

Rhetorical Questions: Structural Unmarkedness in English and Japanese*

Akihiko Sakamoto

1. Introduction

Questions can be ambiguous in interpretation because they intrinsically have two types of use: genuine questions (GQs) and rhetorical questions (RQs). English always appeals to *wh*-movement in question formation irrespective of whether the question is a GQ or an RQ. In other words, this language does not distinguish between the two in surface form; in this sense, it lacks GQ/RQ distinction.

Japanese is rich in sentence-final particles that contribute to characterizing the grammatical status of sentences. For instance, putting the particle *ka* in sentence-final position can play an important role in forming questions (cf. Cheng (1997)). This fact makes it easy to imagine that Japanese has a special sentence-final particle for indicating rhetorical interpretation (hereafter, an RQ marker), leading to GQ/RQ distinction. In fact, this language has such markers: *mono ka*, *koto ka*, and *to yuu no*; they require questions that include them to be interpreted rhetorically (cf. Sprouse (2007), Oguro (2014, 2018), Inada and Imanishi (2016, 2017), Sakamoto (2017a)). Of these markers, this paper focuses on the last one and examines the clausal nature of *to yuu no* RQs (i.e., questions with *to yuu no*) by observing related facts in Japanese and English. This examination will show that these languages differ in structural unmarkedness, the same result as obtained by Sakamoto (2017a).

Section 2 develops an analysis of *to yuu no* as an RQ marker by observing relevant facts in English and Japanese. Based on this analysis, section 3 discusses the difference in syntactic structure between the two languages. Section 4 concludes this paper with a prospect for future investigation.

2. Analysis: *To Yuu No* as an RQ Marker

This section has two portions. The first is a discussion of some basic facts, including ones observed in the literature, which show that *to yuu no* is an RQ marker in the sense stated in the preceding section. In the second, further support is given for this observation by indicating that *to yuu no* RQs function as monoclauses, in that they exhibit behaviors similar to monoclausal RQs and different from biclausal RQs in English and Japanese. The fact that a *to yuu no* RQ is monoclausal confirms that *to yuu no* serves not as a host for embedding but as an RQ marker for ensuring the rhetorical status of a preceding clause.

* I am indebted to Hiroko Wakamatsu and Takashi Ishida for their invaluable comments and suggestions. Thanks also go to Keita Ikarashi and Ryohei Naya for their helpful comments. I also express my deep gratitude to Tod Tollefson for kindly acting as an informant. This work is supported by a Grant-in-Aid for Young Scientists (B) (No. 17K13474) from the Japan Society for the Promotion of Science.

2.1. Basic Observation

2.1.1. The Speaker's Uncertainty about the Hearer's Intention of Utterance

Adachi (2005) regards *to yuu no (ka)* RQs as expressing the speaker's uncertainty about the hearer's intention of utterance. The relevant example below is cited from Adachi (2005:238):¹

- (1) A: Jiroo-ga zuibun sigoto-o tetudattekureta
 Jiro-Nom a lot work-Acc lent a hand
 nde tasukatta yo.
 because was helpful SFP
 'It was helpful for Jiro to lend me a big hand with my work.'
- B: e?, Jiroo-ga kiteita-tte yuu no?
 What, Jiro-Nom came-Comp saying Mir
 'What? Are you saying Jiro came yesterday?'
 Kinoo-wa konai-tte yutteta kedo.
 Yesterday-Top not come-Comp said though
 'Yesterday, he had said he wouldn't come.'

In (1), speaker A is talking under the assumption that Jiro showed himself in front of speaker A; as a response to this utterance, speaker B is using a *to yuu no* RQ (with *te yuu no* being a colloquial variant of *to yuu no*), to provide the proposition that Jiro came with a rhetorical status. In this case, speaker B, having information contrary to speaker A's, is expressing his or her uncertainty about speaker A's intention of utterance. This expression of uncertainty signals to speaker A that the assumption that Jiro showed himself is entirely different from speaker B's.

A *to yuu no* RQ can be used with a *wh*-phrase (from Sakamoto (2017a:155)):

- (2) Taro-ga nani-o sita-to yuu no?
 Taro-Nom what-Acc did-Comp saying Mir
 'What are you saying that Taro did?'

According to Sakamoto (2017a), *to yuu no* in (2) not merely serves as an RQ marker but determines the scope of the *wh*-phrase (i.e., the clausal domain over which the *wh*-phrase has an effect). The speaker of this sentence expresses his or her uncertainty about, for instance, the hearer's assumption that Taro did something bad, which leads to informing the hearer that the speaker has the opposite assumption (i.e.,

¹ The following abbreviations are used in the glosses of examples in this article: Acc = accusative, Comp = complementizer, Dat = dative, Gen = genitive, Mir = mirative, Neg = negation, Nom = nominative, Nominal = nominalizer, SFP = sentence-final particle, Top = topic.

Taro did nothing bad).

