

Rhetorical Questions and Wh-Movement

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1 Observations

Rhetorical Questions (RQ) have the syntactic form of a question, but have the semantic value of a declarative (Sadock 1971, Han 2002). In general, the meaning of RQs can be obtained by replacing the *wh*-word² with the appropriate negative quantifier (1a), or in the case of polar questions, by adding negation (1b):

- (1) a. After all, what does John know?
“John knows nothing”
b. After all, does John ever help?
“John doesn’t ever help”

Despite the semantic difference, rhetorical questions appear to be identical to interrogative questions with respect to syntactic behavior (at least in English): the *wh*-word moves to sentence initial position, induces subject-auxiliary inversion, and displays island effects:

- (2) a. After all, what did he t_{did} buy t_{what} ?
b. *After all, what did he t_{did} meet [_{RC} the man who bought t_{what}]?

This squib addresses three additional syntactic observations of RQs across several languages, and their consequences for theories of *wh*-movement.

Observation 1: Some languages allow multiple wh-words in a single rhetorical question, while others only allow a single wh-word.

Much like multiple *wh*-words in interrogatives, only certain languages allow multiple *wh*-words in RQs (illustrated here with the contrast between Chinese, Japanese, and Russian one hand, and English on the other):

- (3) a. Shei hui dai sheme lai bisai ne? (Chinese)
who will bring what to competition Q
‘Who will bring what to the competition?’
‘Nobody would bring anything to the competition’
b. Dare-ga nani-o paatii-ni motte-kita-to iu-no? (Japanese)
who-nom what-acc to the party bring saying-Q
‘After all, who will bring what to the party’
‘Nobody will bring anything to the party’

- c. V principe, kto prineset čto na tvoju večerinku? (Russian)
 After all, who will bring what to your party
 ‘After all, who will bring what to your party?’
 ‘Nobody will bring anything to your party.’
- d. *After all, who would bring what to the party? (English)

To date, I have observed RQs with multiple wh-words (MRQs) in Chinese, Hindi, Japanese, Russian, and to some extent Bulgarian. MRQs are not possible in Egyptian Arabic, English, French, Hebrew, Italian, Portuguese, and Spanish, although Egyptian Arabic and Italian also disallow multiple interrogative questions.

Crucially, there is no obvious correlation between multiple wh-words in interrogative questions and multiple wh-words in rhetorical questions, although it does seem that multiple wh-words in interrogative questions is necessary, but not sufficient, for multiple wh-words in RQs (i.e. Egyptian Arabic and Italian lack both multiple wh-interrogative and MRQs). Furthermore, there doesn’t seem to be any correlation between types of wh-movement and the possibility of MRQs: Chinese and Japanese are in-situ languages, Russian is a multiple wh-fronting language, and Hindi is a mixed system with both overt wh-movement and wh-in-situ.

Observation 2: Wh-arguments in languages without overt wh-movement show island effects in rhetorical questions.

Huang (1982) and others demonstrated that languages without overt wh-movement do indeed display island effects, although these effects only occur with wh-adjuncts, not wh-arguments. In RQs in these languages, all wh-words show island effects, regardless of whether they are arguments or adjuncts (illustrated here with Japanese; (4a) shows an island violation with an argument, (4b) with an adjunct, and (4c) demonstrates that the effects in (4a) and (4b) are not simply long distance effects).

- (4) a. *[_{IP} John-wa [_{ADJ} kare-no okusan-ga nani-o katta kara] okoru-to
 John-top he-gen wife-nom what-acc bought because get.angry
 iu-no]
 saying-Q
 ‘What would John get angry because his wife bought?’
 ‘There is nothing such that that John would get angry because his wife
 bought that thing.’
- b. *[_{IP} John-wa [_{ADJ} kare-no okusan-ga naze atarasii doresu-o katta kara]
 John-top he-gen wife-nom why new dress-acc bought because
 okoru-to iu-no]
 get.angry saying-Q
 ‘Why would John get angry because his wife bought a new dress?’
 ‘There is no reason such that John would get angry because his wife

bought a new dress for that reason.”

- c. [IP John-wa [CP ano Hanako-ga anna mise-de nani-o katta-to] iu-no]
John-top that Hanako-nom that store what-acc bought saying-Q
‘What does John say that a person like Hanako bought at that kind of
store?’
‘‘There is no thing such that John says that a person like Hanako would
have bought that thing at that kind of store.’’

Observation 3: Island violations with arguments in rhetorical questions in languages without overt wh-movement show Principle of Minimal Compliance effects.

Richards (1998) observed that under specific circumstances, island violations are judged better when a second wh-word is added to the construction. For example, following Richards assumption that Subjacency holds of both overt and covert movement, the contrast between (5a) and (5b) seems to indicate that the addition of a wh-word outside of the island rectifies the island violation incurred by the in-situ (and covertly moved) wh-word.

- (5) a. *What do you wonder whether John bought?
b. Who wonders whether John bought what?

