpretation of *who* or *what*.

Specifically, Rooth (1985) proposes that there are two dimensions of interpretation, one that is specific to focus (the focus value) and one that ignores focus (the ordinary value). In the absence of focus, the ordinary value and the focus value match. But when something is focused, the focus value is taken to be a set of alternatives, and the set “propagates” up the structure in much the same way Hamblin proposed for questions.

Later in the tree, a focus interpretation operator (\sim) takes the focus value and incorporates it into the ordinary semantic value, the focus value of which gets reset at that point to the ordinary semantic value.

If you didn’t already know how that worked, this may not have clarified it too much. The important things to note, though, are:

- The compositional procedure for the focus semantic value is essentially just like what Hamblin proposed for questions.
- The focus value, when it is interesting, is generally a set.
- The focus interpretation operator (\sim) “resets” the focus value back from a set to a single value.

Back to intervenors, Beck (2006) suggests (following Kim (2002)) that the fundamental property of intervenors is that they involve association with focus. And, Beck builds on this formal similarity between the semantic representations of focus and questions, suggesting that in fact they share the same compositional procedures and can actually interfere with one another. Something like overlapping brackets might:

$$(51) \quad \dots [A \dots [B \dots]_A \dots]_B \dots$$

Specifically, Beck (2006) proposes that *wh*-words have *only* a focus-semantic value, essentially just the representation that Hamblin (1973) proposed. The ordinary semantic value of a *wh*-word is undefined—and so any composition that relies on the ordinary semantic value of something with an *wh*-word in it will also be undefined. The question operator is special in that it discards the ordinary semantic value of its argument, and imports the focus semantic value instead. So: in order for the semantic derivation not to crash, the *wh*-words need a question operator.

If the \sim operator stands (compositionally) between a *wh*-word and the question operator, however, it will “collapse” or “reset” the focus value, which, apart from the fact that it will probably refer to the (undefined) ordinary value, it will also leave the question operator (encountered compositionally later) with no focus value to import.

So, focus interferes with *wh*-in-situ: no \sim can stand between the question operator and the *wh*-word.

It’s a very neat proposal—the only problem is that it isn’t fully evident that the focus is really the right way to characterize (fully) the set of intervening elements. Focused elements *do* seem to intervene, but it seems like other things do to.

In the end, Beck has to add what amounts to almost an arbitrary feature (intepreted with a \sim) to each of the intervenors. And this might as well be a [+Q] feature.

4.5 The version from Cable (2007)

Cable (2007) proposes an interesting blend of the Hagstrom (1998) and Beck (2006) systems. Intervention effects are not his primary concern, and his account of intervention effects themselves is in its essence just that proposed by Beck (2006). What differs on Cable’s account is the portion of the structure that is subject to intervention effects.

Intervention effects of the Beck (2006) sort arise between the *wh*-word and the operator that interprets its alternatives. Cable’s syntactic proposal is that it this operator not the interrogative complementizer that is responsible for interpreting the alternatives, but rather the Q, which is analyzed in a way roughly like it was in Hagstrom (1998).

On Cable’s account, intervention effects are strictly semantic, and should only arise when an intervenor comes between Q and the *wh*-word. Under his account, the attachment sites of Q are freer, but Q must always move up into the CP, and is not interpreted until it is. Thus, we expect to find intervention effects along the entire path between CP and the *wh*-word.

In many languages, under Cable’s proposal, the Q and the *wh*-word move together, and so there is not much space available in which to put an intervenor. The exception are cases of “pied-piping” where QP is separated from the *wh*-word by other material. Thus, Cable predicts that intervention effects should always appear within pied-piped phrases. Sauerland

and Heck (2003) give some examples from German that seem to show such intervention effects occurring in this environment.

- (52) Fritz möchte wissen [ein wie schnelles Motorrad] du fahren darfst.
Fritz wants to.know a how fast motorbike you drive may
'Fritz would like to know how fast a motorbike you are allowed to drive.'
- (53) *Fritz möchte wissen [kein wie schnelles Motorrad] du fahren darfst.
Fritz wants to.know no how fast motorbike you drive may
(‘Fritz wants to know how fast no motorbikes are you are allowed to drive.’)(?)

However, this is in direct conflict with the data from Hagstrom (1998) that shows that intervention effects disappear within islands.

The proper resolution of this is not really clear, I just want to point out that it seems like the status of the data from the interaction of islands and intervention effects is crucial to teasing apart the accounts.

And, really, the case I wanted to make that syntax is still crucially necessary as part of the explanation for intervention effects relies on this data as well.

5 Flavors of Q

5.1 Other intervenors in Japanese

The explanation for intervention effects under these hypotheses is essentially **syntactic**. A quick scan of the intervenors in Japanese reveals that words (like *dareka* ‘someone’) that contain *ka* will intervene. And if something in C drives movement of the question particle *ka* from inside the clause to C, then there will be a problem if the *ka* that needs to move is not the closest one (Assumption 2).

