ON THE POSITION OF TOPICS IN JAPANESE

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Abstract

Contrastive topics and non-contrastive topics in Japanese generally receive separate treatments in the literature: although they are both marked by the particle wa, the former carry tone prominence and only optionally move to clause-initial position, while the latter (Kuno's [1973] 'theme') do not carry tone prominence and typically occupy clause-initial position. This paper presents arguments that contrary to the standard view, topics in Japanese, contrastive or non-contrastive, must occupy clause-initial position. Evidence comes from examining the syntactic and interpretive properties of both types of wa-marked phrases in various discourse contexts. First, a tonally prominent wa-phrase must move to clause-initial position in contexts that require a contrastive topic. Second, in contexts that allow a tonally prominent wa-phrase to remain in situ, the relevant phrase is not interpreted as a topic and cannot move to clause-initial position. Third, tonally prominent wa-phrases displaced to clause-initial position show the syntactic distribution of topics which are predicted by considerations at the syntax-information structure interface, but those in situ do not. Finally, despite the general consensus, there are limited circumstances in which tonally nonprominent wa-phrases can occupy a non-initial position. The article presents syntactic and interpretive evidence that such wa-phrases are also not topics.

1. Introduction

This article is concerned with the relation between the syntactic position and the interpretation of phrases marked by the particle *wa* in Japanese. The particle *wa* is widely assumed to be a topic marker. The standard characterisation in the literature on Japanese is that the particle has two uses: contrastive and non-contrastive (Kuno 1973).¹ A phrase marked by contrastive *wa* carries tone prominence (i.e., has a raised f_0 -peak), optionally moves to clause-initial position and implicates contrast with a contextually salient alternative. These properties are shown in (1), with a *wa*-marked object to highlight its non-canonical positioning. A phrase marked by non-contrastive *wa*, on the other hand, does not carry tone prominence, typically occupies clause-initial position and is interpreted as what the rest of the sentence is about. These properties are illustrated in (2). I will call these *wa*-marked phrases 'contrastive *wa*-phrases' and 'non-contrastive *wa*-phrases', respectively. Needless to say, the

felicitous examples below are felicitous on the assumption that the interlocutors know the referents of 'that book' and *John*. (Throughout the article SMALL CAPS is used for tone prominence and # indicates infelicity.)

(1) contrastive *wa*:

a.	John-ga	ANO HON-WA		katta.		
	John-NOM	that book-WA		bought		
b.	ANO HON-WAi	John-ga t	i	katta.		
	that book-WA	John-NOM		bought		
'John bought that book.'						

(Implicature: 'There is another book that John perhaps did not buy.')

(2) non-contrastive *wa*:

a.	#John-ga	ano hon-wa	katta.			
	John-NOM	that book-WA	bought			
b.	ano hon _i -wa	John-ga e _i	katta.			
	that book-WA	John-NOM	bought			
	'Speaking of that book, John bought it.					

The two types of *wa*-phrases illustrated in (1) and (2) are generally analysed separately as two distinct types of topics, contrastive topics and non-contrastive topics, respectively (see Heycock 2008 for an overview). Indeed, if *wa* is a topic marker, the above examples suggest that the two types of topics have very little in common: they clearly have distinct syntactic, prosodic, and interpretive properties.

In this article, I propose that the two types of topics in Japanese share a further property and can be given a uniform account on that basis. Specifically, I argue that both types of topics must occupy clause-initial position. Careful examination of the behaviour of contrastive *wa*-phrases reveals that not all contrastive *wa*-phrases are in fact contrastive *topics* and those that qualify as contrastive topics are restricted to clause-initial position, just like their non-contrastive counterparts. There are independent tests motivated by considerations from discourse and at the interface between syntax and information structure, that can identify items with the discourse function of contrastive topics and crucially, such contrastive *wa*-phrases must move to clause-initial position, as in (1b). Moreover, in discourse contexts that allow a contrastive *wa*-phrase to appear in situ, as in (1a), the *wa*- phrase in question is not interpreted as a contrastive topic and cannot actually undergo movement to clause-initial position, contrary to the standard assumption. I argue that contrastive *wa*-phrases in situ implicate a particular type of contrast, which I will call 'B-contrast' for reasons that are made clear in Section 2.2, but they are not topics.

An obvious implication of the proposal is that the particle wa in its contrastive use does not mark a topic. This idea is not entirely new. Several authors have suggested either explicitly or implicitly that wa in its contrastive use and wa in its non-contrastive use are in fact two different lexical items with distinct sets of grammatical properties. Contrastive wa has much wider distribution than non-contrastive wa; it carries tone prominence, but noncontrastive wa does not; it does not form a separate intonational phrase from the rest of the sentence, but a non-contrastive wa-phrase does; contrastive wa-phrases show syntactic properties associated with movement, while non-contrastive wa-phrases show those associated with base-generation; and it is often claimed that non-contrastive wa unequivocally marks non-contrastive topics, while contrastive wa only implicates a certain kind of contrast (Kuno 1973; Kuroda 1979, 2005; Hara 2006; Oshima 2008; pace Kuroda 1965, 1992; Shibatani 1990; Tomioka 2010). I follow the general idea that contrastive wa and non-contrastive wa are distinct lexical items. A novel contribution of the present article is the observation that the interpretation of a contrastive wa-phrase is not invariant, as assumed in the literature, but that it correlates with the syntactic position of the phrase: those contrastive wa-phrases that have moved to clause-initial position are interpreted as contrastive topics, while those that appear in situ are not.

There is further support for the current proposal from the behaviour of non-contrastive *wa*-phrases. As mentioned above, it is generally assumed that non-contrastive topics appear in clause-initial position. However, there are limited circumstances in which a non-contrastive *wa*-phrase can occupy a non-initial position. These cases are rarely discussed in the literature. The proposal predicts that such non-initial, non-contrastive *wa*-phrases are not topics. The prediction is borne out. In those contexts that allow a non-contrastive *wa*-phrase to appear in a non-initial position, the relevant *wa*-phrase has a distinct discourse function and a different set of syntactic properties from topics. Thus, topics in Japanese, contrastive or non-contrastive, must appear in clause-initial position. The current proposal offers a uniform account of the two types of topics in this respect.

The rest of the article is organised as follows. The next section clarifies various notions that this article adopts and the function of *wa* in relation to these notions. Section 3 demonstrates that contrastive *wa*-phrases must move to clause-initial position in discourse

contexts that require them to be interpreted as contrastive topics, just like their noncontrastive counterparts. I assume following the standard literature on Japanese that contrastive topics move to clause-initial position, while non-contrastive topics are basegenerated there. I will also discuss the idea that the appearance of a topic in clause-initial position is motivated by its effects at the interface between syntax and information structure, developed by Neeleman & van de Koot (2008). In Section 4 I examine discourse contexts that allow contrastive *wa*-phrases in situ and provide arguments for their non-topical status in terms of their interpretation as well as their syntactic properties. Section 5 considers the limited instances where a non-contrastive *wa*-phrase is reported to be possible in positions other than clause-initial position. I will provide arguments that such *wa*-phrases are not topics on the definition of topic adopted in this article. In Section 6, the current proposal is compared with some recent approaches in the literature. Section 7 concludes the article.

2. Topic, B-contrast and wa

2.1. Sentence topic and discourse topic

I follow Reinhart (1981) in characterising topics in terms of aboutness. One can see the mere existence of expressions like *as for, about, regarding, concerning*, and so on, as evidence for the existence and the linguistic relevance of aboutness. Moreover, speakers generally have intuitions regarding what a given sentence is about (Reinhart 1981, 1995; Endriss 2009). Yet, it is notoriously difficult to pin down the exact content of the notion and how it is linguistically relevant.² This state of affairs is reflected by the variety of definitions of topic offered in the literature (Chafe 1976; Reinhart 1981; Givón 1983; Vallduví 1992; Lambrecht 1994; see Hirsch and Wagner [2011] for instructive discussion on defining 'aboutness').