2.1.2. *Fixedness*

If *to yuu no* is an RQ marker, it should be a fixed expression. This expression is, however, a seemingly complex one composed of three separate morphemes: (i) the complementizer *to* ‘that,’ (ii) the verb *yuu* ‘to say,’ and (iii) the mirative marker *no*.² Of course, even if *to yuu no* constitutes one fixed expression, each of these items will contribute to determining the entire meaning compositionally (cf. Inada and Imanishi (2016:10)). In consideration of this respect, our concern goes to the fixedness of the expression in question (from Sakamoto (2017a:160)):

- | | | | | | | |
|-----|----|--------------------------------------|----------|----------|--------|-----|
| (3) | a. | Taroo-ga | nani-o | sita-to | yuu | no? |
| | | Taro-Nom | what-Acc | did-Comp | saying | Mir |
| | | ‘What are you saying that Taro did?’ | | | | |
| | b. | *Taroo-ga | nani-o | sita-to | yutta | no? |
| | | Taro-Nom | what-Acc | did-Comp | said | Mir |
| | | ‘What did you say that Taro did?’ | | | | |

The sentences above constitute a minimal pair different only in *yuu* ‘saying’ and *yutta* ‘said.’ This grammatical contrast is expected, assuming that *to yuu no* is a fixed expression as an RQ marker. If *yuu* in (3a) is used as a pure bridge verb, it will offer no resistance to having its tense form changed from present to past. However, (3b), with the past tense form of *yutta*, has an ungrammatical status, contrary to the expectation; this sentence is available only as an echo question (cf. Inada and Imanishi (2016)). This fact shows that *to yuu no* serves as an RQ marker.

2.2. *Further Observation*

Before getting down to the main argument made in sections 2.2.2 and 2.2.3, a foundation for it must first be constructed by considering the definition of RQs, as shown in section 2.2.1.

2.2.1. *Answerability and the Definition of RQs*

RQs have been characterized differently from researcher to researcher (see

² According to Ikarashi (2015a, 2015b), mirativity is a semantic category characterizing a proposition as unexpected for either the speaker or the hearer (cf. Hengeveld and Olbertz (2012)); he analyzes the sentence-final particle *no* in Japanese as a mirative marker. Although many researchers identify the element as a nominalizer (see e.g., Kuno (1980)), this paper adopts Ikarashi’s analysis based on his compelling argumentation over previous studies. On the other hand, following his observation, we will regard the clause-final particle *no* compatible with *ga/no*-conversion as a nominalizer.

Goto (2018) and references cited there). One characterization can be made in terms of answerability. Quirk et al. (1985) state that the speaker of an RQ utterance does not expect an answer from the hearer. According to Caponigro and Sprouse (2007:127), “answers are obligatory with [GQs] and can only come from the [hearer] in order for a discourse to be felicitous. On the other hand, answers are optional with RQs and either the [hearer] or the [s]peaker can give them.” Putting these statements together with the argument to be made below, we can obtain the definition of RQs in (4).³

(4) The definition of RQs:

The speaker of an RQ utterance assumes the value of the *wh*-phrase prior to the utterance.

In the use of a GQ, the speaker assumes no value of the *wh*-phrase (precisely, the variable introduced by a *wh*-operator or a yes/no-operator) and purely tries to elicit an answer from the hearer (cf. Searle (1969:66); see also Caponigro and Sprouse (2007:129) for the definition of GQs). In contrast, when uttering an RQ, the speaker assumes the value of the *wh*-phrase prior to the utterance; thus, an *answer* to an RQ is different in quality from an answer to a GQ. According to Caponigro and Sprouse (2007), either the speaker or the hearer can provide answers for RQs. Under the definition given in (4), if the speaker of an RQ utterance gives an answer to the question, (s)he simply utters it based on the value preliminarily assumed. RQs do not differ from GQs in surface form, so they do not prevent answers from the hearer. These, however, are not genuine answers, as mentioned above. It does not matter whether the hearer answers and, if (s)he answers, whether his or her answer coincides with the value the speaker has assumed prior to the utterance; the (non)coincidence

³ This definition can also apply to exam questions (from Wierzbicka (1987:68)):

- (i) When did Columbus discover America?

Searle (1969:66) characterizes exam questions in contrast to GQs (which he refers to as “real questions”) as follows:

- (ii) a. Exam questions:
[The speaker] wants to know if [the hearer] knows.
b. GQs:
[The speaker] wants to know (find out) the answer.

As is clear from (iia), even if the speaker of an exam question utterance assumes the value of the *wh*-phrase prior to the utterance, (s)he has no intention of making some assertion based on that value. As shown below, the speaker of an RQ utterance certainly makes some assertion based on the value in question. In this sense, exam questions are close to GQs rather than RQs.

merely affects the way conversation develops.

This example from Caponigro and Sprouse (2007:123) helps understand the argument here:

- (5) a. Question:
Speaker: Who cares about you?
- b. Answer:
 - i. Speaker: Nobody.
 - ii. Hearer: Nobody.
 - iii. Hearer: Yeah, you're right.

(5a) is an RQ utterance made by the speaker. In this case, what (s)he assumes as the value of the *wh*-phrase is an empty set, \emptyset , based on which the speaker asserts, by saying nobody (will care about you) as an answer (see (5bi)), that there is no set of persons that care about the hearer. As shown in (5bii), the hearer can give an identical answer in the same context; in this case, the hearer's answer coincides with the value assumed by the speaker. Further, (5biii) indicates that (5a) can be replied to by the hearer with an "expression conveying agreement" (Caponigro and Sprouse (2007:123)). This reply is not an answer to (5a) in the sense that it does not constitute the direct value of the *wh*-phrase. However, the careful consideration of (5biii) makes it clear that the reply has the status of answer. By uttering (5biii), the hearer agrees to the speaker's assumption of the value. That is, the use of the expression *you're right* is tantamount to saying nobody (will care about you). In this sense, the coincidence is observed here as well.

