

The information structure of Japanese

Reiko Vermeulen

This chapter describes various means in Japanese of expressing information-structural functions. Japanese is interesting in several respects: it is a head-final language with case marking, which allows for relatively “free” word order – that is, the ordering of constituents partly reflects information-structural properties. Most famously, it has a morphological marker for topichood, *wa*, which has figured prominently in the theoretical discussion of information structure. Moreover, it has no articles, so givenness is expressed by other means. Many of these properties can also be seen in Korean, a structurally similar language, although they are not always realized under the same circumstances. In this article, we will consider focus, topic and givenness, as defined in the introduction to this volume, in this order.

1. Focus

1.1. Constituent questions

In Japanese constituent questions, both the *wh*-phrase and the constituent that answers the *wh*-part of the question are typically realized in-situ:¹

- (1) A: *dare-ga wain-o nonda no?* (Subject)
who-NOM wine-ACC drank *Q*
‘Who drank wine?’
B: *[Taro-ga]_F wain-o nonda.*
Taro-NOM wine-ACC drank
‘Taro drank wine.’

¹ The examples in (1)–(4) are based on an example in Ishihara (2004:80). Abbreviations: ACC = accusative, COP = copula, GER = gerund, NMZ = nominalizer, NOM = nominative, PASS = passive, Q= question particle, SFP = sentence final particle.

- (2) A: *Taro-wa nani-o nonda no?* (Object)
 Taro-WA what-ACC drank *Q*
 ‘What did Taro drink?’
 B: *Taro-wa [wain-o]_F nonda.*
 Taro-WA wine-ACC drank
- (3) A: *Taro-wa nani-o sita no?* (VP)
 Taro-WA what-ACC did *Q*
 ‘What did Taro do?’
 B: *Taro-wa [wain-o nonda]_F.*
 Taro-WA wine-ACC drank
- (4) A: *nani-ga atta no?* (Sentence)
 what-NOM happened *Q*
 ‘What happened?’
 B: *[Taro-ga wain-o nonda (no)]_F.*
 Taro-NOM wine-ACC drank SFP

The answers are given as full sentences above, but as will be discussed in Section 4, given items are preferably unpronounced. Thus, the above answers are actually rather awkward. It is more natural to simply pronounce the relevant constituent plus a copula, or the verb, as illustrated for subject below:

- (5) a. *[Taro]_F desu.*² b. *[Taro-ga]_F nonda.*
 Taro COP Taro-NOM drank
 ‘It’s Taro.’ ‘Taro drank (it).’

Prosodically, *wh*-phrases are expressed obligatorily with an emphatic stress, that is, a sharply raised F_0 -peak of the first high tone of the *wh*-phrase, followed by compression of F_0 -movement of the following material (Nagahara 1994, Deguchi and Kitagawa 2002, Ishihara 2002, 2004, 2007).³ This point is illustrated below. CAPITALS indicate the position of the sharply raised F_0 -peak, and underlining indicates the post-focal pitch compression.⁴

² Nominals before a copula cannot have a case marker, while a postposition is usually retained (Fukaya and Hoji 1999).

³ See also Chen (this volume).

⁴ The post-focal compression is variously known as ‘deaccenting’, ‘dephrasing’, and ‘eradication’ in the literature. I will indicate it by underlining only where relevant to make the point. There is a clause-final rising intonation for questions here, hence the question particle is not underlined.

- (6) *Naoya-wa NAni-o nomiya-de nonda no?* (Ishihara 2004: 80)
 Naoya-WA what-ACC bar-at drank Q
 ‘What did Naoya drink at the bar?’

A constituent that answers the *wh*-part of a preceding question is not necessarily marked with a sharp rise of the F_0 -peak like *wh*-phrases. Rather, it typically bears only a slight rise in the F_0 -peak (Deguchi and Kitagawa 2002, Ishihara 2004, 2007). The contour associated with *wh*-phrases **are** observed with contrastive focus, which is discussed below.

Scrambling – optional movement of constituents into non-canonical positions – can affect the focus structure of a sentence in various ways. First, scrambling may target the focus constituent itself, in which case the scrambled item bears an emphatic stress of the type borne by *wh*-phrases. Some speakers are able to scramble the answer constituent in (2B), for instance, even long-distance, but they report that it necessarily leads to a contrastive interpretation:

- (7) A: ‘What did Taro drink?’
 B: [*WAin-o_i*]_F *Taro-wa t_i nonda.*
 wine-ACC Taro-WA drank
 ‘Taro drank wine (and not beer).’

Second, it has been argued that an immediately pre-verbal item in Japanese receives the default main stress of the sentence. Scrambling can manipulate this default stress position for focus purposes (Neeleman and Reinhart 1998, Ishihara 2000). It can remove an item from the default stress position so that a focused item ends up in that position. Thus, one way of answering (8A) is to scramble the object. The adverbial is now in the pre-verbal position, receiving the main stress of the sentence, allowing for a focus interpretation.⁵ (The default stress is marked with an acute accent here):

⁵ This option is also available for focusing the subject (Ishihara 2000), but additional factors are involved, which are not yet well understood. The reply in (i-B) is felicitous only if in the preceding question in (i-A), the object is scrambled so that the subject *wh*-phrase is already in the preverbal position. B’s utterance is infelicitous as an answer to a question with the canonical word order, such as (1A). There is no comparable restriction on the preceding question when the object scrambles over a focused adverbial, as in (8), or a focused indirect object.

(i) A: *wain-o_i DAre-ga t_i nonda no?* B: *wain-o_i Táro-ga t_i nonda.*
 wine-ACC who-NOM drank Q wine-ACC Taro-NOM drank
 ‘Who drank (the) wine?’ ‘Taro drank (the) wine.’

- (8) A: ‘Where did Taro drink wine?’
 B: *Taro-wa wain-o_i [nomiya-de]_F t_i nonda.*
 Taro-WA wine-ACC bar-at drank
 ‘Taro drank wine at a bar.’

An item bearing a default main stress, as in the example above, can project the focus to a larger domain. Thus, in (3B) and (4B) the pre-verbal object bears the default main stress, projecting focus to VP and the sentence. The example in (8B) can have a different focus, such as [adverbial + verb].

Wh-phrases may also undergo scrambling, short- or long-distance. The same intonational pattern is obtained in such cases: the fronted *wh*-phrase has a sharp F_0 -rise and the following material shows a significant down-trend. Miyagawa (2006) claims that scrambled *wh*-phrases are interpreted as D(iscourse)-linked, that is, there is a presupposed, contextually given set which contains the answer to the *wh*-phrase. Thus, the following example means ‘among the things in a presupposed set, the speaker wants to know which of them Taro drank.’

- (9) *NAni-o_i Taro-wa t_i nondano?*
 what-ACC Taro-WA drank Q
 ‘What did Taro drink?’

1.2. Multiple *wh*-questions

A question sentence may contain multiple *wh*-phrases. They may appear in-situ, as in (10a), or one may undergo scrambling across the other, as in (10b), without yielding a superiority effect. Prosodically, all the *wh*-phrases in multiple *wh*-questions must have sharply raised F_0 -peaks, but the post-focal F_0 -compression takes place only after the last *wh*-phrase (Ishihara 2000, 2002).

This shifts the issue to the question of which discourse contexts allow an object to scramble over a focused or *wh*-subject. The discourse effects of short object scrambling of the above sort have not received much attention and currently, there does not appear to be any consensus (Aoyagi and Kato 2008, Miyagawa 2010).

- (10) a. *Dare-ga NAni-o kinoo-no paatii-ni motte-kita no?*
 who-NOM what-ACC yesterday-GEN party-to bring-came *Q*
 b. *NAni-o_i Dare-ga kinoo-no paatii-ni t_i motte-kita no?*
 what-ACC who-NOM yesterday-GEN party-to **bring-came** *Q*
 ‘Who brought what to yesterday’s party?’