For Richards, this was a specific instance of a more general principle called this the Principle of Minimal Compliance, in which constraint violations lose their effect if the very same constraint is respected elsewhere in the sentence. Of interest here is that island violations in MRQs demonstrate PMC effects in languages that allow MRQs, such as Japanese:

- (6) a. *[John-wa [adj kare-no okusan-ga nani-o katta kara] okoru-to iu-no]
John his wife what bought because get.angry saying-Q
‘What would John get angry because his wife bought?’
‘‘There is nothing such that John would get angry because his wife bought
it’’
- b. ?[Dare-ga [adj John-no okusan-ga nani-o katta kara] okoru-to iu-no]
who John’s wife what bought because get.angry saying-Q
‘Who would get angry because John’s wife bought what?’
‘‘There is no person and no thing such that that person would get angry
because John’s wife bought that thing’’

2 The Typology of Wh-Movement

The three observations in section 1 can be restated as three properties of the wh-words:

- (7) i. Whether they display island effects (islands)
 ii. Whether they display PMC effects (pmc)
 iii. Whether they co-occur with elements of the same type⁴ (co-occur)

The core of the theory of wh-movement is the fact that these three properties cluster in only three permutations. It has been standardly assumed that these three clusters were the result of two very robust distinctions: the argument-adjunct distinction among wh-words and the overt-covert movement distinction across languages (see especially Huang 1982, Lasnik and Saito 1984, Chomsky 1986, and Richards 1998). Each cluster of properties is generally analyzed as being the result of the combination of the these two dimensions:

Table 1: The three possible clusters of wh-properties in **interrogative questions**

	Covertly moved Arguments	Overtly moved Arguments	Adjuncts
Island Effects	-	✓	✓
PMC Effects	NA	✓	-
COMP Indexing Effects	-	-	✓

Most major theories of wh-movement have been built around these distinctions in one way or another. In the *Barriers* system (Chomsky 1986), the effect of the ECP was to constrain adjuncts but not arguments, and Subjacency constrained overt movement but not covert movement. In Nishigauchi's (1990) pied-piping account, only covert movement of arguments could induce massive pied-piping, while overt movement of arguments and all movement of adjuncts could not. And in the unselective binding account of Tsai 1994, or the choice function approach of Reinhart 1997, arguments can be unselectively bound/interpreted via choice function, but adjuncts cannot.

Under the plausible assumption that RQs involve wh-movement, these theories would predict the same interaction between the argument-adjunct distinction and the overt-covert movement distinction, yielding the same distribution of the three classes. However, the observations laid out in section 1 are inconsistent with this prediction: Observation 1 indicates that the argument-adjunct distinction does not predict the correct clusters in English, as arguments in RQs display the 'adjunct' property of not co-occurring with other arguments. Observation 2 indicates that the overt-covert distinction does not predict the correct class distinction in languages such as Japanese, as the in-situ argument *nani-o* 'what' in (4) induces an island violation typical of 'overtly moved arguments' and 'adjuncts'. Taken together with observation 3, that there is a PMC effect

in example (6), this seems to suggest that arguments in languages such as Japanese are ‘overtly moved’, despite the lack of overt movement. Given these observations, the labels in Table 1 must be changed to account for the properties of rhetorical questions:

Table 2: The three possible clusters of wh-properties in **rhetorical questions**

	Unobserved	Covertly moved Arguments	Overtly moved Arguments, all Adjuncts
Island Effects	-	✓	✓
PMC Effects	NA	✓	-
COMP Indexing Effects	-	-	✓

In sum, under standard theories of locality, we would be forced to the following conclusions: (i) arguments in English RQs are syntactic adjuncts, despite being semantic arguments; and (ii) arguments in Japanese rhetorical questions are overtly moved wh-words, despite appearing in-situ. These conclusions suggest a rethinking of the properties underlying the three clusters in Table 1, crucially away from the dimensions of argument-adjunct and overt-covert, and for expository purposes, toward a more generic labeling of these clusters:⁵

Table 3: The three possible clusters of wh-properties with **generic labels**

	Type I wh-words	Type II wh-words	Type III wh-words
Island Effects	-	✓	✓
PMC Effects	NA	✓	-
COMP Indexing Effects	-	-	✓

3 Move First

As noted by an anonymous LI reviewer, tables 1 and 2 seem to indicate that wh-movement in rhetorical questions is more restricted than wh-movement in interrogative questions. The properties of wh-movement in rhetorical questions, however, are not monolithic: for example, wh-arguments in Japanese are Type I in interrogative questions, and Type II in rhetorical questions, but in English wh-arguments are Type II in interrogative questions and Type III in rhetorical questions. So while rhetorical wh-movement is more restricted than interrogative wh-movement, rhetorical wh-arguments are still of two types (II and III) much like interrogative wh-arguments (I and II). This suggests that a comprehensive analysis of wh-movement that accounts for both interrogative and rhetorical questions must be more than the addition of a single ‘rhetorical’ feature.