There is some consensus, however, that it is important to distinguish between the topic of a unit of discourse and the syntactic constituent used to introduce the referent as what the sentence is about. This referent typically also functions as the topic of discourse and may continue to do so in the subsequent discourse (Givón 1983). Following Reinhart (1981), I will refer to a topic in the first sense as a 'discourse topic' and to a topic in the second sense as a 'sentence topic' or simply a 'topic' when the distinction is clear. The former is a discourse-level notion and its referent can coincide with the referent of a sentence topic, but can also be more abstract, while the latter is identified at the level of syntax (and possibly semantics). Reinhart (1981) likens the aboutness relation between a sentence topic and the rest of the sentence to that of a particular subject entry in a library catalogue and a book listed under that entry: the book is about that subject. Vallduví (1992), using Reinhart's metaphor, further

elaborates on the function of the sentence topic as an instruction to 'go to x', where the sentence topic constitutes the range over x, corresponding to the subject entry in the library catalogue (Vallduví's 'file').

This article is concerned mainly with the syntactic behaviour of sentence topics. The discussion of discourse topics will be limited to what is necessary to understand their opposition to sentence topics. Sentence topics are variously known as 'chain-initial topic' (Givón 1983), 'link' (Vallduví 1992) and 'aboutness topic' (Frascarelli and Hinterhölzl 2007).

A sentence topic can be identified as the item X in the answer to a request such as *tell me about* X. Such a request explicitly instructs the hearer to give a response that encodes X as the sentence topic. Thus, *John* in Speaker B's utterance below is a sentence topic. In an exchange such as (3), no obvious contrast is implied between John and any other individual. I will therefore refer to such sentence topics as 'non-contrastive' topics.

(3) A: Tell me about John.B: John is a student from Canada.

The fact that *John* in B's utterance in (3) is indeed a sentence topic introducing its referent as the discourse topic, rather than *John* in A's request, is suggested by three facts. First, native speakers I have consulted do not interpret the imperative uttered by A as being *about* John.³ Secondly, B's utterance is also felicitous if the request is less specific about what is to be the topic of discourse, such as *tell me about someone in your class*. This point also illustrates that a sentence topic need not be given or old information, contrary to what is sometimes assumed in the literature (Erteschik-Shir 1997; Rizzi 1997). Finally, a well-known property of a sentence topic is that it must be referential (Reinhart 1981). This property is demonstrated by the infelicity of B's reply in (4). Non-specific quantifiers are not referential and thus cannot function as sentence topics (Endriss 2009). The fact that a request such the one uttered by A in (4) is possible, where the target of the request is not specific, also shows that, by analogy, *John* in A's request in (3) is not a sentence topic.

(4) A: Tell me about some people in your class.B: #Few students are from Canada.

A sentence topic is also associated with constructions such as *as for X...*, or *regarding X...*, where X is the sentence topic (compare **As for few students, they are from Canada*).⁴

Sentence topics must also be distinguished from items that refer back to them and therefore are interpreted as what the rest of the sentence is about (Vallduví 1992; Lambrecht 1994; Vallduví and Engdahl 1996). The point can be illustrated by the following exchange:

(5) A: Who did Max see yesterday?B: He saw ROSA yesterday.

Uttered discourse-initially, Max in A's question in (5) is most typically interpreted as a sentence topic, introducing Max as the topic of this discourse. (A definite, human subject is very likely to be construed as a topic [Givón 1976].) The pronoun he in B's reply in (5), on the other hand, is not a sentence topic. Its referent is indeed what the rest of the sentence is about, but the referent is not newly introduced by it. Rather, he is simply a discourse anaphoric item that refers back to the referent of the sentence topic Max and hence also the discourse topic Max. Thus, B's sentence is interpreted as being about the referent of he, because he refers back to the referent that the discourse is about, not because he functions as a sentence topic. In Vallduví's (1992) metaphor mentioned above, the sentence topic gives an instruction to 'go to' a particular entry. So, if the discourse already concerns that entry, there is no need to mark the expression referring to the entry, such as he in B's statement in (5), as a sentence topic (Brunetti 2009: 758). The information structure of B's utterance is therefore that Rosa, which corresponds to the wh-part of the preceding question, is the focus, and the remaining items constitute the background. The discourse topic is inherited from the previous utterance (Vallduví and Engdahl 1996). A sentence topic is thus always what the sentence is about, but an item that the sentence is about is not necessarily a sentence topic.⁵

In English, sentence topics are not necessarily overtly marked and are not easily distinguished from items that refer back to discourse topics. Some scholars have indeed treated items such as *he* in B's reply in (5) as a topic non-distinct from *Max* in A's question in (5) (Gundel 1988; Rizzi 1997; Erteschik-Shir 1997). However, the grammatical relevance of the distinction between sentence topics and items that refer back to discourse topics is widely observed for other languages. Vallduví (1992), for instance, demonstrates that in Catalan, the distinction is formally marked by the direction of dislocation: sentence topics ('links' in his terminology) must be left-dislocated, while items that refer back to discourse topics must be right-dislocated together with other backgrounded material ('tail' in his terminology). Frascarelli and Hinterhölzl (2007) show that in Italian and German, sentence topics ('shifting topics' in their terminology) bear a different intonation from items that refer back to

discourse topics ('continuing topics' in their terminology), and the former cannot be rightdislocated, while the latter can, like ordinary backgrounded material. Choi (1999) argues that in Korean the so-called topic marker *nun*, in its non-contrastive use, typically marks sentence topics, but items that refer back to discourse topics are usually marked by a case-marker.

Items that refer back to discourse topics are often treated in the literature as a distinct type of topic from sentence topic, known variously as 'continuing topic' (Givón 1983), 'roleoriented topic' (Lambrecht 1994) and 'given topic' (Bianchi and Frascarelli To app.). What is crucial for this article is that these items are distinguished from sentence topics. I will continue to describe them simply as 'items that refer back to discourse topics'.

For Japanese, I propose that non-contrastive *wa* marks constituents that refer to discourse topics, that is, sentence topics, whose referents function as discourse topics, and items referring back to discourse topics. Thus, as widely assumed, non-contrastive *wa* can be considered a topic marker, but in a rather broad sense. Moreover, I argue that sentence topics and items that refer back to discourse topics are associated with different sets of syntactic properties in Japanese. Evidence for the proposed function of *wa* and the syntactic differences will be provided in Section 5.

2.2. B-contrast and contrastive topics

I take contrastive topic to be a sentence topic which has a particular contrastive interpretation. In addition to introducing its referent as what the sentence is about, it presupposes at least one salient alternative to the topic in the discourse, with which it is either explicitly or implicitly contrasted. As such, a contrastive topic is typically associated with shifting the current discourse topic from one item to another, narrowing down the referent of the discourse topic or simply implicating the existence of a relevant alternative (Büring 1997, 2003).⁶ Thus, *Bill* in B's utterance in (6), for example, is a contrastive topic, because it shifts the current topic of discourse from John, explicitly contrasting with it. Similarly, *the female pop stars* in B's utterance in (7) is a contrastive topic, narrowing down the referent of the topic of discourse from *the pop stars* and implicitly contrasting with *the male pop stars*.

- (6) A: Did John eat the pasta?B: Well, Bill did.
- (7) A: What did the pop stars wear?B: The female pop stars wore caftans.