Multiple *wh*-questions can be answered by sentences containing multiple foci. There is a preference to keep the order of arguments the same as in the preceding question: (11a) sounds most natural for the question in (10a) and (11b) for (10b).

- (11) a. *[TAro-ga]_F [WAin-o]_F motte-kita.*
 Taro-NOM wine-ACC bring-came
 b. *[WAin-o]_F [TAro-ga]_F t_i motte-kita.*
 wine-ACC Taro-NOM bring-came
 ‘Taro brought wine.’

Multiple *wh*-questions like (10) can be answered with one of the questioned items bearing the particle *wa*, a marker that is also used for contrastive topics, as we will see below, and the other with a case marker. This pattern is observed cross-linguistically. As is well known, in English and German, for example, one of the questioned items can be marked with a rising tone, a tone associated with contrastive topics, and the other with a falling tone, a tone associated with focus (Jackendoff 1972, Büring 1997). The XP-*WA* YP-case_{FOCUS} pattern is particularly natural if the answer lists several pairs (see Hara and van Rooij 2007 on this use of *wa*):

- (12) a. *[TAro-wa]_{CT} [WAin-o]_F motte-kite, [HAnako-wa]_{CT}*
 Taro-WA wine-ACC bring-come.GER Hanako-WA
[ZYUusu-o]_F motte-kita. Sosite...
 juice-ACC bring-came and...
 b. *[WAin-wa]_{CT} [TAro-ga]_F t_i motte-kite, [ZYUusu-wa]_{CT}*
 wine-WA **Taro**-NOM bring-come.GER juice-WA
[HAnako-ga]_F t_j motte-kita. Sosite...
 Hanako-NOM bring-came and...

1.3. Contrastive focus

Contrastive focus, found in cases of correction and confirmation, can appear in-situ or fronted. Contrastively focused items show the same intonation as

wh-phrases: a sharply raised F_0 -peak on the contrastive focus followed by compression of F_0 -movement (Beckman and Pierrehumbert 1988, Selkirk and Tateishi 1991, Nagahara 1994, Ishihara 2000, 2007, Deguchi and Kitagawa 2002, Sugahara 2003, among others). It is worth noting that while an emphatic stress necessarily indicates a contrastive interpretation, a contrastive interpretation may arise from the context and does not necessitate an emphatic stress (Kuroda 2005: Appendix II).

In both cases of correction and confirmation, the relevant focus constituent may stay in-situ, may undergo scrambling, or a cleft construction may be used. The following examples demonstrate the possibilities of scrambling, (13B-i), and a cleft construction, (13B-ii), for an object in an instance of correction. Other arguments and adverbials display the same pattern (Hoji 1987, Kizu 2005, Takano 2002, Hiraiwa and Ishihara 2002, among others).

(13) A: *Hanako-ga kukkii-o nusunda.*

Hanko-NOM cookie-ACC stole
'Hanako stole cookies.'

B: i. *tigai-masu. [oSEnbee-o]_iF Hanako-wa t_i nusunda no desu.*
incorrect-COP rice.cracker-ACC Hanako-WA stole NMZ COP
'That's not true. Hanako stole ricecrackers.'

ii. *tigai-masu. [Hanako-ga e_i nusunda no]-wa [oSEnbee]_iF desu.*
incorrect-COP Hanako-NOM stole NMZ-WA rice.cracker COP
'That's not true. It is ricecrackers that Hanako stole.'

A contrastive focus can undergo long-distance scrambling. Long-distance scrambling is most typically accompanied by an emphatic stress, followed by a pause (Saito 1989). Consequently, a contrastive interpretation is obligatory (Miyagawa 2006). Some speakers allow only corrective or confirmative kinds of focus to undergo long-distance scrambling, while others allow an item that merely answers the *wh*-part of a preceding question to do so, but report that they have supplemented it with a contrastive interpretation.⁶ These speakers are interpreting the exchange in a particular discourse context, accommodating a contrastive interpretation.

⁶ Subjects in Japanese cannot undergo scrambling (Saito 1985), thus long-distance scrambling is not an option for subjects. Ko (2005) argues that theoretically, subjects in Japanese and Korean can scramble. But, Saito's descriptive observation that an embedded subject cannot scramble over a matrix argument remains correct and is relevant here.

Furthermore, it is interesting to note that when the focused constituent is a case-marked nominal or a PP, there are two potential positions in which the sharp F_0 -rise may be observed within the focused item, namely on the position of the lexical accent of the nominal, or on the case marker or the postposition. Thus, instead of the emphatic stress placement depicted above, i.e., *oSEnbee-o* and *KUkkii-o*, the case marker can bear the emphatic stress, i.e., *osenbee-O* and *kukkii-O*. This option is available only if the nominal is lexically accented.⁷ In cases of unaccented nominals, the sharp F_0 -rise is possible on the case marker or the postposition only. The same optionality is found with focal particles discussed in Section 1.5 and the contrastive use of *wa*.

I shall mention here a further instance of what appears to be focus undergoing scrambling, which has not yet received much attention in the literature.⁸ It involves scrambling within a focused constituent, as shown below. This kind of scrambling is associated with a particular intonation. Within the fronted object, only the nominal can bear the sharp F_0 -rise; the case marker cannot. Moreover, native speakers do not perceive the following material to have compressed F_0 -movements.

- (14) [Hearing some noise in a different room.] ‘What happened?’

[kaGAmi-o_i / #kagami-O_i Hanako-ga t_i kowasite-simatta no]_F.
 mirror-ACC mirror-ACC Hanako-NOM break-ended.up SFP
 ‘Hanako broke a mirror.’

In terms of interpretation, speakers report a sense of ‘surprise’ at the fact that it was a mirror that was broken, as opposed to other things. This kind of scrambling differs syntactically from contrastive focus in that it cannot undergo long-distance movement:

- (15) ‘What happened?’

#kaGAmi-o_i Taroo-ga [_{CP} Hanako-ga t_i kowasite-simatta to] itta.
 mirror-ACC Taro-NOM Hanako-NOM break-ended.up that said
 ‘Taro said that Hanako broke a mirror.’

Fanselow and Lenertová (2011) discuss a similar kind of movement in a variety of languages, but not in Japanese.

⁷ Not all words are lexically accented in Japanese. See Haraguchi (1999) for general discussion on this issue.

⁸ Thanks to Naoyuki Yamato for discussion on this phenomenon.

1.4. Verum focus

Japanese *yes/no* questions do not allow answers in the form of *do*-support as in English. As with constituent questions, it is possible, but rather awkward, to answer with full sentences. A more natural answer consists simply of the fully inflected verb with an emphatic stress. These properties are demonstrated for affirmative answers below. Japanese finite verbs are morphologically complex, with, minimally, the tense morpheme attaching to the verbal root, and these two morphemes forming a phonological word. It is not clear where the sharp F_0 -rise is located. The whole verbal complex is therefore in CAPITALS here (Ishihara to app.). An emphatic stress on the verb in the question is optional.⁹

(16) A: 'Did Taro buy that book?'

- B: i. **un, si-ta* (yo).
yes, do-PAST SFP
- ii. *un, Taro-wa ano hon-o KATTA* (yo).
yes, Taro-WA that book-ACC bought SFP
- iii. *un, KATTA* (yo).
yes, bought SFP
'Yes, Taro bought that book.'

Exactly the same means as shown in the example above can be used for instances in which the polarity of a statement is confirmed or corrected. Thus, the utterances in (16B-ii) and (16B-iii) may be used in affirming the statement *Taro-wa ano hon-o katta* 'Taro bought that book.'