In this way, RQs can be answered by either the speaker or the hearer. However, even when the hearer gives an answer to an RQ with expressions like (5bii) and (5biii), the speaker, prior to the utterance, holds a given assumption of the value of the *wh*-phrase of that RQ. Therefore, such an answer is not a genuine answer, unlike in the case of GQs. In addition, the fact that the hearer can utilize an expression conveying agreement in answering an RQ seems to corroborate the idea that the speaker of an RQ utterance assumes the value of the *wh*-phrase prior to the utterance. Otherwise, the hearer should not be able to show any agreement to that utterance at all.

Caponigro and Sprouse (2007) count as optional an answer to an RQ of the sort given in (5b), which is essentially different from the value preliminarily assumed by the speaker. The obligatoriness of the speaker's assumption of the value in the sense of (4) must be emphasized here. This obligatoriness is consistent with the optionality of an answer to an RQ of the sort given in (5b). Although the speaker has a mandatory assumption of the value in question (cf. (4)), the utterance based on it (cf. (5bi)) is optional; similarly, the hearer's answer (cf. (5bii, iii)) is not obligatory.

Therefore, the definition of RQs in (4) remains intact.

2.2.2. Possible Answer Sets to Wh-Phrases

The discussion in the last subsection enables the distinguishing of values from answers. Whereas the former are specified only by the speaker (cf. (4)), the latter can be made by either the speaker or the hearer (cf. (5b)). Although the values and answers are different in quality from each other, they become equal whenever the speaker gives answers to RQs because (s)he utters based on the value assumed by himself or herself. Below, we discuss such cases, in which possible answers can be given in two ways.

Here again, consider the example in (5a); it is reproduced as (6a) and some possible answer sets are given in (6b).

- (6) a. Question:
 Speaker: Who cares about you?
 b. Answer:
 i. Speaker: Nobody (will care about you).
 ii. Speaker: (It is) only John (that will care about you).

It is important to note that (6a) can be answered, instead of using (6bi), with (6bii), in which the *wh*-phrase is assigned a specific value (i.e., *John*) rather than an empty one (i.e., \emptyset). Such an answerability has no subject/object asymmetry:

- (7) a. Question:
 Speaker: What does John know about you?
 b. Answer:
 i. Speaker: (He will know) nothing.
 ii. Speaker: (It is) just what you like (that he will know).

As shown in (7b), the RQ with an object *wh*-phrase, as well as the one with a subject *wh*-phrase, can be answered by giving it a specific value (i.e., *what you like*).

This result is generalized in (8).

- (8) Two possible answers to RQs by the speaker:
 a. No-member answers (i.e., empty answers):
 There is/are no member(s) that constitute(s) the value of a *wh*-phrase.
 b. At least one-member answers (i.e., nonempty answers):
 There is at least one member that constitutes the value of a *wh*-phrase.

As illustrated in (8), we find that the speaker of an RQ utterance can give two possible

answers: (i) no-member answers and (ii) at least one-member answers, which, for simplicity, we will refer to as empty answers and nonempty answers, respectively.

Here, let us turn to RQs in Japanese; more specifically, we are concerned with the Japanese counterparts of (6) and (7):⁴

- (9) a. Question:
 Speaker: Dare-ga omae-o kinikakeru no?
 who-Nom you-Acc care about Mir
 ‘Who cares about you?’
- b. Answer:
 i. Speaker: Daremo kinikake-nai daro(o).
 anybody care about-Neg will
 ‘Nobody will care about you.’
 ii. Speaker: Kinikakeru no wa John-gurai daro(o).
 care about Nominal Top only John will
 ‘It is only John that will care about you.’
- (10) a. Question:
 Speaker: John-wa omae-no nani-o sitteiru no?
 John-Top you-Gen what-Acc know Mir
 ‘What does John know about you?’
- b. Answer:
 i. Speaker: Aitu-wa nanimo sira-nai daro(o).
 he-Top anything know-Neg will
 ‘He will know nothing.’
 ii. Speaker: Sitteiru no wa sukina mono-gurai daro(o).
 know Nominal Top only favorite thing will
 ‘It is just what you like that he will know.’

Both (9a) and (10a) are not RQ-dedicated forms for the absence of *to yuu* (*no*); they can be used not only as RQs but also as GQs, according to the context. Here, the use of *omae*, a rough term, helps the hearer interpret the sentences in question as RQs; the existence of (9b) and (10b), possible answer sets, is the decisive factor in determining them as RQs (*aitu* ‘he’ also functions as a rough term that indicates third-person singular). Under this premise, the question-answer pairs in (9) and (10) illustrate that Japanese displays parallel behaviors to English in that they both permit

⁴ According to Martin (1988:605-610), *daroo* and its polite form *desyoo*, the meaning of which is tentative (see also Makino and Tsutsui (2015:100-102)), often undergo vowel shortening, as in *darō* and *desyō*. Based on my intuition, the abbreviated versions fit in well with informal speech environments.

the speaker of an RQ utterance to give two possible answers to RQs (see (8)).

2.2.3. *The Monoclausality of To Yuu No RQs*

Now, let us return to *to yuu no* RQs. The discussion in the preceding subsection reveals that they are monoclausal rather than biclausal, a characteristic that constitutes an additional piece of evidence that *to yuu no* functions as an RQ marker. Consider the following examples:

- (11) a. Question:
 Speaker: Dare-ga omae-o kinikakeru-to yuu no?
 who-Nom you-Acc care about-Comp saying Mir
 ‘Who cares about you?’
- b. Answer:
 i. Speaker: Daremo kinikake-nai daro(o).
 anybody care about-Neg will
 ‘Nobody will care about you.’
 ii. Speaker: Kinikakeru no wa John-gurai daro(o).
 care about Nominal Top only John will
 ‘It is only John that will care about you.’
- (12) a. Question:
 Speaker: John-ga omae-no nani-o sitteiru-to yuu no?
 John-Nom you-Gen what-Acc know-Comp saying Mir
 ‘What does John know about you?’
- b. Answer:
 i. Speaker: Aitu-wa nanimo sira-nai daro(o).
 he-Top anything know-Neg will
 ‘He will know nothing.’
 ii. Speaker: Sitteiru no wa sukina mono-gurai daro(o).
 know Nominal Top only favorite thing will
 ‘It is just what you like that he will know.’