(Büring 1997: 56)

Bill and the female pop stars in the above examples bear what Jackendoff (1972) calls the B-accent (maximally realised as L+H*, followed by a default low tone and a high boundary tone (L H%)). Contrastive topics in English are often identified as items bearing this accent. There are several proposals on the exact meaning associated with the B-accent in English and the similar rising pitch accent in German (e.g., Büring 1997, 2003; Constant 2006; Hara and van Rooij 2007; Wagner 2008). I will not examine the details of different proposals here (although I will discuss specific proposals for Japanese contrastive topics in Sections 4 and 6). However, an idea shared by many is that a contrastive topic is associated with a set of alternative propositions, each differing in the value for the contrastive topic, and also with a particular implicature regarding the alternative propositions that are not selected, such as 'uncertainty' of their truth values. Thus, B's utterances in (6) and (7) imply, respectively, that B is uncertain about whether John ate the pasta or what John ate, and what the male pop stars wore. I will call this kind of contrast 'B-contrast', for this type of contrast is associated with the B-accent in English. Notice that this contrastive interpretation is not present in B's reply in (3). Note furthermore that B-contrast differs from the kind of contrastive interpretation generally associated with contrastive focus, which is found, for instance, in cases of correction (John ate the pasta. - No BILL ate the pasta.) or as an answer to a disjunctive question (Did John eat the pasta or the beans? – John ate the PASTA.). With contrastive focus, the falsity, rather than uncertainty, of the truth value of an alternative proposition is implied (É Kiss 1998; Tomioka 2010).

There are instances, however, in which items with a B-accent or a rising pitch accent are not sentence topics in a most obvious way. As noted above, a sentence topic must be referential, but the following examples from English and German show that these accents can be used to mark B-contrast on verbs or non-specific quantifiers. It is difficult to see in what sense these non-referential items are what the sentences are about. For instance, the native speakers I have consulted report that B's utterance in (8) is not about 'buying (in the past)', but rather about the speaker or the speaker's revision. Similarly, the first clause of B's utterance in (9) cannot be paraphrased as **as for lots of people, they called*. At least *lots* and *nobody* fall under the category of quantifiers that cannot function as topics (Endriss 2009). Conversely, if contrastive topics are identified simply as items bearing these accents, and not necessarily what the sentence is about, it is unclear what is common to contrastive topics and non-contrastive topics in terms of their interpretation.

- (8) A: How's your revision going?B: Well, I [bought]_B the book, but I haven't read it.
- (9) A: How many people expressed interest in your house?
 B: Well, [lots]_B of people called, and [three]_B looked at it, but [nobody]_B made an offer.

(10) Man VMUSS das Buch \NICHT mögen (, aber man KANN)
One must the book.ACC not like but one can (German: modified from Jacobs [1997], cited in Molnár [2002: 157]; original notation)

I propose therefore that accents such as the B-accent or the rising pitch accent only indicate B-contrast, and the topic status of a contrastive topic is identified by its discourse function, that is, introducing its referent as what the rest of the sentence is about, as discussed above (see also Vallduví and Vilkuna 1998; McNally 1998; Mólnar 2002; Hetland 2005; Giusti 2006; Wagner 2008; Brunetti et al. 2010 for related ideas). In other words, the interpretation of a contrastive topic comprises of two independent elements, B-contrast and topicality. In B's utterance in (6), *Bill* is a sentence topic, because it introduces its referent as what the rest of the sentence is about. It is also B-contrastive, because it bears the B-accent and has the associated implicature that the speaker is perhaps not sure about a salient alternative topic, John in this context. Similarly, *the female pop stars* in (7) is a sentence topic and B-contrastive. Notice that although the referent of *the female pop stars* is a subset of the referent of *the pop stars*, the former, as an independent entity, is not yet introduced as a discourse topic in A's question. Thus, it does have the discourse function of a sentence topic is indeed a composite of two independent attributes, B-contrast and topicality.

Note that items that refer back to contrastive topics behave like items that refer back to non-contrastive topics, discussed above. For example, in (6), B may continue to say *he really liked the dish*, but this utterance need not imply that B is perhaps not sure if someone else also liked the dish. Anaphoric items do not always inherit the discourse-related properties of their antecedents: an item that refers to a focus is not also therefore a focus, and similarly, it is clear that an item that refers back to a contrastive topic is not therefore also contrastive.

For Japanese, I propose that contrastive *wa* marks B-contrast and does not mark a topic. I will demonstrate below that there are syntactic differences between items that are simply B-contrastive and those that are B-contrastive and topics in Japanese.

In sum, I take a sentence topic to be a syntactic constituent that introduces its referent as

⁽adapted from McNally [1998: 152])

what the rest of the sentence is about. This is an element of interpretation and discourse function that is shared by contrastive and non-contrastive topics. A contrastive topic has particular implicature regarding the alternatives that are not selected, which I have called B-contrast. For Japanese, non-contrastive *wa* marks constituents that refer to discourse topics, that is, sentence topics and items referring back to discourse topics, and contrastive *wa* indicates B-contrast. The functions of non-contrastive *wa* and contrastive *wa* are uniform, but a phrase marked by either kind of *wa* is interpreted in addition as a topic if it appears in clause-initial position. As will be discussed below, a topic constituent surfaces in this position either as a result of base-generation or movement, and the clause-initial position in question is non-thematic, i.e., the topic does not receive a θ -role there. In the remainder of the article, I will provide arguments for this proposal regarding Japanese. The proposal is summarised in the following table.⁷

Table 1

	non-thematic, clause-initial position	in situ
non-contrastive <i>wa</i> -phrase (discourse topic)	non-contrastive topic	an item that refers back to a discourse topic
contrastive <i>wa</i> -phrase (B-contrastive)	contrastive topic	an item with B-contrastive interpretation

3. The syntactic distribution of topics in Japanese

This section provides empirical evidence for the clause-initialness of both contrastive and non-contrastive topics in Japanese. Let us first consider non-contrastive topics. As mentioned in the introduction, non-contrastive topics in Japanese are marked by non-contrastive *wa*, and they typically appear in clause-initial position (Kuno 1973; see Heycock 2008 for an overview). The exchange in (11)/(12) confirms this standard description using the appropriate discourse context discussed above. A reply to (11) in which the relevant *wa*-phrase occupies another position, such as (12b), is infelicitous.⁸

- (11) ano inu-nituite nanika osiete-kudasai.
 that dog-about something tell-please
 'Tell me something about that dog.'
- (12) a. ano inu-wa kinoo kooen-de John-o kande-simatta. that dog-WA yesterday park-at John-ACC bite-ended.up b. *#John-o*₁ ano inu-wa kinoo kooen-de *t*_i *kande-simatta*. John-ACC that dog-WA yesterday park-at bite-ended.up 'The dog bit John in the park yesterday.'

The same pattern obtains when the non-contrastive topic is an object in the reply, as (13)/(14) shows. (The nature of the empty category in (14a) is discussed below.)

(13)	ano boosi-nituite	nanika	osiete-kudasai			
	that hat-about	something	tell-please			
'Tell me something about that hat.'						
(14)	a. #John-ga a	no boosi-wa	kinoo	kaimasita. ⁹		

(14)	а.	#Jonn-gu	uno boosi-wa	KINOO	καιπι	usiiu.
		John-NOM	that hat-WA	yesterday	boug	ht
	b.	ano boosi _i -wa	John-ga	kinoo	ei	kaimasita.
		that hat-WA	John-NOM	yesterday		bought
'John bought that hat yesterday.'						

Contrastive topics must also appear in clause-initial position. In (15) information about John is requested, but not knowing the relevant information regarding John, the answerer might provide information regarding Bill, as in (16). In doing so, s/he has shifted the topic of discourse from John to Bill, making *Bill* a contrastive topic. *Bill* carries tone prominence and is marked with contrastive *wa* and crucially, it must occupy clause-initial position, as demonstrated by the contrast between (16a) and (16b). The same pattern obtains when the contrastive topic is an object in the answer, as in (17)/(18). (The set-up of the discourse context is adopted from Neeleman and van de Koot [2008]).