1.5. Focus sensitive particles

The focus sensitive particles *dake* 'only', *mo* 'also', and *sae* 'even', and the negative polarity item (NPI) *sika* 'only' are widely reported to display similar properties. First, they can appear on nominals, (17)/(19), PPs, (18), and

⁹ The sentence final particle *yo* is often described as a marker of new information, or assertion. It is optional in the examples in the main text, though the examples are much more natural with it. The emphatic stress on the verb can remain on the verb in the presence of *yo*, but it seems to me that it is also possible to shift the emphatic stress to the particle without difference in meaning, thus the choice is *KATTA yo* or *katta YO* for (16B-ii) and (16B-iii).

verbs, (20), and in the last case *do*-support is required. When attaching to a nominal, the case marker is omitted. Examples with *sika* are not provided here, but see Futagi (2006).

- (17) *Taro-dake/mo/sae ano mise-de nihongo-no syoosetu-o katta.*
 Taro-only/also/even that shop-at Japanese-GEN novel-ACC bought
 ‘Only/Also/Even Taro bought Japanese novels at that shop.’
- (18) *Taro-ga ano mise-de-dake/mo/sae nihongo-no syoosetu-o katta.*
 Taro-NOM that shop-at-only/also/even Japanese-GEN novel-ACC bought
 ‘Taro bought Japanese novels only/also/even at that shop.’
- (19) *Taro-ga ano mise-de nihongo-no syoosetu-dake/mo/sae katta.*
 Taro-NOM that shop-at Japanese-GEN novel-only/also/even bought
 ‘Taro bought only/also/even Japanese novels at that shop.’
- (20) *Taro-ga ano mise-de nihongo-no syoosetu-o kai-dake/mo/sae sita.*
 Taro-NOM that shop-at Japanese-GEN novel-ACC buy-only/also/even did
 ‘Taro only/also/even bought Japanese novels at that shop.’

The target of the focus sensitive particles is not limited to the lexical item that they are attached to. Thus, for instance, the target in (19) may be the object *nihongo-no syoosetu* ‘Japanese novels’, as well as its subparts, *syoo-setu* ‘novel’ and *nihongo-no* ‘Japanese’. In (20), the target of the particle can be the verb *kai*- ‘buy’, the object *nihongo-no syoosetu* ‘Japanese novels’, *syoosetu* ‘novel’, *nihongo-no* ‘Japanese’, the VP, as well as the locative *ano mise-de* ‘at that shop’. Association with the subject in (18)–(20) is not possible (Kuroda 1979, 2005, Futagi 2005, Kishimoto 2009). The following paraphrases with added contextual material describe readings available for the various potential associations with *dake* ‘only’ in (20).

- (21) a. *kai*-‘buy’: ‘Taro only bought Japanese novels at that shop, but he didn’t read them.’
 b. *nihongo-no syoosetu* ‘Japanese novels’: ‘Taro bought only Japanese novels at that shop, but not any other reading material, Japanese or not.’
 c. *syoosetu* ‘novel’: ‘Taro bought only Japanese novels at that shop, but not Japanese non-fiction, Japanese poetry, etc.’
 d. *nihongo-no* ‘Japanese’: ‘Taro bought only Japanese novels at that shop, but not English, French, etc. novels.’

- e. *nihongo-no syoosetu-o kai*- ‘buy Japanese novels’: ‘The only thing Taro did was to buy Japanese novels at that shop. He didn’t go and see a film at the cinema.’
- f. *ano mise-de* ‘that shop-at’: ‘The only place that Taro bought Japanese novels is that shop.’

Association with a lexical item across an island is also possible. In (22), the focus sensitive particles are attached to the relative head noun and they can associate with it, but they may also associate with an item inside the relative clause. Thus, for *dake* ‘only’, it has the reading ‘Taro bought only the book that Hanako recommended’ as well as ‘Taro bought the book that only Hanako recommended’. The target of the focus preferably bears an emphatic stress.

- (22) *Taro-wa* [_{CP} *Hanako-ga e_i suisensita*] *hon_i-dake/mo/sae katta*.
 Taro-WA Hanako-NOM recommended book-only/also/even bought

The particle *dake* ‘only’ shows further properties that are strikingly distinct from the other focus sensitive particles, which are discussed extensively in Futagi (2004) and Kishimoto (2009).

1.6. Focus and nominative case marker

I note here two further peculiarities of Japanese regarding focus. First, Japanese shows an asymmetry in the default reading between nominative subjects and non-subjects marked with canonical case markers or postpositions. Specifically, a nominative subject of an individual-level predicate must be interpreted as exhaustive, as in (23a), while if the predicate is stage-level, either the subject is interpreted as exhaustive or the sentence is interpreted as all focus, (“exhaustive listing reading” and “neutral description” in Kuno’s (1973) terminology), as in (23b) (Kuroda 1965, 1972, Kuno 1973, Diesing 1988, Heycock 1993a, Tomioka 2001, 2007a,b).

- (23) a. *Taro-ga gakusee desu*. b. *Taro-ga hasitta*.
 Taro-NOM student COP Taro-NOM ran
 ‘It is Taro who is a student.’ ‘It is Taro who ran.’ or ‘Taro ran.’

The exhaustive reading appears to be an implicature rather than entailment, as it may be cancelled easily. Thus, (23a) can be followed felicitously by *sosite Hanako-mo gakusee desu* ‘and Hanako too is a student’. If the subject

is not to be interpreted as exhaustive or part of focus, it is marked with *wa*.¹⁰ These obligatory focus-related readings for nominative subjects are limited to matrix clauses, and do not arise in subordinate clauses (Kuroda 1988). In fact, it is often not possible to mark a given subject with *wa* in subordinate clauses, without an additional contrastive interpretation. Non-subjects need not receive an exhaustive or part-of-focus reading when they appear with their canonical case markers or postpositions in any kind of clause.

A second peculiarity of Japanese regarding focus concerns the so-called multiple nominative construction, where more than one nominative phrase appears in the left periphery of the clause. The additional nominative phrases may be a possessor or modifier of the following nominative phrase, as in (24), or a sentential adverbial, as in (25). In these sentences, the first nominative phrase receives an exhaustive reading, which again is an implicature rather than entailment.¹¹ (Kuno 1973, Saito 1985, Heycock 1993b, 2008, Tateishi 1994, Vermeulen 2005, Akiyama 2006)

- (24) *zoo-ga hana-ga nagai.*
 elephant-NOM trunk-NOM long
 'It's the elephants that have long trunks.'

- (25) *Tokyo-ga ziko-ga ooi.*
 Tokyo-NOM accident-NOM many
 'It's in Tokyo that there are many accidents.'

There is a vast amount of work on the two default focus-associated readings of nominative subjects and the multiple nominative construction. I will not pursue these topics here. Heycock (2008) has an extensive overview, where she also considers the question of whether the nominative case marker in these constructions should be considered a focus marker.

¹⁰ This statement is too strong in some respects. There are instances of given, non-focused subjects in matrix clauses being *ga*-marked, but this is associated with some rhetorical effects (see Hinds et al. 1987)

¹¹ The multiple nominative construction is not always judged as perfect by speakers. It appears that a variety of factors are involved here, such as the type of the main predicate and the kind of relation between the additional nominative and the rest of the clause (Ishizuka 2009).

2. Topic

Topics in Japanese have received an overwhelming amount of attention in the literature from both formal and functional perspectives due to the presence of a topic marking device, the particle *wa*. Japanese has figured prominently in the theoretical discussion of topic-hood, for example in the treatment of “categorical” vs. “thetic” sentences – or sentences with or without a topic – in Kuroda (1972), cf. also Sasse (1987). Here, I will discuss some basic facts about Japanese topics, but will focus on highlighting some aspects that have received relatively little attention. The reader is referred to Heycock (2008) for a comprehensive overview of the literature.