These examples indicate that *to yuu no* RQs can be given either empty or nonempty answers (see (8)). This is the same behavior as exhibited by monoclausal RQs in English and Japanese (see (6)-(7), (9)-(10)). This parallel behavior confirms that *to yuu no* RQs are monoclausal, which means that *to yuu no* serves as an RQ marker. To put it another way, this element rhetoricalizes, but does not embed, a preceding clause.

However, this is insufficient proof unless *to yuu no* RQs are shown to behave in a different manner than biclausal RQs do. The following examples make the

proof sufficient:

- (13) a. Question:
 Speaker: Dare-ga omae-o kinikakeru-to omotteiru no?
 who-Nom you-Acc care about-Comp think Mir
 ‘Who do you think cares about you?’
- b. Answer:
 i. Speaker: *Daremo kinikake-nai daro(o).
 anybody care about-Neg will
 ‘Nobody will care about you.’
 ii. Speaker: Kinikakeru no wa John-gurai daro(o).
 care about Nominal Top only John will
 ‘It is only John that will care about you.’
- (14) a. Question:
 Speaker: John-ga omae-no nani-o sitteiru-to
 John-Nom you-Gen what-Acc know-Comp
 omotteiru no?
 think Mir
 ‘What do you think John knows about you?’
- b. Answer:
 i. Speaker: *Aitu-wa nanimo sira-nai daro(o).
 he-Top anything know-Neg will
 ‘He will know nothing.’
 ii. Speaker: Sitteiru no wa sukina mono-gurai daro(o).
 know Nominal Top only favorite thing will
 ‘It is just what you like that he will know.’

As these examples show, biclausal RQs are incompatible with empty answers; they behave differently from *to yuu no* RQs, which are compatible with both empty and nonempty answers, a behavior exhibited by monoclausal RQs.

Further, the situation is somewhat different, but in English as well, biclausal RQs show different behaviors from monoclausal RQs:

- (15) a. Question:
 Speaker: Who {i. do you think / ii. are you saying} cares about you?
- b. Answer:
 i. Speaker: Nobody (will care about you).
 ii. Speaker: (It is) only John (that will care about you).
- (16) a. Question:

- Speaker: What {i. do you think / ii. are you saying} John knows about you?
- b. Answer:
- i. Speaker: (He will know) nothing.
 - ii. Speaker: (It is) just what you like (that he will know).

The (ai)-questions are more natural with the (bi)-answers, and the (aai)-questions with the (bii)-answers. This fact means that embedding restricts the domain of possible answers; this property is shared between Japanese and English. It is not clear at the moment where the property comes from, but it successfully demonstrates the monoclausality of *to yuu no* RQs, namely, the fact that *to yuu no* serves as an RQ marker.

In this section, we have shown, by observing the difference in answerability between monoclausal and biclausal RQs in English and Japanese, that *to yuu no* RQs are monoclausal and thus *to yuu no* functions as an RQ marker. In section 3, based on this argumentation, we discuss the difference in syntactic structure between English and Japanese.

3. Unmarked Properties of Questions in English and Japanese

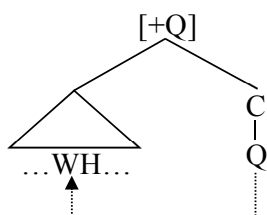
It was shown in section 2 that *to yuu no* works as an RQ marker, which guarantees the rhetorical status of a preceding clause. There is no sentence-final particle dedicated to indicating rhetorical interpretation in English, which means that English, unlike Japanese, has no GQ/RQ distinction in surface form (see section 1). However, the lack of a GQ/RQ distinction in surface form does not entail the lack of a GQ/RQ distinction in the syntactic structure. If there is no GQ/RQ distinction at this abstract level, it will render the distinction impossible in English. As discussed below, the existence of an RQ marker in Japanese confirms that GQs and RQs should be distinguished at the level of syntactic structure in both languages.

English, to our knowledge, has no direct counterpart of *to yuu no*; the existence of such counterparts entails the existence of a nonmovement derivation in this language, as in Japanese. As expected, English RQs are generally characterized as bearing a movement derivation in which their *wh*-phrases are displaced in the domain of C. What exactly explains this difference between the languages? Our answer is this: the difference reduces to the abstract level of syntactic structure, more precisely, to the separability of Q and indeterminate pronouns in the syntactic computation. That is, Japanese sets WH-Q separation (cf. Kuroda (1965), Nishigauchi (1990), Watanabe (1992)), and English sets WH-Q combination (cf. Cable (2010)), as the default for question formation.

The WH-Q separation results in a nonmovement derivation utilizing Agree (cf.