- (15) John-wa kinoo-no paatii-de nani-o tabeta no?
 John-WA yesterday-GEN party-at what-ACC ate Q
 'What did John eat at the party yesterday?'
- (16) hmm, John-wa doo-ka sir-anai kedo,
 well, John-WA how-whether know-not but,
 'Well, I don't know about John, but...'
 - a. *BILL-WA* 8-zi-goro *MAME-O* tabeteita (yo). Bill-WA 8 o'clock-around beans-ACC eating.PST PRT
 - b. $\#MAME-O_i$ BILL-WA 8-zi-goro t_i tabeteita (yo). beans-ACC Bill-WA 8 o'clock-around eating.PST PRT 'as for Bill, he was eating beans around 8 o'clock.'
- (17) kinoo-no paatii-de dare-ga pasuta-o tabeta no?
 yesterday-GEN party-at who-NOM pasta-ACC ate Q
 'Who ate the pasta at the party yesterday?'
- (18) 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...'
 #BUL-GA MAME-WA 8-zi-goro tabeteita (vo)

a.	#DILL=GA	MAME-WA	8-21-90r0	lubell	ena	(90).	
	Bill-NOM	beans-WA	8 o'clock-around	eating	g.PST	PRT	
b.	MAME-WA _i	BILL-GA	8-zi-goro	ti	tabete	eita	(yo).
	beans-WA	Bill-NOM	8 o'clock-around		eating	g.PST	PRT

'as for the beans, Bill was eating them around 8 o'clock.'

The above data demonstrate clearly that both contrastive and non-contrastive topics, identified independently by the use of appropriate discourse contexts, must appear in clauseinitial position. The example in (18a) in particular shows that a contrastive *wa*-phrase that surfaces in situ, such as the one in (1b), cannot be a topic. We will see in the next section that given appropriate discourse contexts, contrastive *wa*-phrases can appear in situ.¹⁰

I propose that a topic in Japanese occupies an adjoined position to the highest maximal projection in the clause in general (Saito 1985). Thus, in a normal declarative clause, the topic is adjoined to TP. Following the standard view on Japanese, I assume that if the topic is a non-contrastive argument, it is base-generated in its surface position, binding an empty

pronominal in the thematic position; if it is a contrastive argument, it has moved to that position (Kuno 1973; Saito 1985; Hoji 1985). Hoji (1985) provides evidence from island sensitivity, reconstruction effects and weak cross over effects that contrastive topics indeed undergo movement, while non-contrastive topics do not. For concreteness, I assume furthermore that so-called 'scene-setting topics' are base-generated in the adjoined position, while other adverbials such as manner adverbials, have moved to this position.¹¹

Following Neeleman and van de Koot (2008), I assume that the generation of such syntactic structures is motivated by their effects at the interface with information structure. The idea is similar in spirit to Reinhart's (1995, 2005) proposal that covert raising of a quantifier takes place only if there is an effect at the interface, namely a transparent mapping between the syntactic structure and the scope of the quantifier (see also Fox 2000). Neeleman and van de Koot argue based on Dutch data that overt movement of a topic results in its sister constituent being mapped to information structure as the comment of the utterance. In other words, the comment is represented as a continuous constituent, while without the movement, it would be discontinuous. The movement thus facilitates this one-to-one mapping. Neeleman and van de Koot implement the effect as a mapping rule. I extend this proposal to topics in Japanese and propose the mapping rule in (19). (See Neeleman and van de Koot [2009] for how in situ topics in languages that allow them are interpreted as topics.) This mapping rule makes correct predictions for Japanese, which will be discussed in Section 4.3.

(19) Mapping Rule for [Topic]: Syntax: [TP XPi-wa [TP (proi/ti)]] Information Structure: Topic Comment

4. Contrastive wa-phrases in situ

4.1. *B-contrastive interpretation*

In Section 2, I proposed that contrastive *wa* in Japanese encodes the contrastive interpretation associated with the B-accent in English and the rising pitch accent in German, which I called 'B-contrast'. In this section I argue that contrastive *wa*-phrases in situ are also construed with a B-contrastive interpretation, but lack the topical interpretation in the sense discussed in Section 2. I first elaborate on the B-contrastive interpretation and then provide two syntactic arguments for their non-topical status.

There has recently been much work on the precise interpretation of contrastive wa-phrases

(Kuroda 2005; Hara 2006; Hara and van Rooij 2007; Oshima 2008; Tomioka 2010). Hara (2006: 29-30), for instance, proposes that contrastive *wa* induces the presupposition that a scalar alternative stronger than the assertion of the sentence exists and also the implicature that the stronger alternative could be false. The scale is determined in terms logical entailment: the proposition expressed by a sentence containing a contrastive *wa*-phrase must be entailed by, but not entail, the alternative proposition. The alternative differs from the relevant proposition only in the position occupied by the contrastive *wa*-phrase. Consider the following example.

(20) NANNINKA-WA kita.
some people-WA came
'Some people came.' (Implicature: 'Not everyone came') (Hara 2006: 31)

The asserted proposition of (20) is represented in (21a). (20) presupposes that there is a stronger scalar alternative such as 'everyone came', represented in (21b). (21b) entails (21a), but not vice versa. (20) has the implicature that the stronger alternative could be false, namely '(it is possible that) not everyone came'.

(21) a. ∃(x) [[person(x)] [came (x)]]
b. stronger scalar alternative: ∀(x) [[person(x)] [came (x)]] (Hara 2006: 32)

Hara's analysis explains the infelicity of (22), where the subject is a universally quantified item: there is no stronger alternative and thus the presupposition is not satisfied.¹²

(22) **MINNA-WA kita.* everyone-WA came (Hara 2006: 32)

Hara extends the analysis to non-quantified DPs. A contrastive *wa*-phrase can answer the *wh*-part of a preceding question, with the implicature that the speaker is unsure about the alternatives. In a context where Mary and John are the only salient individuals, B's response in (23) implicates that John probably did not pass the exam. A stronger alternative induced by B's response is that both Mary and John passed. However, the speaker just asserted that Mary passed, so the hearer can infer that the intended implicature is that John did not pass.

- (23) A: dare-ga siken-ni ukatta no? who-NOM exam-DAT passed Q 'Who passed the exam?'
 - B: MARY-WA ukatta. Mary-WA passed

'Mary passed' (Implicature: 'John probably didn't pass')

(adapted from Hara 2006: 31)

The data considered in the literature involve predominantly cases where it is the subject that bears contrastive *wa*.¹³ The same contrastive interpretation obtains with contrastive object *wa*-phrases in situ, and Hara's analysis can be applied straightforwardly to these cases (Yurie Hara, p.c.). The sentence in (24) gives rise to the implicature 'John did not help everyone', because 'John helped everyone' is a stronger scalar alternative and this alternative could be false. A universal quantifier *minna* 'everyone' cannot be an object marked with contrastive *wa*, as in (25), similarly to (22). Finally, (26) can be used to answer a question like *Who did John help*? Marking the object *Mary* with contrastive *wa* gives rise to the implicature 'John did not help Bill' in a context where only Bill and Mary are the relevant individuals in the discourse, in the same way as in (23).

- (24) John-ga NANNINKA-WA tasuketa.
 John-NOM some.people-WA helped
 'John helped some people.' (Implicature: 'John didn't help everyone.')
- (25) *John-ga MINNA-WA tasuketa.
 John-NOM everyone-WA helped
 'John helped everyone.'
- (26) John-ga MARY-WA tasuketa.
 John-NOM Mary-WA helped
 'John helped Mary.' (Implicature: 'John didn't help Bill.')