Before we proceed, a remark is in order regarding the treatment of the particle *wa*. While there is general agreement that topics are marked by *wa* in Japanese, it is not clear whether all *wa*-marked items are topics. There are contexts where a *wa*-marked item is not necessarily interpreted as what the sentence is about, for example, when it functions as a frame-setter or delimitator, or is interpreted contrastively. In other words, the interpretive properties of a *wa*-marked item are not uniform and therefore, whether the particle *wa* should be considered a ‘topic marker’ depends to a great extent on the definition of ‘topic’.¹² Here, I will generally follow the notion of topic in Reinhart (1982), as discussed in the introduction to this volume, but I will also point out cases where the topic status of a *wa*-marked item is not so obvious.

Ever since the seminal works of Kuroda (1965) and Kuno (1973), two uses of *wa* have been widely recognized: ‘thematic’ and ‘contrastive’ (in Kuno’s terminology). Items marked with *wa* in its thematic use roughly correspond to ‘sentence topics’ in the sense of Reinhart (1982), while items marked with *wa* in its contrastive use roughly correspond to contrastive topics in the sense discussed in the introduction to this volume. Following Heycock’s (2008) practice, I will refer to the former as ‘non-contrastive’ topics, to be more theory-neutral.¹³

¹² For this reason, I gloss the particle *wa* as ‘WA’ throughout.

¹³ It is a valid question to ask whether there is one lexical item *wa* or two. At an observational level, the particle shows different syntactic, semantic and phonological behavior in the two uses. Thus, for the present purposes, I will treat them separately (see Kuroda (2005: Appendix II) for discussion on this point).

2.1. Non-contrastive topics

Non-contrastive topics typically appear in sentence initial position. Thus, in an answer to the request *tell me about X*, which is a standard test for identifying *X* as the topic in the response, *X* is *wa*-marked and most naturally occupies sentence-initial position:

- (26) A: *Taro-nituite nanika osiete-kudasai.*
 Taro-about something tell-give
 ‘Tell me something about Taro.’
- B: i. *[Taro-wa]_T kinoo ano boosi-o katta.*
 Taro-WA yesterday that hat-ACC bought
 ii. *#ano boosi-o_i [Taro-wa]_T kinoo t_i katta.*
 that hat-ACC Taro-WA yesterday bought
 ‘Taro bought that hat yesterday.’
- (27) A: *ano boosi-nituite nanika osiete-kudasai.*
 that hat-about something tell-give
 ‘Tell me something about that hat.’
- B: i. *[ano boosi-wa]_i Taro-ga kinoo e_i katta.*¹⁴
 that hat-WA Taro-NOM yesterday bought
 ii. *#Taro-ga [ano boosi-wa]_T kinoo katta.*
 Taro-NOM that hat-WA yesterday bought
 ‘Taro bought that hat yesterday.’

Argument topics are insensitive to islands (Kuno 1973, Hoji 1985, Saito 1985). In other words, an argument topic can appear in a non-thematic, left-peripheral position, and be construed as an argument inside an island, such as a relative clause, as illustrated below (Hoji 1985: 152). The topic *ano boosi-wa* ‘that hat-WA’ is interpreted as the object inside the relative clause and can be resumed by a pronominal *sore-o* ‘it-ACC’.

¹⁴ *e* here indicates an empty pronominal, which can be overtly realised, as discussed immediately below. For reasons most likely to do with prosody, a *wa*-phrase prefers not to surface adjacent to the verb (a non-contrastive *wa*-phrase typically has a prosodic boundary following it (Nakanishi 2001, 2003), while a verb prefers to form a prosodic unit with the preceding item (Nagahara 1994). Adverbials are inserted to circumvent this effect. Obj-Adv-V is assumed here to be base-generated, following Neeleman and Reinhart (1998), but nothing hinges on this assumption.

- (28) *ano boosi_j-wa John-ga* [_{NP} [_{TP} *e_i (sore_j-o) kabutteita*] *hito-o*
 that hat-WA John-NOM it-ACC wearing.was person-ACC
yoku sitteiru.
 well know
 ‘Speaking of that hat, John knows well the person who was wearing it.’

Non-arguments, including extra nominative phrases in the multiple nominative construction mentioned above, can be topics. Each sentence below can be an answer to the request of the form *tell me something about X*, where *X* is the *wa*-marked item in the response.

- (29) a. [*zoo-wa*]_T *hana-ga nagai.*
 elephant-WA trunk-NOM long
 ‘An elephant has a long trunk.’
 b. [*Tokyo-wa*]_T *ziko-ga ooi.*
 Tokyo-WA accident-NOM many
 ‘There are many accidents in Tokyo.’
 c. [*ano kooen(-de)-wa*]_T *kodomotati-ga yoku asobu.*
 that park-at-WA children-NOM often play
 ‘Children often play in that park.’

Frame-setters are also *wa*-marked and they generally occupy sentence initial position. Examples are given below. The *wa*-marked adverbials in (30) and (32), sometimes called ‘pure topics’ and ‘conditional topics’, respectively, are not interpreted as what the sentence is about in a most obvious way (Kuroda 1986a,b, Tateishi 1994).

- (30) *kyoo-wa Taro-ga tosyokan-e iku.*
 today-WA Taro-NOM library-to go
 ‘Today, Taro is going to the library.’
 (31) *hannin-wa Jiroo-ga ayasii.*
 perpetrator-WA Jiro-NOM suspicious
 Lit.: ‘As for the perpetrator, Jiro is suspicious.’
 (slightly modified from Tateishi 1994: 31)
 (32) [_{NP}[_{CP} *e_i sinbun-o yomi-tai*] *hito*]_T-*wa koko-ni arimasu.*
 newspaper-ACC read-want person-WA here-at exist
 ‘If you want to read newspapers (they) are here.’ (Kuroda 1992: 283)

It is not the case that non-contrastive *wa*-marked items can never appear elsewhere. Moreover, we observe an asymmetry between subjects and non-subjects in such cases: subject *wa*-phrases have a freer distribution (Kuroda 1988, Watanabe 2003). This point is illustrated in two instances below. First, a sentential adverbial may precede the topic in the responses to the requests in (26) and (27). Both of the following are less preferred to those in (26B-i) and (27B-i), but (33a), where the subject topic is preceded by an adverbial, is not as dispreferred with respect to (26B-i), as (33b), where the object topic is preceded by an adverbial, is dispreferred with respect to (27B-i).

- (33) a. *kinoo* [Taro-*wa*]_T *ano boosi-o katta.*
 yesterday Taro-WA that hat-ACC bought
 b. *kinoo* [*ano boosi-wa*]_{iT} *Taro-ga e_i katta.*
 yesterday that hat-WA Taro-NOM bought
 ‘Yesterday, Taro bought that hat.’

Second, as discussed above, some speakers allow a focus constituent answering the *wh*-part of a preceding question to undergo scrambling. For such speakers, an object focus can be scrambled across a subject *wa*-phrase, as in (34B-ii). So, the subject *wa*-phrase can be preceded by an object focus. By contrast, an object *wa*-phrase cannot be preceded by a subject focus, as demonstrated by (35). It is widely reported that an object *wa*-phrase in-situ must be interpreted contrastively (Saito 1985, Hoji 1985). Thus, (35B-ii) states that Taro bought a hat but also implicates that there is something else that he did not buy, an infelicitous implicature in the given context.

- (34) A: *Taro-wa nani-o katta no?*
 Taro-WA what-ACC bought *Q*
 ‘What did Taro buy?’
 B: i. *Taro-wa kinoo ano boosi-o katta.*
 Taro-WA yesterday that hat-ACC bought
 ii. *ano boosi-o_i Taro-wa kinoo t_i katta.*
 that hat-ACC Taro-WA yesterday bought
 ‘Taro bought that hat yesterday.’
- (35) A: *ano boosi-wa dare-ga katta no?*
 that hat-wa who-nom bought *Q*
 ‘Speaking of that hat, who bought it?’