While this squib is not the place for a full analysis of the wh-movement properties in question, this section suggests what one might look like. First, the analysis must capture the \pm islands distinction between Types I and II (as accomplished by the analyses of Huang, Nishigauchi, Reinhart and other), and the \pm co-occur distinction between Types II and III, without invoking an absolute overt-covert or argument-adjunct distinction. Second, the analysis must capture the co-variation between \pm pmc and \pm co-occur. While there are undoubtedly a number of possible analyses, I would like to briefly suggest one that resurrects an old idea from the early days of GB.

Under the classic GB approach to wh-movement, -co-occur was the result of an ECP violation (see Lasnik and Saito 1984 for details). More importantly, the ECP violation occurred when the adjunct was not the *first* wh-word to move to the specifier of CP. This *move first* analysis predicted that adjuncts could not be in-situ in English (8a) because another wh-word had moved first to CP, that adjuncts could be in-situ in Chinese (8b) because there is a derivation in which the adjunct could move first, and that adjuncts in Chinese could not co-occur with other adjuncts (8c) because both could not move first.

- (8) a. *What did John buy why?
- b. Zhangsan weishenme mai-le shenme?
Zhangsan why bought what
‘Why did Zhangsan buy what?’
- c. *Zhangsan ru-he weishenme mai-le yi-bu chi-chi?
Zhangsan how why bought CL car
‘How did John buy a car why?’

Tying \pm co-occur to the ECP also captured the correlation between \pm co-occur and \pm pmc, because as Richards (1998) argued, the PMC does not apply to licensing constraints such as the ECP (see Richards 1998 for details).

Despite the loss of the ECP to minimalism, and the loss of the argument-adjunct distinction to the rhetorical question observations in section 1, the *move first* intuition of

Lasnik and Saito still predicts a correlation between \pm co-occur and \pm pmc: if a wh-word must move first, then there is no way it can co-occur with another element that must move first; if a wh-word must move first, then there is also no way for the movement of another element to satisfy its requirements via the PMC. Furthermore, if a wh-word must move first, then it must move, therefore it is plausible to expect it to induce island effects. In this way Lasnik and Saito's intuition can be applied directly to Type III: Type III items *must move first*. Logically then, Type II items *must move* (hence island effects and the possibility of co-occurrence and PMC amelioration), and Type I items either do not move (perhaps with choice function application or unselective binding), or move with some extra mechanism such as LF pied-piping.

While *move first* is by no means the only way to capture the observations in section 1, and despite leaving many questions unanswered (such as the ultimate source of the *move first* requirement), the description of wh-movement based on the *move first* intuition has some points in its favor: it captures the bifurcated nature of rhetorical questions (Type II and III) in a way that resurrects an old idea from the early days of GB while still fitting nicely with other modern approaches to wh-movement.

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Notes

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² Here and throughout, for ease of exposition, I use the term *wh-word* to refer to both single *wh*-words such as *what* and *wh*-phrases such as *which book*.

³ There are undoubtedly several dialects of Japanese, and two bear special mention. First, as Masaya Yoshida (p.c.) points out, for some speakers of Japanese the PMC effect in (6b) may be disguised by a scope ambiguity in Adjunct islands that decreases acceptability. For these speakers, the effect may be resurrected by scrambling the entire Adjunct Island to the left periphery:

- (i) ?_[adj] John-no okusan-ga nani-o katta kara [dare-ga t_{adj} okoru to iu-no]
 John's wife what bought because who get angry C saying-Q
 'Because John's wife bought what, who would get angry'
 'Because John's wife bought nothing, no one would get angry''

In the second dialect of interest, Adjunct islands may be so weak so to cancel the island effect in (6a). For these dialects, the same paradigm may be created using a stronger Relative Clause island. The choice of Adjunct islands throughout this squib is purely expository, as the syntactic structure of Adjunct islands in Japanese is often easier to visualize for English speakers than the structure of Relative Clause islands.

⁴ 'Type' here provisionally refers to the argument-adjunct distinction. So the question is whether *wh*-arguments may co-occur with other *wh*-arguments, or whether *wh*-adjuncts may co-occur with other *wh*-adjuncts. Later in this paper, when the argument-adjunct distinction is proven inadequate, 'type' will refer to the three Types delineated in Table 3.

⁵ Soh 2005, following Pesetsky 2000, offers a novel two-way distinction in Chinese: *wh*-words that resolve ACD also do not show island effects, and *wh*-words that show intervention effects also show island effects. In effect, this reduces to the argument-adjunct distinction, but it provides a new way of viewing islands: in Chinese, islands exist for feature movement, but not phrasal movement; in English, islands exist for phrasal movement, and possibly not for feature movement. While outside the scope of this squib, it should be noted that rhetorical questions raise problems for this view as well: In Chinese, the very same constructions that Soh claims are ACD can be interpreted as rhetorical (and thus ACD movement shows island effects), and rhetorical arguments show intervention effects, just like interrogative adjuncts:

- (i) Meiyoun gan gen shei dajia
 Nobody dare with who fight
 IQ: Who would nobody dare fight with?
 RQ: *There is nobody that nobody would dare fight with

These facts seem to be at direct odds with the Soh distinction, and lead one to question Pesetsky's use of ACD as a test for phrasal movement.