There are obviously differences amongst the proposals referred to above for the meaning of contrastive *wa*. However, they all share the general idea that a contrastive *wa*-phrase is associated with a set of alternatives, and it has a particular implicature regarding the alternatives, akin to incompleteness or uncertainty, as in Hara's proposal. I believe that this line of analysis provides an accurate characterisation of the interpretation of contrastive *wa*-

phrases and corresponds to the interpretation I have called 'B-contrast' in Section 2. Crucially, however, nothing inherent in this B-contrastive interpretation makes a contrastive *wa*-phrase a contrastive *topic*, i.e., introducing its referent as what the rest of the sentence is about. I propose that contrastive *wa*-phrases in general have the type of interpretation proposed in the recent literature, but only those that move to clause-initial position are interpreted additionally as topics. Topicality and the particular B-contrastive interpretation are thus two independent interpretive attributes of a contrastive topic (Kuroda 2005; Tomioka 2010; see Brunetti et al. [2010] for related ideas in Neapolitan Italian).¹⁴

An immediate consequence of this proposal is that a contrastive *wa*-phrase that is not moved to clause-initial position are not topics. Notice that contrastive *wa*-phrases in some of the examples we have seen in this subsection show properties that are incompatible with topic-hood. As noted in Section 2, topics must be referential, but the contrastive *wa*-phrases in (20) and (24) are not. Moreover, the contrastive *wa*-phrases in (23) and (26) correspond to the *wh*-part of the preceding questions, which is a property associated with focus-hood, rather than topic-hood (Rooth 1985). Noting the non-topical, focus-like meaning of some contrastive *wa*-phrases, some authors refrain from using the term 'contrastive topic' and refer to them as 'contrastive *wa*-phrases' or talk in terms of the 'function' of contrastive *wa* (Hara 2006; Tomioka 2007b; Oshima 2008; among others). However, these authors, like those who treat contrastive *wa*-phrases generally as contrastive topics, do not distinguish contrastive *wa*-phrases displaced to clause-initial position from those in situ. Their accounts therefore cannot easily capture the observation that contrastive *wa*-phrases must occupy clause-initial position in certain discourse contexts, as we saw in Section 3, or the two syntactic arguments in support of the present approach, presented in the following two subsections.¹⁵

4.2. Non-topical contrastive wa-phrases cannot move

The standard characterisation of contrastive *wa*-phrases is that movement to clause-initial position is optional. However, the current proposal predicts that there is no such optionality. Recall that the movement of a contrastive topic is motivated to facilitate transparent mapping between syntax and information structure (see discussion around (19)). As we discussed above, a contrastive *wa*-phrase in situ is not a topic. Thus, there is no motivation for such a phrase to undergo movement to clause-initial position and movement is therefore predicted not to be possible. The prediction is borne out in three different contexts. In order to see clearly that the *wa*-phrase in question is either in situ or has undergone movement to clause-initial position, I will avoid using data with subject contrastive *wa*-phrases, whose canonical

position is clause-initial. (To be clear, a subject contrastive *wa*-phrase can be a contrastive topic or a contrastive *wa*-phrase without the topical interpretation. The former appears in its canonical position and can be preceded by other material, while the latter has [string vacuously] moved to clause-initial position and cannot be preceded by other material.)

The first context is illustrated by the exchange in (27)/(28). In (28), *John*, which corresponds to the *wh*-part of the preceding question, is the focus and the object is a contrastive *wa*-phrase in situ. The implication of the answer in this exchange is that there might be a higher sum of money than 500 yen that one might donate to count as clearly having supported the charity, but the speaker is not sure if John has donated such an amount (and thus is not sure if John qualifies as a person who supported the charity). As (28b) shows, the *wa*-phrase cannot be fronted.

(27)	Dare-ga	kono zizendantai-no	sien-o	sita	no?			
	who-NOM	this charity-GEN	support-ACC	did	Q			
	'Who has supported this charity?'							
(28)	a. JOHN-GA	I [SUKUNAKUTOMO	500-en]-wa	kihu-	sita.			
	John-NO	M at least	500-ven-WA	dona	tion-did			

John-NOM	at.least	500-уе	en-WA donat	tior	n-did		
b. #[SUKUNAKU	UTOMO	<i>500-en]-wa</i> _i	JOHN-GA	ti	kihu-sita.		
at.least		500-yen-WA	John-NOM		donation-did		
'John donated at least 500 yen.'							

From an interpretational point of view too, it does not make sense to say that the contrastive *wa*-phrase in (28a) is a contrastive topic. The sentence is not about the *wa*-phrase: it does not mean 'at least 500 yen is such that John donated it'. Moreover, recall that topics must be referential and thus indefinite topics must be specific (Reinhart 1981, Endriss 2009), but 'at least 500 yen' is not specific.

The second context exemplifies a peculiar property of contrastive *wa*, namely that it can project the contrastive interpretation to a larger constituent. In (30a), contrastive *wa* marks the subject *ame* 'rain' in the first conjunct and the object *kasa* 'umbrella' in the second conjunct. The meaning of the sentence is not that the first conjunct is about rain and the second conjunct is about an umbrella. It is also not that rain is contrasted with an umbrella. Rather, what are contrasted are the events described by the two conjuncts. As (30b) demonstrates, this context does not permit the *wa*-phrase in the second conjunct to move to clause-initial position. (The example in (30a) is modified from one cited in Kuno (1973: 46)

attributed to Minoru Nakau (p.c.).)¹⁶

(29) [Seeing someone worried]
doo sita no desu ka?
how did NMZ COP Q
'What's happened? / What's wrong?'

(30) a. [?][AME-WA hutteiru-ga] [John-ga KASA-WA motte-ik-anakatta]. rain-WA falling-but John-NOM umbrella-WA bring-go-not.PST
b. #[AME-WA hutteiru-ga] [KASA-WA_i John-ga t_i motte-ik-anakatta]. rain-WA falling-but umbrella-WA John-NOM bring-go-not.PST
'It was raining, but John did not bring an umbrella.'

Finally, as we already saw in (23) and (26), a contrastive *wa*-phrase may correspond to the *wh*-part of a preceding question, if accompanied by the B-contrastive implicature. The following exchange shows that such a *wa*-phrase must appear in situ:

- (31) John-wa nani-o katta no?John-WA what-ACC bought Q'What did John buy?'
- (32) a. John-wa OSENBEE-WA tikaku-de katta (kedo, KUKKII-WA kaw-anakatta). John-WA rice.crackers-WA near-at bought but cookie-WA buy-not.PST
 b. #OSEENBEE-WA_i John-wa t_i tikaku-de katta (kedo, KUKKII-WA kaw-anakatta).¹⁷ rice.crackers-WA John-WA near-at bought but cookies-WA buy-not.PST
 'John bought rice crackers nearby, but (he) didn't buy cookies.'

In sum, a contrastive *wa*-phrase that surfaces in situ does not have the option to move to clause-initial position in the same context. On the other hand, a contrastive *wa*-phrase that functions as a topic must move to clause-initial position, as we saw in Section 3. Thus, there is no optionality of movement to clause-initial position for a contrastive *wa*-phrase, contrary to the standard characterisation in the literature.

4.3. Syntax-information structure mapping

The second syntactic argument concerns considerations at the interface between syntax and information structure. It is well-known that at the level of information structure, a focus-

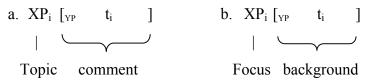
background structure can be embedded inside the comment of a topic, but a topic-comment structure cannot be part of the background of a focus (Krifka 1992; Jäger 1994).¹⁸

(33) Information Structure

a.	topic	[comment	FOCUS	background ··· ···]]
b.	*FOCUS	[background	topic	comment]]

As discussed in Section 3, Neeleman and van de Koot (2008) argue that the sister constituent of a fronted topic is interpreted as the comment. They argue similarly that the sister constituent of a fronted focus is interpreted as the background:

(34) *Syntax – Information structure*



The considerations in (33) and (34) together make predictions regarding the syntactic distribution of topic and focus, illustrated in (35): a focus can follow a fronted topic, because a focus is part of the comment, but a topic cannot follow a fronted focus, because a topic cannot be inside the background. Neeleman and van de Koot show in detail that the predictions are correct for Dutch. The cross-linguistic observation that topics generally precede foci also partially confirm the predictions (Hajičová et al. 1998).¹⁹

(35) Syntax

a.	topic _i	[YP	FOCUS	ti]
b.	*FOCUS _i	[_{YP}	topic	t_i]

The prediction in (35a) is superfluously borne out in Japanese because topics must occupy clause-initial position. The prediction in (35b) may also at first seem untestable due to the same requirement, and therefore the above considerations regarding mapping between syntax and information structure in (34) may appear irrelevant for this language. However, close examination of examples involving embedded clauses demonstrates that the prediction in (35b) is correct and the mapping considerations in (34) are hence relevant for Japanese. Furthermore, and more importantly, it is only those contrastive *wa*-phrases that have moved

to clause-initial position that show the predicted distribution of topic in (35).