- B: i. *ano boosi-wa_i Taro-ga kinoo e_i katta.*
 that hat-WA Taro-NOM yesterday bought
 ii. *#Taro-ga ano boosi-wa kinoo katta.*
 Taro-NOM that hat-WA yesterday bought
 ‘Taro bought that hat yesterday.’

Recall that we saw in (26) that the word order in (34B-ii) is infelicitous as a response to the request *tell me about Taro*. One relevant difference between the two contexts appears to be the status of *X* in the requests. In (34), the question introduces *Taro* as the topic, which is suggested by the fact that *Taro* is marked by *wa*, and the question is interpreted as being about *Taro*. Consequently, *Taro* in the response is a continuing topic in the sense of Givón (1983). On the other hand, *tell me about Taro* is an explicit instruction to the hearer to introduce *Taro* as the topic. Thus, *Taro* in the response introduces the topic and is not a continuing topic. The latter point is supported by the fact that the request can be less specific such as *tell me about someone in your class*, for which the utterance in (26B-i)/(34B-i) can still be used. (See Reinhart 1982, Givón 1983, Lambrecht 1994, Vallduví and Engdahl 1996, among others, for discussion on this distinction)

A clause may have multiple non-contrastive *wa*-phrases. At typical examples involves a frame-setter and a subject (Kuroda 1988). The adverbial may appear without *wa*, but the difference in the interpretation is not very clear.

- (36) *Paris-de-wa Masao-wa [_{NP} Eiffel-too-to Notre Dame-no*
 Paris-in-WA Masao-WA Eiffel-tower-and Notre Dame-GEN
 too]-ni nobotta.
 tower-in climbed
 ‘In Paris, Masao climbed up the Eiffel tower and the tower of Notre Dame.’

Non-contrastive *wa*-phrases are root phenomena and are excluded from most subordinate clauses such as conditionals, relative clauses, adverbial clauses, complement clauses of nouns and factive predicates (Maki et al. 1999). These clauses normally do not allow a topic-comment structure of their own. However, non-contrastive *wa*-phrases do occur in argument clauses headed by verbs like *sinziteiru* ‘believe’, as in (37), and others that arguably subcategorize for speech acts, such as embedded interrogative clauses, as in (38). The examples are modified from Maki et al. (1999: 8–9) (cf. also Kuroda 2005, Hara 2006).

- (37) *John-wa [kono hon-wa Mary-ga yonda to] siziteiru.*
 John-WA this book-WA Mary-NOM read that believe
 ‘John believes that this book, Mary read.’
- (38) *John-wa [kono hon-wa Mary-ga yonda kadooka] siritagatteiru.*
 John-WA this book-WA Mary-NOM read whether want.to.know
 ‘John wants to know whether this book, Mary read.’

In terms of prosody, not as much attention has been paid to *wa*-marked phrases as to contrastive focus and *wh*-phrases. It has been claimed on occasion that a non-contrastive *wa*-phrase forms a separate intermediate phrase (Nagahara 1994), and Nakanishi (2001, 2003) provide some suggestive evidence from an experimental study bearing out the claim.

Finally, there are a few other particles that may indicate topichood, such as *-nara* (Munakata 2006) and *-to ieba*. Such particles are comparable to the English phrases *as for...* and *speaking of...*

2.2. Contrastive topics

Contrastive topics are also marked by the particle *wa*. They typically display the prosody associated with contrastive focus and *wh*-phrases, discussed above: a sharp F_0 -rise followed by F_0 -compression (Nakanishi 2001, 2003, Tomioka 2010).

The standard description in the literature is that contrastive topics may remain in-situ.¹⁵ We saw such an example in (35B-ii). Nevertheless, when contrastive *wa*-phrases are set in discourse contexts requiring contrastive topics, they obligatorily appear in clause-initial position (Vermeulen, to appear). In the following examples, an explicit contrast is made to an alternative, and the leading utterances in B’s responses ensure the topic status of the intended contrastive topics ‘Bill’ and ‘beans’ (Vermeulen, to appear: Ex. (15)–(18)).

¹⁵ More specifically, the generalization is that a *wa*-marked object in-situ must be interpreted contrastively. However, this generalization seems to hold only if the preceding subject is marked with the nominative case marker (Kuroda 1965, Vermeulen to appear). If the preceding subject is marked with *wa*, then it is possible for the object *wa*-phrase in-situ to be interpreted without contrast.

(39) A: ‘What did John eat at the party yesterday?’

B: *hmm, John-wa doo-ka sir-anai kedo*,
 well, John-WA how-whether know-not but
 ‘Well, I don’t know about John, but...’

- i. *[Bill-wa]_{CT} 8-zi-goro [maME-o]_F tabeteita (yo)*.
 Bill-WA 8 o’clock-around beans-ACC eating.was SFP
- ii. *#[maME-o]_{iF} [Bill-wa]_{CT} 8-zi-goro t_i tabeteita (yo)*.
 beans-ACC Bill-WA 8 o’clock-around eating.was SFP
 ‘as for Bill, he was eating beans around 8 o’clock.’

(40) A: ‘Who ate the pasta at the party yesterday?’

B: *hmm, pasuta-wa doo-ka sir-anai kedo*,
 well, pasta-WA how-whether know-not but
 ‘Well, I don’t know about the pasta, but...’

- i. *#[Bill-ga]_F [maME-wa]_{CT} 8-zi-goro tabeteita (yo)*.
 Bill-NOM beans-WA 8 o’clock-around eating.was SFP
- ii. *[maME-wa]_{iCT} [Bill-ga]_F 8-zi-goro t_i tabeteita (yo)*.
 beans-WA Bill-NOM 8 o’clock-around eating.was SFP
 ‘as for the beans, Bill was eating them around 8 o’clock.’

Unlike non-contrastive topics, contrastive topics are sensitive to island conditions. This is illustrated below (slightly modified from Hoji 1985: 161):

- (41) *?*(Susan-zyanakute) [Mary_j-wa]_{CT} John-ga [_{NP}_{TP} e_i (kanozyo-o) butta]*
 (Susan-not.but) Mary-WA John-NOM she-ACC hit
hito_i-o sagasiteiru.
 person-ACC looking.for
 Lit.: ‘(Not Susan, but) Mary, John is looking for a person who hit (her).’

Different kinds of contexts are required for contrastively *wa*-marked items to appear elsewhere felicitously. Such contexts include partial answers, (42), and cases where they are part of a larger focus, (43). Interestingly, in the latter case, the contrastive implicature of contrastive *wa* can percolate to a larger constituent, like focus. Thus, in (43), ‘rain’ and ‘umbrella’ are not contrasted with each other, but rather the two events described by the clauses, that ‘it was raining’ and that ‘John did not take an umbrella with him’, are. Furthermore, *wa* may attach directly to verbs, contrasting them explicitly, in which case *do*-support is required, (44). Whether these *wa*-phrases should be analyzed as contrastive ‘topics’ depends on one’s

definition of ‘contrastive topic’. In particular, the relevant sentences do not appear to be ‘about’ the *wa*-marked items nor are they specific, both of which are characteristics of ‘topics’.

(42) A: ‘Did John buy the sweets?’

B: *John-wa oSEnbee-wa katta (kedo, KUkkii-wa kaw-anakatta).*
 John-WA rice.cracker-WA bought but cookies-WA buy-not.PAST
 ‘John bought rice crackers, but (he) didn’t buy cookies.’

(43) [_{TP} *Ame-wa hutteita-ga*] [_{TP} *John-ga KAsa-wa motte-ik-anakatta*].
rain-WA falling.was-but *John*-NOM umbrella-WA bring-go-not.PAST
 ‘It was raining, but John did not take an umbrella with him.’