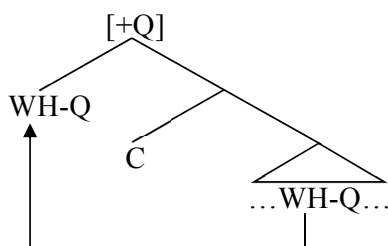
Harada (1972), Watanabe (2006)):

(17) Default question formation in Japanese (WH-Q Agree):



The occurrence of Q in the domain of C fixes a relevant clause as [+Q], and at the same time, Q, establishing an agreement relation with a *wh*-phrase under minimal search, determines its scope (see Sakamoto (2017b) for details). This nonmovement derivation renders the existence of *wh*-movement unnecessary (see Sakamoto and Ikarashi (2014, 2015) for a demonstration that Japanese has *wh*-movement only as a last resort operation). In English, the obligatory application of *wh*-movement, coming out as a result of WH-Q combination, meets the requirements of clausal typing and scope determination simultaneously:

(18) Default question formation in English (internal Merge with no WH-Q Agree):



As depicted in (18), the WH-Q complex undergoes movement to the domain of C, which fixes the clause type as [+Q] and determines the scope of the *wh*-phrase.

The existence of an RQ marker like *to yuu no* reflects the default property in Japanese (i.e., WH-Q separation). Japanese forms GQs based on the nonmovement derivation from the WH-Q separation, as depicted in (17). Given this default property, it is reasonable that RQ formation is also implemented under the same mechanism. Unlike GQs, however, RQs are devoid of Q because they have no illocutionary force of question (cf. Quirk et al. (1985:825)). In RQ formation, RQ markers, such as *mono ka*, *koto ka*, and *to yuu no*, fix a relevant clause as [-Q] by occupying the domain of C (i.e., clausal typing), from which they determine the scope of a *wh*-phrase by establishing an agreement relation with it under minimal search (i.e., scope determination) (see Sakamoto (2017a) for details).

RQs in English are also devoid of Q, but the absence of a *to yuu no* counterpart does not license the exploitation of the nonmovement derivation utilizing Agree; accordingly, English RQs always have to be derived via *wh*-movement (from Sadock (1974:125)):

- (19) a. Bill lent money to who(m)?
 b. *Bill ever lent money to who(m)?

The ungrammatical status of (19b), in which the use of *ever* invokes a rhetorical interpretation, illustrates that English has neither an overt nor covert counterpart of *to yuu no*, which makes the nonmovement derivation utilizing Agree unavailable. The lack of Q in the syntactic structure could be an indication of rhetorical interpretation. However, Q is a purely morphosyntactic entity that is originally invisible; hence, its absence does not appear as a salient difference in surface form. As a result, the lack of Q is undetectable to the hearer. It is thus expected that the speaker of an RQ utterance in English more often indicates rhetorical interpretation by appealing to phonological means (of course, rhetorical interpretation can be indicated lexically, for instance, by the use of *ever* and *after all*, as in (19b), but these cannot be RQ markers, which ensure the rhetoricality of a clause in a morphosyntactic fashion):

- (20) What are you EATING? [GQ]
 (21) a. WHAT are you eating? [RQ]
 b. What are you EATING? [RQ]
 c. WHAT are you EATING? [RQ]

(20) is a GQ; the sentences in (21) are all RQs, with the capital words standing for nuclear pitch accents, the most prominent in intonation contour. When (20) is uttered with neutral emotion in an out-of-the-blue context, the verb receives the nuclear pitch accent (cf. Okazaki (1998)). On the other hand, the same sentence, being used as an RQ utterance, can receive the nuclear pitch accent either on the *wh*-phrase (see (21a)) or on the verb (see (21b)); in addition, it can receive two nuclear pitch accents, with one on the *wh*-phrase and the other on the verb (see (21c)).

The RQs in (21) are typically used in accusing the hearer of eating something. As indicated in (22a-c), possible scenarios for (21a-c), the positioning of a nuclear pitch accent is likely to be determined in conjunction with the focus of accusation:

- (22) a. A possible scenario for (21a):
 The hearer has diabetes and is eating candy. The speaker is surprised to see the hearer eating the candy and so emphasizes *what* to indicate

the speaker's disapproval of the choice made by the hearer to eat the candy.

- b. A possible scenario for (21b):
The hearer has to leave home soon with the speaker; otherwise, they would miss a train. Nonetheless, the hearer is eating something slowly. The speaker is surprised by this and so emphasizes *eating* to indicate the speaker's disapproval with the behavior itself.
- c. A possible scenario for (21c):
A diabetic is preparing candy for his child's birthday party. He has a lot of candy on the table in front of him. He is supposed to place the candy in little bags for his child and her friends, but instead he is eating the candy. His wife suddenly walks in and is horrified to see her husband eating the candy. She emphasizes both *what* and *eating* to indicate her disapproval with both his choice to eat the candy and the behavior itself.

The nuclear pitch accent position in (21b) is the same as in (20), but an RQ will generally retain a higher pitch over its whole contour; this pitch pattern holds true for all the RQs in (21). Although further argumentation is needed both empirically and theoretically, we find there to be a significant correlation between the positioning of a nuclear pitch accent and the focus of accusation. Accordingly, it can be concluded that the phonological measure plays an important role in indicating rhetorical interpretation in English.⁵

The discussion in this section is summarized as follows:

(23) Unmarked properties of questions in English and Japanese:

- a. English:
 - i. GQ formation based on WH-Q combination (i.e., internal Merge with no WH-Q Agree)
 - ii. The absence (poor development) of RQ markers
 - iii. RQ formation based on movement derivation
 - iv. The use of phonological indication of rhetorical interpretation
- b. Japanese:
 - i. GQ formation based on WH-Q separation (i.e., WH-Q Agree)
 - ii. The presence (rich development) of RQ markers
 - iii. RQ formation based on nonmovement derivation
 - iv. The use of morphosyntactic indication of rhetorical interpretation

⁵ The same distinction can be made in Japanese; thus, the use of RQ markers is not the only means of the indication in this language. See Sakamoto and Takagi (2018) and Takagi and Sakamoto (2018) for the analysis of the Japanese counterparts of (21).