First, it is possible for a contrastive topic to appear in an embedded clause, as shown in (37), which can be uttered in a context such as (36). The context makes *ano CD* 'that CD' a contrastive topic, as it shifts the topic of discourse from *the book*. The presence of *kare* 'his', that is coreferential with the matrix subject *Bill*, ensures that the embedded clause is indeed embedded and not a direct quotation (Fukui 1995).

- (36) Context: John finds a book on Sue's desk and he asks Bill to tell him something about the book. Bill does not know anything about the book, but he knew how Sue obtained a CD that was also on the desk. So, he decides to tell John about the CD. In describing this situation, you utter (37).
- (37) Bill_j-wa [_{CP} ANO CD-WA_i Mary-ga kare_j-no mise-de Sue-ni t_i ageta-to] omotteiru.
 Bill-WA that CD-WA Mary-NOM he-GEN shop-at Sue-to gave-that thinking 'Bill_j thinks that as for this CD, Mary gave it to Sue in his_i shop.'

Independently, a focus can undergo long-distance scrambling in cases of correction (Saito 1989; Miyagawa 2006). Thus, correcting the statement in (38), one can utter (39) felicitously, where the embedded indirect object provides correct information and is fronted to sentenceinitial position. A focus employed for correction is generally considered an instance of 'contrastive focus'.²⁰

- (38) Bill_j-wa [_{CP} Mary-ga Jane-ni ano CD-o kare_j-no mise-de ageta to] omotteiru.
 Bill-WA Mary-NOM Jane-to that CD-ACC he-GEN shop-at gave that thinking 'Bill_j thinks that Mary gave this CD to Jane in his_j shop.'
- (39) *ie,* SUE-NI_i Bill_j-wa [_{CP} Mary-ga t_i ano CD-o kare_j-no mise-de no Sue-to Bill-WA Mary-NOM that CD-ACC he-GEN shop-at ageta-to] omotteiru (ndayo).
 gave-that thinking PRT
 'No, it is to Sue that Bill_i thinks that Mary gave this CD in his_i shop.'

The precise prediction is that it should be impossible to combine the above two operations, as this will result in the unacceptable structure in (35b). The prediction is borne out. In correcting the statement in (40), one cannot utter the sentence in (41). In (41), the embedded indirect object *Sue-ni* is a contrastive focus and is fronted to initial position of the embedding

clause, while *ano-CD-wa* 'that CD-wa' functions as the contrastive topic and is moved to initial position in the embedded clause.

- (40) Bill_j-wa [_{CP} Mary-ga Jenny-ni ano hon-o kare_j-no mise-de ageta to] omotteiru.
 Bill-WA Mary-NOM Jenny-to that book-ACC he-GEN shop-at gave that thinking 'Bill_j thinks that Mary gave this book to Jenny in his_j shop.'
- (41) *ie, Bill-wa ano hon-nituite-wa sir-anakatta-kedo,*no Bill-WA that book-about-WA know-not.PST-but
 'No, Bill didn't know anything about the book, but...'
 - * $SUE-NI_i Bill_k-wa [_{CP} ANO CD_j-WA Mary-ga kare_k-no mise-de t_i t_j ageta to] omotteiru.$ Sue-to Bill-WA that CD-WA Mary-NOM he-GEN shop-at gave that thinking Lit.: 'to Sue_i Bill_k thinks that as for this CD_i, Mary gave it_i t_i in his_k shop.'

Crucially, the sentence is acceptable if the contrastive focus remains in situ, which is an acceptable option in the same context:

(42) ... Bill_k-wa [_{CP} ANO CD-WA_j Mary-ga kare_k-no mise-de SUE-NI t_j ageta to] omotteiru.
... Bill-WA this CD-WA Mary-NOM he-GEN shop-at Sue-to gave that thinking
'... Bill_k thinks that as for this CD_j, Mary gave it_j to Sue in his_k shop.'

On the other hand, contrastive *wa*-phrases in situ are not subject to the syntactic distribution predicted for topic in (35b). The sentence in (43) contains a contrastive *wa*-phrase in situ in the embedded clause. Its non-topical status is made explicit by its being a non-specific quantifier. In correcting this statement, it is possible to front the contrastive focus *Sue-o* 'Sue-ACC' from within the embedded clause to sentence-initial position, as illustrated in (44). The contrast between (44) and (41) would be unexpected if all contrastive *wa*-phrases were contrastive topics. Moreover, the acceptability of (44) shows that the unacceptability of (41) cannot be due to a Relativized Minimality violation (Rizzi 1990), caused by a contrastive focus crossing a contrastive *wa*-phrase. In the acceptable (44) too, the contrastive focus moves across a contrastive *wa*-phrase.

- (43) $Bill_i$ -wa $\int_{CP} Mary-ga$ sukunakutomo 3-NIN-NO HITO-NI-WA Jane-o Bill-WA Mary-NOM at.least 3-CL-GEN person-to-WA Jane-ACC kare_i-no mise-de syookaisita to] omotteiru. he-GEN shop-at introduced that thinking 'Bill thinks that Mary introduced Jane to at least three people in his shop.' (44) ?*ie*, Bill_i-wa [_{CP} Mary-ga SUE-Oi sukunakutomo 3-NIN-NO HITO-NI-WA ti no, Sue-ACC Bill-WA at.least
- no, Sue-ACC Bill-WA Mary-NOM at.least 3-CL-GEN person-to-WA *kare_j-no mise-de syookaisita to] omotteiru (ndayo).* he-GEN shop-at introduced that thinking PRT Lit.: 'No, Sue_i Bill said that Mary introduced t_i to at least three people in his shop.'

The same result obtains if the embedded direct object is a contrastive *wa*-phrase in situ and the embedded indirect object is a contrastive focus undergoing long-distance scrambling: the latter may move to a position above the former, as illustrated in (46).

(45)	Bill _j -wa [_{CP} Mary-g	ga Jane-ni	sukunakutomo	о 3- NIN-NO Н	ITO-WA
	Bill-WA Mary-M	NOM Jane-to	at.least	3-CL-GEN p	erson-WA
	kare _j -no mise-de	syookaisita	to] omottein	ru.	
	he-GEN shop-at	introduced	that thinking	3	
	'Bill _j thinks that M	ary introduced a	t least three peo	ople to Jane in h	nis _j shop.'
(46)	[?] <i>ie, SUE-NI</i> _i <i>E</i>	Bill _j -wa [_{CP} Mary	v-ga t _i su	ıkunakutomo	3-NIN-NO HITO-WA
	no, Sue-to E	Bill-WA Mar	y-NOM at	least	3-CL-GEN person-WA
	kare _j -no mise-de	syookaisita to] omotteiru	(ndayo).	
	he-GEN shop-at	introduced th	at thinking	PRT	
	Lit.: 'No, to Sue _i Bi	ll _j said that Mary	introduced at le	east three people	t _i in his _j shop.'

In sum, contrastive *wa*-phrases that have not been displaced to clause-initial position are not topics, contrary to the standard descriptions in the literature: they are not interpreted as what the rest of the sentence is about, they cannot undergo movement to clause-initial position and they do not show the syntactic distribution of topic that is predicted by considerations at the interface.

5. Non-contrastive *wa*-phrases in a non-initial position

We saw in Section 3 that a non-contrastive topic must occupy clause-initial position. The relevant exchange involving a subject topic is repeated below.