(44) *John-wa ano hon-o kaI-wa sita-ga, mada yoMI-wa site-inai.*
 John-WA that book-ACC buy-WA did-but still read-WA do-not
 ‘John bought that book, but he hasn’t read it yet.’

The distribution of *wa* in (42)–(44) is reminiscent of the focus sensitive particles *mo*, *sae*, and *sika*, discussed in Section 1.5: it may attach to DPs in-situ and to verbs. Indeed, its syntactic, semantic, and prosodic properties have been likened to those of contrastive focus or focus sensitive particles on some occasions (Kuroda 1969, 2005, Nagahara 1994, Hara 2006, Oshima 2008). Like the other focal particles, contrastive *wa* can associate with an item at a distance, even across an island (slightly modified from Hara 2006: 74):

(45) *Itsumo* [_{NP} [_{CP} *CHOmsky-ga e_i kai-ta*] *hon_i*]-*wa*
 always Chomsky-NOM wrote book-WA
shuppan-sa-re-ru.
 publish- do-PASS-NON.PAST
 ‘As for books that Chomsky wrote, they are always published.’
 (Implicature: ‘but books that other people wrote are not always published.’)

Contrastive *wa*-phrases are permitted in a wider range of environments than non-contrastive *wa*-phrases (Hara 2006). For instance, they may appear in *because*-clauses, as shown below. The example is slightly modified from Hara (2006: 91).

- (46) *itsumo [uti-ni John-wa kuru node] oyatsu-o youi-suru.*
 always house-to John-WA come because sweets-ACC prepare-do
 ‘Because at least John comes to our house, I always prepare some sweets.’

However, their distribution is still limited compared to that of other focus sensitive particles. Although varying judgements have been reported for some subordinate clauses,¹⁶ the judgement is robust and shared by most speakers with respect to relative clauses (Maki et al. 1999, Kuroda 2005, Hara 2006): A contrastive *wa*-phrase cannot appear inside a relative clause (Hara 2006: 73). Other focus sensitive particles can appear inside relative clauses, however.

- (47) **Itsumo [_{NP} [_{CP} CHOmsky-wa e_i kaita] hon_i]-ga*
 always Chomsky-WA wrote book-NOM
shuppan-sa-re-ru.
 publish-do-PASS-NON.PAST
 ‘A book which at least Chomsky wrote is always published.’

- (48) *Taro-wa [_{NP} [_{CP} Hanako-mo e_i suisensita] hon_i]-o katta.*
 Taro-WA Hanako-also recommended book-ACC bought
 ‘Taro bought the book that Hanako too recommended.’

A final instance of sentence-medial contrastive *wa*-marked phrases to be mentioned is so-called ‘mini-topics’ (Kuroda 1990, 1992), which have not received much attention. Two examples are given below (slightly modified from Kuroda 1990: 13).

- (49) *Tanaka-ga (ano kaigi-ni) huransu-zin-wa (ano kaigi-ni)*
 Tanaka-NOM that meeting-to France-person-WA that meeting-to
gengogakusya-oyonda
 linguist-ACC invited
 ‘Tanaka invited linguists, so far as the French are concerned, to that meeting.’

¹⁶ For instance, Kuroda (2005) reports that a contrastive *wa*-phrase is permitted inside a conditional clause, while Hara (2006) reports that this is disallowed.

- (50) *Tanaka-ga (kyonen) wain-o Amerika-kara-wa (kyonen)*
 Tanak-NOM last.year wine-ACC America-from-WA last.year
Karihorunia-kara yunyuu-sita.
 California-from imported
 ‘Tanaka imported wine from California last year, so far as America is concerned.’

An interesting feature of mini-topics is that they seem to have a part-whole or set-subset relation with the following object or adverbial and have the same semantic relation to the verb. The latter point can be seen from the fact that in (50) the *wa*-phrase bears the postposition *kara* ‘from’. This is not visible in (49), as case markers are generally omitted in the presence of *wa*. Syntactically, they are separate from the associated object or adverbial at the clausal level, as a sentential adverbial may intervene between them, as indicated above. In terms of interpretation, Kuroda claims that a contrast with alternatives is implicated. For instance, the speaker may follow (49) with ‘but as far as the Koreans are concerned, Tanaka invited psychologists’. Furthermore, the following object or adverbial receives a focus interpretation. (49) implies that Tanaka invited French linguists and not French psychologists, for example, and (50) implies that the wine was from California and not from New York. Mini-topics are not interpreted as what the rest of the sentence is about, rather, their function seems akin to frame-setters, limiting the domain in which the focus should be interpreted.

3. Givenness

There are several ways of expressing the given status of an item. First of all, given items, including continuing topics, are often not realized by overt expressions. The antecedent may be in the previous sentence, as in the case of (5b), as an answer to (1A), and in example (16); it may be within the same sentence, as in (51); or it may only be given contextually, as in (52). See Takahashi (2008) for an overview of the syntactic literature on zero expressions. (51) and (52) are slightly modified from Takahashi (2008: 394, 416) and *e* indicates a zero expression here.

- (51) *Taro_i-ga Hanako_j-ni [_{CP} e_i e_j kekkon-suru to] yakusoku-sita.*
 Taro-NOM Hanako-DAT marry that promised
 ‘Taro promised Hanako that he would marry her.’

(52) [Observing a student smoking in the classroom]

- a. *e haigan-de sinu kamosirenai.*
lung.cancer-of die may
'He may die of lung cancer.'
- b. *sensee-ga e sikaru daroo*
teacher-NOM scold will
'The teacher will scold him.'

On the other hand, an item introducing a new topic, contrastive or not, cannot be a zero expression, even if the relevant lexical item is mentioned previously, thus in (26) and (27), the non-contrastive topic cannot be absent, and in (53), the contrastive topic must be overt.

(53) A: 'What did Taro and Jiro eat?'

- B: *Hmm, Taro-wa doo-ka sir-anai kedo, [Jiro-wa/ #e]_{CT}*
well, Taro-WA how-whether know-not but Jiro-WA
pasuta-o tabeta.
pasta-ACC ate
'Well, I don't know about Taro, but Jiro ate pasta.'

Second, an intermediate level of givenness may be indicated by case-marker drop. An object adjacent to the verb allows this more easily than a subject, but the latter is in principle possible, as shown below. Case-marker drop on the subject requires a higher level of informality and a sentence-final particle (Tsutsui 1984, Masunaga 1987, 1988, Fukuda 1993, Lee 2002).

- (54) *ame(-ga) hutteiru yo.*
rain-NOM falling-SFP oh
'Oh, it's raining.'

The particle *wa* may be dropped from a topic, although this also requires informality and a high level of saliency of the host item (Tsutsui 1984).

A third way of expressing givenness is by compression of F_0 -movement. This option is available only to post-focal or post-*wh* material (Sugahara 2003, Hwang 2008, Hara and Kawahara 2008, Féry and Ishihara 2009).

Finally, given material can right-dislocate, that is, appear to the right of the verb, with or without a case marker, a postposition or *wa* (Kuno 1978, Endo 1996, Tanaka 2001), and more than one argument/adverbial may do so simultaneously. In (55), the subject and the object are right-dislocated. See

Shimojo (2005) for the different levels of givenness associated with some of the strategies mentioned here.

- (55) *yonda yo, John(-ga/wa) sono hon(-o/wa)*
 read SFP John-NOM/WA this book-ACC/WA
 ‘John read this book.’/Lit.: ‘(he) read (it), John, this book.’

A given item may be (part of) a focus. In such instances the given item cannot generally be a zero expression, as shown in the following examples. They are best realized as full DPs.

- (56) A: [Hearing some noise in Taro’s room] ‘What happened in Taro’s room?’
 B: [_{TP} *Taro-ga / ?kare-ga / #e kabin-o kowasite-simatta*]_F.
 Taro-NOM he-NOM vase-ACC break-ended.up
 ‘Taro has broken a vase.’
- (57) A: ‘What did Taro’s mother do?’
 B: *kanozyo-wa / Ø* [_{VP} *Taro-o / ?kare-o / #e hometa*]_F.
 she-WA Taro-ACC he-ACC praised
 ‘She praised Taro.’