In (23), particular unmarked properties are derived in ascending order. English always exploits *wh*-movement in question formation; GQs and RQs are distinct in the presence or absence of Q in their syntactic structures, but the distinction does not surface to the extent detectable to the hearer. The lack of GQ/RQ distinction in surface form, accordingly, leads to the use of phonological indication of rhetorical interpretation. Japanese basically does not utilize *wh*-movement in question formation; the exploitation of RQ markers, equivalent to the use of morphosyntactic indication of rhetorical interpretation, enables GQ/RQ distinction in surface form as well as in syntactic structure.

Given that (23a) and (23b) are unmarked properties in each language, English may make use of morphosyntactic indication of rhetorical interpretation and Japanese phonological indication of rhetorical interpretation. However, such patterns of indication are expected to be on marked sides in each language. In fact, when Japanese utilizes the phonological indication, *wh*-movement, a marked operation for this language (cf. Sakamoto and Ikarashi (2014, 2015)), is observed (cf. Sakamoto and Takagi (2018), Takagi and Sakamoto (2018); see also footnote 5). Similarly, the morphosyntactic indication in English, if any, should be involved in a marked operation for this language in some sense; a study closely related to this expectation has been initiated by Ikarashi and Sakamoto (2018). This question as raised by (23) calls for further empirical justification.⁶

4. Concluding Remarks

In this paper, we demonstrated that the Japanese sentence-final particle *to yuu no* serves as an RQ marker by observing the difference in answerability between monoclausal and biclausal RQs in English and Japanese (see section 2). This demonstration successfully led us to characterizing unmarked properties of questions in these two languages (see section 3). However, we need to examine further the plausibility of this characterization both qualitatively and quantitatively.

Before closing this paper, we would like to make a brief remark on a prospect

⁶ It seems that lexical indication (i.e., an indication of rhetorical interpretation by such certain polarity items as *hitori-demo* ‘even a single’ and *ikkai-demo* ‘even once’) is a property common to English and Japanese (see Yoshimura (2009:section 3) for related discussion; see also (19b) and the discussion about it in the text). This type of indication should be distinguished from the morphosyntactic indication because the use of polarity items of the sort mentioned above does not compel rhetorical interpretation; according to Yoshimura’s (2009) observation, such items can occur in other syntactic environments like conditionals and imperatives. In contrast, an RQ marker, implementing the morphosyntactic mechanism (i.e., clausal typing and scope determination), forces its preceding clause to be interpreted rhetorically. Hence, the lexical indication is under the control of semantico-pragmatic mechanisms, rather than morphosyntactic ones. In passing, the phonological indication will be more complicated because prosody is determined based on syntactic, semantic, and pragmatic information and on the interaction among them; thus, it must be analyzed more carefully.

for future investigation. In section 2, we revealed that monoclausal RQs, including *to yuu no* RQs, exhibit a different behavior in answerability from biclausal RQs. As mentioned earlier, Japanese has two types of RQ markers in addition to *to yuu no*: *mono ka* and *koto ka*. Although they are in the same group in the sense that they force questions that include them to be interpreted rhetorically, they seem to differ in answerability, just as monoclausal and biclausal RQs do. Take the grammatical contrast between *mono ka* and *to yuu no* as an example ((24a) from Inada and Imanishi (2016:13)):

- (24) a. Question:
 Speaker: Dare-ga sonna mise-ni iku mono ka?
 who-Nom that shop-Dat go thing SFP
 ‘Who goes to that shop?’
- b. Answer:
 i. Speaker: Ore-wa ika-nai.
 I-Top go-Neg
 ‘I don’t go there.’
 ii. Speaker: Daremo ika-nai daro(o)
 anyone go-Neg will
 ‘No one will go there.’
 iii. Speaker: *Iku no wa John-gurai daro(o).
 go Nominal Top only John will
 ‘It is only John that will go there.’

(24a) is a *mono ka* RQ; some (im)possible answer sets are given in (24b). One discriminative aspect of this RQ is reflected in the empty answer in (24bi). According to Nihongo Kizyutu Bunpo Kenkyukai (2012:285-286), *mono ka* RQs are used when the speaker strongly asserts his or her judgment and will, capturing the occurrence of the event in question as impossible. In the case of (24a), the speaker is asserting that (s)he has no will to go to the shop at all; this assertion can be manifested as the empty answer in (24bi). (24a) can have the empty answer in (24bii), but it is assumed to be a secondary derivative of (24bi). Under our analysis, the speaker of (24a) is the only candidate that can constitute the value of the *wh*-phrase; (s)he ceases to be the candidate by showing his or her will not to go to the shop, hence the empty answer, (24bi). The value of the *wh*-phrase in question is empty (i.e., \emptyset); consequently, the empty answer, (24bii), can be derived.

The view that (24bi) is a primary answer for (24a) is also confirmed by the contrast between (25) and (26):

(25) Question:

Speaker: Dare-ga iku mono ka?
 who-Nom go thing SFP
 ‘Who goes?’

(26) Question:

Speaker: *Dare-ga kuru mono ka?
 who-Nom come thing SFP
 ‘Who comes?’