Another class of intervenors contains the morpheme *mo* (e.g., *daremo* ‘everyone’). The distribution of *mo* is very similar to that of *ka*, and so it is not a reach to suppose that they share the same category (say, Q), as well as whatever feature the interrogative C is probing for when it looks for a question particle.

Having run low on time preparing the handout, I will have to leave this part somewhat underspecified here, but a point to note: Q across languages seem to mean slightly different things. Tlingit *wh+Q* seems to be rather like ‘any*wh*’, Sinhala *wh+Q* is ‘some*wh*’, but *wh+hari* is more like ‘some*wh* or other’. Japanese *wh+Q* may be ‘something (identity unknown to the speaker)’. The question is: what are the flavors of Q? What are the implications to the project of trying to collect syntax/semantics/morphology of questions together with that of indefinites?

6 The pragmatic proposal from Tomioka (2007)

Tomioka (2007) claims that intervention effects are essentially pragmatic, although that may not be entirely the right characterization. What he actually claims is that the property that intervenors share is an inability to be topics.

Tomioka points out that the grammaticality judgments on intervention effects are “notoriously subtle, and the variability among native speakers is vast. Although there is no denying that the scrambled version is better than the unscrambled counterpart, some feel that the unscrambled example is merely marginal, while others find them bad enough to label them as ‘ungrammatical’.”

He also points out that intervention effects are much weaker in embedded contexts (not just in islands, but any embedded context). Judgments below as reported by Tomioka (2007).

- (54) a. ?Kimi-wa [_{CP} daremo nani-o yom-ana-katta-to] omotteiru-no?
 you-TOP anyone what-ACC read-NEG-PAST-COMP think-Q
 ‘What do you think that no one read?’
- b. Kimi-wa [_{CP} daremo-ga nani-o yon-da-to] omotteiru-no?
 you-TOP everyone-NOM what-ACC read-PAST-COMP think-Q
 ‘What do you think that everyone read?’
- c. Kimi-wa [_{CP} [John-ka Bill]-ga nani-o yom-ana-katta-to]
 you-TOP John-or Bill-NOM what-ACC read-NEG-PAST-COMP
 omotteiru-no?
 think-Q
 ‘What do you think that John or Bill read?’

Tomioka lists the following non-intervenors: *subete-no/zenbu-no-NP* ‘all (the) NP’ and *hotondo-no-NP* ‘most NP’. He cites the nominative-marked subject as another thing that seems to act like a weak intervenor.

He takes questions to be divided into discourse-old (the non-*wh* part) and sentence focus (the *wh* part). And there are (discourse?) topics, which can be explicitly marked with *wa*.

He notes that none of the intervenors can be topic marked with *wa*, although notes that *dareka* and disjunctions are ok if they are interpreted as contrastive topics. The non-intervenors mentioned above can be topic marked. He even supposes that maybe some of the antitopical items are that way for just the reason Beck (2006) mentions, they are focused or focus-sensitive.

The basic mechanism for getting intervention effects to happen is that the Japanese sentence is split up into sections, and the bad cases are those where an ATI winds up in the topic area. It is, basically, just this: (topic) . . . focus . . . tail. An ATI is no good as a topic. The *wh* signals the focus. QED.

The disappearance of intervention effects in embedded clauses, then, is just due to the disappearance of “topic-focus articulation” below the matrix clause. ST says that embedded subjects are not topic marked, but then footnotes that

According to a judgment often reported in the literature, topic-marking in embedded clauses is not so bad if the embedded clauses are complement CPs (of attitude verbs). In contrast, topic-marking within other embedded clauses, such as relative clauses, is significantly worse. This contrast is not so surprising if one believes in the ‘quotation’ theory of attitude verbs. If an embedded sentence is really an embedded quotation, the information structure might well survive under embedding.

This sounds like it is getting pretty close to giving just another name to islands, doesn't it? Islands are those things that can't have topic marking?

There's kind of a quickly evident difficulty, though—what about an embedded *wh*-phrase that isn't first? Does that mean that everything to its left is topic (and can't be tail)?

Tomioka notes that even embedded, it is more natural when the *wh* follows the topic, but failure is not as “harmful.” NPIs, however, are still pretty robust. Why? Maybe they need licensors, and maybe it's best to have NPIs in the same intermediate/major (phonological) phrase. This explains why even in the absence of *wh*-words, there is a kind of intervention effect.

7 Too many explanations

The problem with the account from Tomioka (2007) is that it is very specific to Japanese and Korean. It is pretty hard to see how it will generalize. Tlingit? German? English? You have to start somewhere, but the horizon of applicability seems very near. The observation that the intervenors seem to be “anti-topical” is quite interesting, but is also really I think at least nearly predicted by Beck (2006). To the extent that foci make bad topics, at least.

As for the comparison between the semantic account from Beck (2006) and the more syntactic account from Hagstrom (1998), the island facts seem really only to come from the latter.

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