The situation does not seem so clear-cut, however. For instance, the examples in (52) demonstrate an instance of zero expressions inside focus. Also, some speakers report that a zero expression in the subject position is fine in (56B), if it refers to the speaker.

Finally, a remark is in order regarding two cross-linguistically common ways of realizing givenness that do not seem prevalent in Japanese. First, pronominals can be used to refer to given items and they are possible in the above examples in principle. Nonetheless, Japanese pronominals have particular social connotations, such as intimacy or formality (Shibatani 1990), and their use is a much less preferred option, compared to full DPs.¹⁷ Second, in many languages that allow scrambling, the operation is employed to mark givenness, so that given items precede new items. However, as mentioned in footnote 5, discourse effects of scrambling,

¹⁷ See Clancy (1980) for a comparative study in the use of pronouns between Japanese and English. She reports that in recounting stories, Japanese speakers used a full DP twice before resorting to zero expressions referring to the same entity, while English speakers used a full DP once before employing a pronominal.

especially when the scrambled item is not focused, are still unclear in Japanese. Thus, at this stage, it is difficult to say to what extent givenness bears on the apparent optional nature of scrambling in this language.

References

- Akiyama, Masahiro
 2005 On the general tendency to minimize moved elements: The multiple nominative construction in Japanese and its theoretical implications. *The Linguistic Review* 22: 1–68.
- Aoyagi, Hiroshi and Sachiko Kato
 2007 On information packaging of topicalized and scrambled sentences in Japanese. *Current Issues in Unity and Diversity of Languages: Collection of Papers Selected from CIL (International Congress of Linguists) 18, Held at Korean University in Seoul*. Published by The Linguistic Society of Korea. 276–294.
- Beckman, Mary and Janet B. Pierrehumbert
 1988 *Japanese Tone Structure*. Cambridge: Massachusetts Institute of Technology Press
- Clancy, Patricia M.
 1980 Referential choice in English and Japanese narrative discourse. In *The Pear Stories: Cognitive, Cultural, and Linguistic Aspects of Narrative Production*, Wallace L. Chafe (ed.), 127–202. Norwood: Ablex.
- Büring, Daniel
 1997 *The Meaning of Topic and Focus*. London: Routledge.
- Deguchi, Masanori and Yoshihisa Kitagawa
 2002 Prosody and wh-questions. *North East Linguistic Society* 32: 73–92.
- Diesing, Molly
 1988 Bare plural subjects and the stage/individual contrast. In *Genericity in Natural Language: Proceedings of the 1988 Tübingen Conference*, Manfred Krifka (ed.).
- Endo, Yoshio
 1996 Right dislocation. *Formal Approaches to Japanese Linguistics 2: Massachusetts Institute of Technology Working Papers in Linguistics* 29: 1–20.
- Fanselow, Gisbert and Denisa Lenertová
 2011 Left peripheral focus: Mismatches between syntax and information structure. *Natural Language and Linguistic Theory* 29: 169–209.
- Féry, Caroline and Shinichiro Ishihara
 2009 How focus and givenness shape prosody. In *Information Structure from Different Perspectives*, Malte Zimmermann and Carolin Féry (eds.), 36–68. Oxford: Oxford University Press.

- Fukuda, Minoru
1993 Head government and case marker drop in Japanese. *Linguistic Inquiry* 24: 168–172.
- Fukaya, Teruhiko and Hajime Hoji
1999 Stripping and sluicing in Japanese and some implications. *West Coast Conference on Formal Linguistics* 18.
- Futagi, Yoko
2005 Japanese focus particles at the syntax-semantics interface. Ph.D. dissertation, Rutgers University.
- Givón, Talmy
1983 *Topic Continuity in Discourse: A Quantitative Cross-Language Study*. Amsterdam: John Benjamins.
- Hara, Yurie
2006 Grammar of knowledge representation: Japanese discourse items at interfaces. Ph.D. dissertation. University of Delaware.
- Hara, Yurie and Shigeto Kawahara
2008 De-accenting, MAXIMIZE PRESUPPOSITION and evidential scales. In *Proceedings of the Speech Prosody 2008 Conference*, 509–512.
- Hara, Yurie and Robert van Rooij
2007 Contrastive topics revisited: a simpler set of topic-alternatives. Talk presented at *North East Linguistic Society* 38, University of Ottawa, Canada.
- Haraguchi, Shosuke
1999 Accent. In *The Handbook of Japanese Linguistics*, N. Tsujimura (ed.), 1–30. Oxford: Blackwells.
- Heycock, Caroline
1993a Focus projection in Japanese. *Proceedings of North East Linguistic Society* 24: 157–171.
- Heycock, Caroline
1993b Syntactic predication in Japanese. *Journal of East Asian Linguistics* 2: 167–211.
- Heycock, Caroline
2008 Japanese *-wa*, *-ga*, and information structure. In *The Oxford Handbook of Japanese Linguistics* Mamoru Saito and Shigeru Miyagawa (eds.), 54–83. Oxford: Oxford University Press.
- Hinds, John, Senko Maynard and Shoichi Iwasaki
1987 *Perspectives on Topicalization: the Case of Japanese WA*. Amsterdam: John Benjamins.
- Hiraiwa, Ken and Shinichiro Ishihara
2002 Missing links: cleft, sluicing, and “no da” construction in Japanese. *Massachusetts Institute of Technology Working Papers in Linguistics* 43: 35–54.
- Hoji, Hajime
1985 Logical form constraints and configurational structures in Japanese. Ph.D. dissertation, University of Washington.

- Hoji, Hajime
1987 Japanese clefts and reconstruction/chain binding effects. Handout of talk presented at West Coast Conference on Formal Linguistics 6, University of Arizona.
- Hwang, Hyun Kyung
2008 Wh-intonation and information structure in South Kyeongsang Korean, Fukuoka Japanese and Tokyo Japanese. Talk presented at Workshop on Interface-based Approaches to Information Structure. University College London.
- Ishihara, Shinichiro
2000 Stress, focus, and scrambling in Japanese. *Massachusetts Institute of Technology Working Papers in Linguistics 39: A Few from Building E39*. 142–175.
- Ishihara, Shinichiro
2002 Invisible but audible wh-scope marking: Wh-constructions and deaccenting in Japanese. *Proceedings of West Coast Conference on Formal Linguistics 21*: 180–193.
- Ishihara, Shinichiro
2004 Prosody by phase: evidence from focus intonation – wh-scope correspondence in Japanese. *Interdisciplinary Studies on Information Structure 1*: 77–119.
- Ishihara, Shinichiro
2007 Major phrase, focus intonation, multiple spell-out. *The Linguistic Review 24*: 137–167.
- Ishihara, Shinichiro
to appear Intonation of *wh*- and *yes/no*-question in Tokyo Japanese. In *Contrastiveness and Scalar Implicature*, Ferenc Kiefer, Manfred Krifka and Chungmin Lee (eds.).
- Ishizuka, Tomoko
2010 Alienable-Inalienable Asymmetry in Japanese and Korean Possession. *UPenn Working Papers in Linguistics 16*.
- Jackendoff, Ray
1972 *Semantic Interpretation in Generative Grammar*. Cambridge: Massachusetts Institute of Technology Press.
- Kim, Soowon
1999 Sloppy/strict identity, empty objects, and NP ellipsis. *Journal of East Asian Linguistics 8*: 255–284.
- Kishimoto, Hideki
2009 Topic prominence in Japanese. *The Linguistic Review 26*: 465–513.
- Kizu, Mika
2005 *Cleft Constructions in Japanese Syntax*. New York: Palgrave Macmillan.
- Ko, Heejeong
2005 Syntactic edges and linearization. Ph.D. dissertation, Massachusetts Institute of Technology.