This grammatical contrast shows that the use of *kuru* ‘to come’ instead of *iku* ‘to go’ is not accepted in *mono ka* RQs. According to Makino and Tsutsui (2015:149, 219), *iku* and *kuru* are defined as follows:

(27) a. *Iku*:

[someone] or [something] moves in a direction away from the speaker or the speaker’s viewpoint.

b. *Kuru*:

[someone] or [something] moves in a direction towards the speaker or the speaker’s viewpoint or area of empathy.

Crucially, *kuru*, unlike *iku*, excludes the possibility that the speaker functions as the subject of the act expressed by the verb. This exclusion accounts for the ungrammatical status of (26), together with the property of a *mono ka* RQ observed above, according to which the speaker of a *mono ka* RQ is the only candidate that can constitute the value of the *wh*-phrase. This property is at odds with the meaning of *kuru*, which does not permit the speaker to be the subject. Therefore, (26) is ungrammatical. This account strongly supports the view that (24bi) is a primary answer for (24a).

Moreover, as the ungrammatical status of (24biii) indicates, *mono ka* RQs do not permit nonempty answers. This behavior is not observed in monoclausal RQ counterparts without *mono ka*:

(28) a. Question:

Speaker: Dare-ga sonna mise-ni iku
 who-Nom that shop-Dat go
 {i. no / ii. to yuu no}?
 Mir Comp saying Mir
 ‘Who goes to that shop?’

- b. Answer:
- i. Speaker: Daremo ika-nai daro(o)
anyone go-Neg will
'No one will go there.'
 - ii. Speaker: Iku no wa John-gurai daro(o).
go Nominal Top only John will
'It is only John that goes there.'

The RQ counterparts in (28a) license both empty and nonempty answers, as shown in (28b). The fact that *mono ka* RQs are different in answerability from *to yuu no* RQs can be problematic for the analysis presented in this paper, for *mono ka* RQs, like *to yuu no* RQs, are expected to be monoclausal because *mono ka* obligatorily provides its preceding clause with a rhetorical status (cf. Oguro (2014, 2018)). That said, it is premature to relinquish the application of the present analysis to *mono ka* RQs. In the case of (24a), (24bi) is primary as an answer given by the speaker for the reason stated above. This primacy accounts for the unacceptability of (24biii): (24bi) can derive the empty answer in (24bii), but not the nonempty answer in (24biii), by touching on the empty set, ϕ .⁷ If this account is on the right track, our analysis, which recognizes *mono ka*, *koto ka*, and *to yuu no* as a natural class, is maintained.⁸

In this way, RQ markers, such as *mono ka*, *koto ka*, and *to yuu no*, are considered to be in the same group, but they can differ in answerability. In addition, Sakamoto and Ikarashi (2014, 2015) demonstrate that RQs devoid of such markers involve *wh*-movement (see section 3; see also Sakamoto (2017a, 2018)). These observations suggest the existence of some subtypes of RQs inside and outside of the same group. Therefore, we should explicitly generalize grammatical criteria to classify RQs by analyzing them at various levels of grammar (i.e., morphology, syntax, semantics, pragmatics, and phonology), which we have, in fact, verified in part in this paper (see also footnote 6). Through this generalization, we will be able to reach the essential nature shared by RQs.

REFERENCES

- Adachi, Taro (2005) "Gimonbun ni okeru Hango Kaisyaku o Meguru Oboegaki (Rhetorical Questions in Japanese)," *Memoirs of Kyoto Tachibana Women's University* 31, 35-50.
- Cable, Seth (2010) *The Grammar of Q: Q-Particles, Wh-Movement and Pied-Piping*, Oxford University Press, Oxford.

⁷ (28a) is compatible with the verb *kuru*, which suggests that (28a) does not have the primary answer restriction observed in (24b). Hence, the nonempty answer in (28bii) is not excluded.

⁸ Here, we do not discuss *koto ka* due to space limitations, but we believe it to constitute a natural class with the other RQ markers; this discussion will be left for another occasion.

- Caponigro, Ivano and Jon Sprouse (2007) "Rhetorical Questions as Questions," *Proceedings of Sinn und Bedeutung* 11, 121-133.
- Cheng, Lisa L.-S. (1997) *On the Typology of Wh-Questions*, Garland, New York.
- Goto, Risa (2018) *Rhetorical Questions: A Relevance-Theoretic Approach to Interrogative Utterances in English and Japanese*, Hituzi Syobo, Tokyo.
- Harada, Kazuko I. (1972) "Constraints on WH-Q Binding," *Studies in Descriptive and Applied Linguistics* 5, 180-206.
- Hengeveld, Kees and Hella Olbertz (2012) "Didn't You Know? Mirativity Does Exist!," *Linguistic Typology* 16, 487-503.
- Ikarashi, Keita (2015a) "The Japanese Sentence-Final Particle *No* and Mirativity," *Tsukuba English Studies* 34, 79-98.
- Ikarashi, Keita (2015b) "Mirativity o Arawasu Maakaa tosite no *No* (*No* as a Marker Expressing Mirativity)," *Jisee narabini sono Kanren Ryooiki to Ninti no Mekanizumu* (Tense and Its Related Fields and the Mechanism of Cognition), ed. by Naoaki Wada and Junya Watanabe, 181-213, TAME Kenkyukai.
- Ikarashi, Keita and Akihiko Sakamoto (2018) "Suikoosetu *I Ask You* no Danwa Kinoo ni tuite (The Discourse Function of the Performative Clause *I Ask You*)," paper presented at 6th Tsukuba Eegogaku Wakate Kenkyukai, September 3, 2018, University of Tsukuba.
- Inada, Toshiaki and Noriko Imanishi (2016) "Nitieego no Syujigimon o Megutte: Gengo no Huhensee to Tayoosee no Tansaku (1) (On Rhetorical Questions in English and Japanese: An Exploration of Uniformity and Variability of Human Languages (1))," *Journal of Center for Language Studies Nagasaki University* 4, 1-23.
- Inada, Toshiaki and Noriko Imanishi (2017) "Nitieego no Syujigimon no Tokusee to Toogoseeyaku: Gengo no Huhensee to Tayoosee no Tansaku (2) (On Rhetorical Questions and Their Constraints in English and Japanese: An Exploration of Uniformity and Variability of Human Languages (2))," *Journal of Center for Language Studies Nagasaki University* 5, 1-18.
- Kuno, Susumu (1980) "The Scope of the Question and Negation in Some Verb-Final Languages," *CLS* 16, 155-169.
- Kuroda, S.-Y. (1965) *Generative Grammatical Studies in the Japanese Language*, Doctoral dissertation, MIT.
- Makino, Seiichi and Michio Tsutsui (2015) *A Dictionary of Basic Japanese Grammar*, The Japan Times, Tokyo.
- Martin, Samuel E. (1988) *A Reference Grammar of Japanese*, Charles E. Tuttle, Tokyo.
- Nihongo Kizyutu Bunpo Kenkyukai (2012) *Gendai Nihongo Bunpoo* 3 (Modern Japanese Grammar 3), Kurosio, Tokyo.
- Nishigauchi, Taisuke (1990) *Quantification in the Theory of Grammar*, Kluwer, Dordrecht.
- Oguro, Takeshi (2014) "Negation in Certain Rhetorical Questions in Japanese," *Proceedings of the Florida Linguistics Yearly Meeting* 1, Retrieved from <http://journals.fcla.edu/florida-linguisticspapers/article/view/83584>.