- (11) ano inu-nituite nanika osiete-kudasai.
 that dog-about something tell-please
 'Tell me something about that dog.'
- kinoo John-o (12) a. ano inu-wa kooen-de kande-simatta. that dog-WA yesterday park-at John-ACC bite-ended.up *t*_i *kande-simatta*. b. #John-oi ano inu-wa kinoo kooen-de John-ACC that dog-WA vesterday park-at bite-ended.up 'The dog bit John in the park yesterday.'

There are, however, limited contexts in which a non-contrastive *wa*-marked phrase can appear in other positions (Kuroda 1988; Watanabe 2003). One example is provided by an object *wh*-question which also introduces a *wa*-marked subject, such as (47). As shown in (48b), the object in the reply in this context can be scrambled to a position above the *wa*-marked subject.

- (47) ano inu-wa dare-o kande-simatta no?
 that dog-WA who-ACC bite-ended.up Q
 'Who did the dog bite?'
 (48) a. ano inu-wa kinoo kooen-de JOHN-O kande-simatta.
 - that dog-WA yesterday park-at John-ACC bite-ended.up
 b. JOHN-O_i ano inu-wa kinoo kooen-de t_i kande-simatta. John-ACC that dog-WA yesterday park-at bite-ended.up
 'The dog bit John in the park yesterday.'

The *wa*-phrase in (48a) is potentially ambiguous between an item referring back to a discourse topic, which is introduced by the *wa*-marked subject in the preceding question, and a sentence topic, as discussed by Vallduví and Engdahl (1996: 470) for similar examples in English. If it is a sentence topic, its function is to re-introduce its referent as the discourse topic to remind the hearer what the discourse topic is, although somewhat redundantly here. On the other hand, if the current proposal that sentence topics must occupy clause-initial

position is on the right track, the *wa*-phrase in (48b) cannot be a sentence topic. Notice that what precedes it is a fronted focus. We saw in the previous section that a moved focus cannot precede a sentence topic. The standard view in the literature treats non-contrastive *wa*-phrases uniformly as non-contrastive topics. In this section, I will present arguments that non-contrastive *wa*-phrases in a non-initial position like the one in (48b) are not sentence topics and have distinct syntactic properties.

In Section 2, I argued with an analogous exchange to (47)/(48) in English that the subject in the answer in this kind of context is not a sentence topic, but is simply an anaphoric item referring back to the discourse topic. I propose that in the above exchange too, the *wa*-marked phrase in the question introduces its referent as the topic of discourse, and the *wa*-marked subject in the reply is an item that refers back to this discourse topic.²¹ This explains why *ano inu-wa* in (48) is not subject to the clause-initialness requirement for sentence topics. That *ano inu-wa* 'that dog-wa' in the question in (47) is indeed a sentence topic is confirmed by my informants who report that it must appear in clause-initial position, as shown, if the question is uttered discourse-initially. On the other hand, if the discourse has been about the violent behaviour of a particular dog, for instance, and the dog is thus given in the discourse, the accusative *wh*-phrase can precede it.^{22,23}

The same observation obtains in cases of correction where a fronted object may precede a *wa*-marked subject, as illustrated below. I argue that the same considerations apply here.

- (49) ano inu-wa kinoo Bill-o kande-simatta.
 that dog-WA yesterday Bill-ACC bite-ended.up
 'The dog bit Bill yesterday.'
- (50) a. *ie*, ano inu-wa kinoo JOHN-0 kande-simatta (no desu vo). kooen-de bite-ended.up NMZ COP PRT no that dog-WA yesterday park-at John-ACC b. *ie*, *JOHN-O*₁ ano inu-wa *t*_i *kande-simatta (no desu yo).* kinoo kooen-de bite-ended.up NMZ COP PRT no John-ACC that dog-WA yesterday park-at 'No, the dog bit John in the park yesterday.'

One may wonder whether (12b), repeated below, is an infelicitous reply to *tell me something about that dog* because object fronting is disallowed in this kind of context, rather than because the sentence topic is not in clause-initial position.

(12)	b. #John-o _i	ano inu-wa	kinoo	kooen-de	ti	kande-simatta.
	John-ACC	that dog-WA	yesterday	park-at		bite-ended.up

However, there are arguments that (12b) is infelicitous because the sentence topic is not in clause-initial position. First, as was demonstrated by (13)/(14), an object sentence topic must also appear in clause-initial position, where no question of whether fronting of another argument is legitimate arises. Secondly, the object in (12b) is arguably moved out of VP-focus, the latter providing new information regarding the topic. There are other acceptable instances of object moving out of a focused VP across a subject *wa*-phrase, as demonstrated by (51)/(52), at least for some speakers (two informants found (52) marginal, while three found it acceptable). The subject *wa*-phrase in (52) is an item that refers back to the discourse topic introduced in the preceding question. The acceptability of (52) indicates that (12b) is infelicitous because of the position of the sentence topic, not because of the object fronting.

(51)	ano inu-wa	kinoo	nani-o	sita	no?		
	that dog-WA	yesterday	what-ACC	did	Q		
	What did the dog do yesterday?						
(52)	$JOHN-O_i$	ano inu-wa	kinoo [_v	$_{P}$ t_{i}	kooen-de	kande-simai-masi-ta] _{FOC.}	
	John-ACC	that dog-WA	yesterday		park-in	bite-end.up-POLITE-PST	

Notice that in the above examples, *wa*-phrases that refer back to discourse topics are also given in the sense that it has been previously mentioned. It is important to note, however, that givenness is not a sufficient condition for *wa*-marking. In examples illustrating cases of correction such as (38)/(39) and (49)/(50), for instance, the responses contain items, other than the *wa*-marked item, that are mentioned in the preceding statements, but none of these given items can be *wa*-marked (see also Heycock 2008).

I argue therefore that non-contrastive *wa* marks items that refer to discourse topics, that is sentence topics as well as items that refer back to discourse topics. However, the two types of items differ with respect to whether they must surface in clause-initial position or not. There are two further syntactic arguments that sentence topics and items that refer back to discourse topics should be distinguished. A first argument comes from sensitivity to island constraints. As noted in Section 3, it is a widely adopted view that a non-contrastive, nominal topic is base-generated in a left-peripheral position, binding an empty pronominal in a thematic position, as illustrated in (53).

This analysis explains the well-known observation that a non-contrastive topic can be linked to a position inside an island. The point is often illustrated with a relative clause in the literature (Kuno 1973; Saito 1985), but the same can be shown with a simpler example, where the *wa*-phrase is interpreted as the possessor of the subject, such as (54). The *pro* can be overt.²⁴

(54) Johni-wa kyonen [NP proi / karei-no otooto]-ga Mary-to kekkonsita.
John-WA last.year he-GEN brother-NOM Mary-with married
'Speaking of John, his brother married Mary last year.'

If the current proposal is on the right track, it seems plausible that the structure in (53) is associated only with non-contrastive sentence topics, and not with those *wa*-phrases that merely refer back discourse topics, which need not appear in clause-initial position.²⁵ On an interface-based approach such as (19), generation of a structure like (54) would be motivated by the resulting transparent mapping of topic-comment structure in Japanese. If this is the case, we predict that a non-contrastive sentence topic can take part in a structure like (54), but an item that refers back to a discourse topic cannot. The prediction is correct in both cases. The sentence in (54) is a felicitous reply to the request *John-nituite nanika osiete-kudasai* 'tell me something about John'.

Testing the prediction for an item referring back to a discourse topic is a little more complex and requires the following ingredients. (i) The phrase that is marked with wa in the answer must be mentioned as a sentence topic in the preceding question. (ii) In the answer, a fronted focus should be present, preceding the wa-phrase, to ensure independently on the interface grounds discussed in Section 4.3 that the wa-phrase in the answer is not a sentence topic. (iii) Fronting of an object is permitted in answering an object wh-question and is most natural if the lexical items and the word order in the answer are the same as that of the question. Considering that we are attempting to see if a wa-phrase could bind a position inside a subject, it must already do so in the question. These ingredients yield the question in (55). As indicated, the reply in (56) is infelicitous. The discourse in (57)/(58) shows the same point in a case of correction (see Samek-Lodovici [2009] for a similar distinction in Italian).