Kuno, Susumu

- 1973 *The Structure of the Japanese Language*. Cambridge, Massachusetts: Massachusetts Institute of Technology Press.

Kuno, Susumu

- 1978 *Danwa-no bunpoo* [Grammar of discourse]. Tokyo: Taishuukan-shoten.

Kuroda, Sige-Yuki

- 1965 Generative grammatical studies in the Japanese language. Ph.D. dissertation, Massachusetts Institute of Technology. Reproduced by Garland, New York 1979.

Kuroda, Sige-Yuki

- 1969 Remarks on the notion of subject with reference to words like *also*, *even*, and *only*. Part 2. *Annual Bulletin* 4: 127–152. Research Institute of Logopedics and Phoniatrics, University of Tokyo.

Kuroda, Sige-Yuki

- 1972 The categorial and the thetic judgment: evidence from Japanese syntax. *Foundations of Language* 9: 153–185.

Kuroda, Sige-Yuki

- 1986a Movement of noun phrases in Japanese. Reprinted in Sige-Yuki Kuroda 1992.

Kuroda, Sige-Yuki

- 1986b What happened after the movement of noun phrase in La Jolla. Reprinted in Sige-Yuki Kuroda 1992.

Kuroda, Sige-Yuki

- 1988 Whether we agree or not: A comparative syntax of English and Japanese. *Linguisticae Investigationes* 12: 1–47.

Kuroda, Sige-Yuki

- 1990 Cognitive and syntactic bases of topicalized and non-topicalized sentences in Japanese. In *Japanese/Korean Linguistics*, Hajime Hoji (ed.), 1–26. Stanford: Center for the Study of Language and Information.

Kuroda, Sige-Yuki

- 1992 *Japanese Syntax and Semantics: Collected Papers*. Dordrecht: Kluwer.

Kuroda, Sige-Yuki

- 2005 Focusing on the matter of topic: A study of *wa* and *ga* in Japanese. *Journal of East Asian Linguistics* 14: 1–58.

Lambrecht, Knud

- 1994 *Information Structure and Sentence Form*. Cambridge: Cambridge University Press.

Lee, Kiri

- 2002 Nominative case-marker deletion in spoken Japanese: an analysis from the perspective of information structure. *Journal of Pragmatics* 34: 683–709.

- Maki, Hideki, Lizanne Kaiser and Masao Ochi
 1999 Embedded topicalization in English and Japanese. *Lingua* 109: 1–14.
- Masunaga, Kiyoko
 1987 Non-thematic positions and discourse anaphora. Ph.D. dissertation, Harvard University.
- Masunaga, Kiyoko
 1988 Case deletion and discourse context. In *Papers from the Second International Workshop on Japanese Syntax*, William J. Poser (ed.), 145–156. Stanford: Center for the Study of Language and Information.
- McCready, Eric
 2006 On the meaning of Japanese *yo*. *Lecture Notes in Computer Science*. 141–148.
- Miyagawa, Shigeru
 2006 On the “undoing” property of scrambling: A response to Bošković. *Linguistic Inquiry* 37: 607–624.
- Munakata, Takashi
 2006 Japanese topic-constructions in the minimalist view of the syntax semantics interface. In *Minimalist Essays*, Cedric Boeckx (ed.), 115–159. Amsterdam: John Benjamin.
- Nagahara, Hiroyuki
 1994 Phonological phrasing in Japanese. Ph.D. dissertation, University of California Los Angeles.
- Nakanishi, Kimiko
 2001 Prosody and information structure in Japanese: A case study of topic marker *wa*. *Japanese/Korean Linguistics* 10: 434–447.
- Nakanishi, Kimiko
 2003 Prosody and scope interpretations of the topic marker *wa* in Japanese. In *Topic and Focus: Cross-linguistic Perspectives on Meaning and Intonation*, Chungmin Lee, Matthew Gordon and Daniel Büring (eds.), 177–193. Dordrecht: Springer.
- Neeleman, Ad and Tanya Reinhart
 1998 Scrambling and the PF interface. In *The Projection of Arguments*, Miriam Butt and Wilhelm Geuder (eds.), 309–353. Stanford: Center for the Study of Language and Information.
- Oshima, David Y.
 2008 Morphological vs. phonological contrastive topic marking. *Proceedings of Chicago Linguistic Society* 41: 371–384.
- Saito, Mamoru
 1985 Some Asymmetries in Japanese and their theoretical implications. Ph.D. thesis, Massachusetts Institute of Technology.
- Saito, Mamoru
 1989 Scrambling as semantically vacuous A'-movement. In *Alternative Conceptions of Phrase Structure*, Mark Baltin and Anthony Kroch (eds.), 182–200. Chicago: University of Chicago Press.

Sasse, Hans-Jürgen

1987 The thetic/categorical distinction revisited. *Linguistics* 25: 511–580.

Selkirk, Elisabeth and Koichi Tateishi

1991 Syntax and downstep in Japanese. In *Interdisciplinary Approaches to Language: Essays in Honor of S.-Y. Kuroda*, Carol Georgopoulos and Roberta Ishihara (eds.), 519–43. Dordrecht: Kluwer.

Shibatani, Masayoshi

1990 *The Languages of Japan*. Cambridge: Cambridge University Press.

Shimojo, Mitsuaki

2005 *Argument Encoding In Japanese Conversation*. New York: Palgrave Macmillan.

Sugahara, Mariko

2003 Downtrends and post-focus intonation in Tokyo Japanese. Ph.D. dissertation, University of Massachusetts.

Takahashi, Daiko

2008 Noun phrase ellipsis. In *The Oxford Handbook of Japanese Linguistics*, Mamoru Saito and Shigeru Miyagawa (eds.), 395–423. Oxford: Oxford University Press.

Takano, Yuji

2002 Surprising constituents. *Journal of East Asian Linguistics* 11: 243–301.

Tanaka, Hidekazu

2001 Right-dislocation as scrambling. *Journal of Linguistics* 37: 551–579.

Tateishi, Koichi

1994 *The Syntax of Subjects*. Stanford: Center for the Study of Language and Information.

Tomioka, Satoshi

2001 Information structure and disambiguation in Japanese. *West Coast Conference on Formal Linguistics* 20: 552–564.

Tomioka, Satoshi

2007a Pragmatics of LF intervention effects: Japanese and Korean *wh*-interrogatives. *Journal of Pragmatics* 39: 1570–1590.

Tomioka, Satoshi

2007b The Japanese existential possession: A case study of pragmatic disambiguation. *Lingua* 117: 881–902.

Tomioka, Satoshi

2010 Contrastive topics operate on speech acts. In *Information Structure: Theoretical, Typological, and Experimental Perspectives* Malte Zimmermann and Carolin Féry (eds.). Oxford: Oxford University Press.

Tsutsui, Michio

1984 Particle ellipses in Japanese. Ph.D. dissertation, University of Illinois.

Vallduvi, Enric and Elisabet Engdahl

1996 The linguistic realization of information packaging. *Linguistics* 34: 459–519.

Vermeulen, Reiko

- 2005 Possessive and adjunct multiple nominative constructions in Japanese. *Lingua* 115: 1329–1363.

Vermeulen, Reiko

- 2010 Non-topical *wa*-phrases in Japanese. In *Interfaces in Linguistics: New Research Perspectives*, Raffaella Folli and Christiane Ulbrich (eds.), 135–148. Oxford: Oxford University Press.

Vermeulen, Reiko

- to appear On the position of topics in Japanese. To appear in *The Linguistic Review* 30.

Watanabe, Akira

- 2003 Wh and operator constructions in Japanese. *Lingua* 113: 519–558.