- Oguro, Takeshi (2018) "Properties of *Mono Ka* Rhetorical Questions," *MIT Working Papers in Linguistics* 88: *Proceedings of the 13th Workshop on Altaic Formal Linguistics*, 193-204.
- Okazaki, Masao (1998) *English Sentence Prosody: The Interface between Sound and Meaning*, Kaitakusha, Tokyo.
- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik (1985) *A Comprehensive Grammar of English Language*, Longman, London.
- Sadock, Jerrold M. (1974) *Towards a Linguistic Theory of Speech Acts*, Academic Press, New York.
- Sakamoto, Akihiko (2017a) "Rhetorical Question Formation in Japanese and English," *Data Science in Collaboration* 1, 155-164.
- Sakamoto, Akihiko (2017b) "*Wh*-Island Effects in Japanese and English," *Tsukuba English Studies* 36, 47-71.
- Sakamoto, Akihiko (2018) "Nitieego WH Gensyoo no Rironka to Imikaisyaku no Yuhyoossee ni tuite (Theorizing on *Wh*-Phenomena in Japanese and English and Markedness in Semantic Interpretation)," *Proceedings of the 72nd Conference of the English Literary Society of Japan, Tohoku Branch*, 155-156.
- Sakamoto, Akihiko and Keita Ikarashi (2014) "*Wh*-Movement as a Scope Determination Operation in Japanese," *MIT Working Papers in Linguistics* 73: *Proceedings of Formal Approaches to Japanese Linguistics* 7, 143-154.
- Sakamoto, Akihiko and Keita Ikarashi (2015) "Universal Grammar and the Mechanism of Structure Indication: A Case Study of the *Nani-o X-o* Construction," *Tsukuba English Studies* 34, 33-53.
- Sakamoto, Akihiko and Sachiko Takagi (2018) "Nihongo Syujigimonbun ni okeru Taikaku WH Go no Sijisee: Toogo Koozoo ni Motozuku Inritu Koozoo no Yosoku (The Referentiality of Accusative *Wh*-Phrases in Japanese Rhetorical Questions: Predicting Prosodic Structures from Their Syntactic Structures)," *IEICE Technical Report* 117(509), 101-105.
- Searle, John R. (1969) *Speech Acts: An Essay in the Philosophy of Language*, Cambridge University Press, Cambridge.
- Sprouse, Jon (2007) "Rhetorical Questions and *Wh*-Movement," *Linguistic Inquiry* 38, 572-580.
- Takagi, Sachiko and Akihiko Sakamoto (2018) "Nihongo Syujigimonbun ni okeru Taikaku WH Go no Sijisee: Onsee Tyoosyu Jikken ni yoru Nisyurui no Toogo Koozoo no Kensyoo (The Referentiality of Accusative *Wh*-Phrases in Japanese Rhetorical Questions: Examining Two Types of Syntactic Structures by the Experiment Using Vocal Stimuli)," *IEICE Technical Report* 118(49), 83-88.
- Watanabe, Akira (1992) "*Wh*-in-situ, Subjacency, and Chain Formation," *MIT Occasional Papers in Linguistics* 2, MIT Press, Cambridge, MA.
- Watanabe, Akira (2006) "The Pied-Piper Feature," *Wh-Movement: Moving on*, ed. by Lisa L.-S. Cheng and Norbert Corver, 47-70, MIT Press, Cambridge, MA.
- Wierzbicka, Anna (1987) *English Speech Act Verbs: A Semantic Dictionary*, Academic Press, Sydney.

Yoshimura, Keiko (2009) “Complexity of Polarity Sensitivity: Japanese-*Demo*,” *The Annals of Gifu Shotoku Gakuen University* 48, 49-59.

Faculty of Management and Administration

Tokiwa University

e-mail: sakamoto@tokiwa.ac.jp