- (55) Johni-wa kyonen [NP proi otooto]-ga dare-to kekkonsita no?
 John-WA last.year younger.brother-NOM who-with married Q
 'Speaking of John, who did his brother marry last year?'
- (56) #MARY-TOj Johni-wa kyonen [NP proi otooto]-ga tj kekkonsita.
 Mary-with John-WA last.year younger.brother-NOM married
 'John's brother married Mary last year.'
- (57) Johni-wa kyonen [NP proi otooto]-ga Jane-to kekkonsita.
 John-WA last.year younger.brother-NOM Jane-with married
 'Speaking of John, his brother married Jane last year.'
- (58) #ie, MARY-TOj Johni-wa kyonen [NP proi otooto]-ga tj
 no Mary-with John-WA last.year younger.brother-NOM
 kekkonsita (no desu yo).
 married NMZ COP PRT
 'No, John's brother married Mary last year.'

Thus, non-contrastive sentence topics are base-generated and licensed in a left-peripheral, dislocated position, but items referring back to discourse topics are not.

Secondly, a clause may contain multiple *wa*-phrases. In the examples in (59), the object *Bill-wa* is a contrastive *wa*-phrase, while the subject *ano inu-wa* 'that dog-wa' is a non-contrastive *wa*-phrase.²⁶ As shown, the order between the two arguments can be reversed.

(59)	a.	ano inu-wa	BILL-WA	m	oo sudeni	kyonen	kand	le-iru.
		that dog-WA	Bill-WA	al	ready	last.year	bite-	PRF
	b.	BILL-WA _i	ano inu-wa		moo sudeni	kyonen	t_i	kande-iru.
		Bill-WA	that dog-WA	4	already	last.year		bite-PRF
'That dog has already bitten Bill last year.'								

There are languages such as Catalan which also require a sentence topic to be clause-initial (Vallduví 1992). In Catalan, a sentence may contain multiple sentence topics so long as the sequence of topics (Vallduví's 'link string') is in clause-initial position. As mentioned above, the standard literature on Japanese treats items that refer back to discourse topics as no distinct from sentence topics (Watanabe 2003). Given the possibility of multiple topics then, one would expect on the standard assumption that the sentences in (59a) and (59b) would be

equally felicitous in a context where *Bill-wa* is a contrastive topic and *ano inu-wa* is an item referring back to a discourse topic. However, as demonstrated below, the prediction is not correct: *Bill-wa* must move to clause-initial position preceding *ano inu-wa* 'that dog-WA'.

- (60) ano inu-wa John-o kanda no?
 that dog-WA John-ACC bit Q
 'Did that dog bite John?'
- (61) hmm, John-wa doo-ka sir-anai-kedo,
 well, John-WA how-whether know-not-but
 'Well, I don't know about John, but...'
 - a. #ano inu-wa BILL-WA moo sudeni kyonen kande-iru. that dog-WA Bill-WA already last.year bite-PRF b. BILL-WA_i ano inu-wa moo sudeni kyonen t_i kande-iru. Bill-WA that dog-WA already last.year bite-PRF

Thus, if *ano inu-wa* in the exchange in (60)/(61) were a sentence topic, (61a) should be acceptable and (61b) should be infelicitous. However, the fact that it is (61b) that is felicitous shows that an item referring back to a discourse topic need not occupy clause-initial position. More specifically, because it need not occupy clause-initial position, it must give way to the contrastive topic, *Bill-wa*, which must move to clause-initial position. Notice that it is not the case that a contrastive *wa*-phrase must precede a non-contrastive *wa*-phrase when they cooccur, as (59a) is a felicitous reply to the request *tell me about that dog*, while (59b) is not. (See Vermeulen [2010] for further discussion, including data where an in situ object is an item referring back to a discourse topic and marked with non-contrastive *wa*.)

In sum, the data considered so far in this section show that a distinction between a sentence topic and an item referring back to a discourse topic is grammatically relevant in Japanese, as in other languages listed in Section 2.1. Moreover, the data provide further support for the current proposal that contrastive and non-contrastive topics in Japanese must occupy clause-initial position.²⁷

An anonymous reviewer provides the following example as a counter-example to the claim that non-initial, non-contrastive *wa*-phrase is an item referring back to a discourse topic. In (62), the discourse topic is arguably 'the rookie', but the item in the answer with the same referent, *anna sugoi sensyu* 'such a great player', which one might expect to be marked by *wa*,

is marked with the accusative case marker, and the subject *boku* 'I' is instead marked with *wa*. In addition, the *wa*-marked phrase is not in clause-initial position.

- (62) ano sinnin-sensyu-nituite nanika osiete-kudasai.
 that rookie-about something tell-please
 'Tell me something about that rookie'
- (63) anna sugoi sensyu-o boku-wa hazimete mita yo.
 such great player-ACC I-WA for.the.first.time saw particle
 'I've never seen such a great player before.'

First, although the request of the form *tell me something about X* is used in (62), neither *anna sugoi sensyu-o* 'such a great player-ACC' nor *boku-wa* 'I-WA' is a sentence topic. The example in (64a), which is an attempt to answer the request in (62) in a most straightforward way, marking *anna sugoi sensyu* 'such a great player' as a sentence topic, is ungrammatical. It also cannot be associated with a position inside an island, as illustrated by (64b).

(64)	a.	a. *anna sugoi sensyu-wa		kanada-zin		desu.		
		such a great player-WA		Canada-person		СОР		
		'Such a	ı great player is Ca	nadian.'				
	ſ	cf. ano s	s <i>innin-sensyu-wa</i> rookie-WA	kanada-zin		desu.		
	L	that	rookie-wa	Canada-persor	n	сор Ј		
	b. * <i>anna sugoi sensyu</i> i-o such a great player-ACC		boku-wa [pro _i ot		poto]-ga	hazimete		
			I-WA yo		unger.brother-NOM	for.the.first.time		
		mita	уо.					
		saw	PRT					

'My younger brother has never seen such a great player.'

The request is not about the addressee, so *boku-wa* 'I-WA' is also not a sentence topic. Thus, *boku-wa* 'I-WA' in (63) must be an item referring back to a discourse topic. As the reviewer notes, such an example suggests that a more refined idea of what can qualify as a discourse topic is desirable. Addressing such an issue is beyond the scope of this article, however, as the main concern of this article is the syntactic position of sentence topics on the definition discussed in Section 2. I tentatively suggest here that the notion of 'accessibility' in the sense of Chafe (1987) might be relevant. An 'accessible' object (or event or property) is

something that is not directly in the centre of the interlocutors' consciousness or attention, but is in their background awareness. It can easily become 'active', that is, be in the centre of the interlocutor's consciousness. An object may be made accessible by previous mention, by the situation in which the discourse is taking place or by inference (Lambrecht 1994). The interlocutors are always accessible discourse referents, if not active, as they are always present situationally. Perhaps, accessible discourse referents can be easily promoted and accommodated as discourse topics. This may explain why *wa*-marking of *boku* 'I' in (63) is possible. Initial support for this idea comes from the fact that (63) becomes infelicitous if the *wa*-marked subject referred to an individual that is not obviously accessible, *John*, for instance:

(63)' #anna sugoi sensyu-o John-wa hazimete mita yo. such great player-ACC John-WA for.the.first.time saw PRT

In connection to examples such as (62)/(63), the reviewer wonders whether noncontrastive wa could be considered a marker of ground-hood, an idea proposed by Oshima (2009). Specifically, Oshima (2009: 407) provides the following definitions. Ground is "noninformative and expected material; material that provides an open proposition to be completed by focus". Focus is defined as "informative and newsy material; material that completes an open proposition provided by ground and/or the discourse context". Topic is "an entity presented as something the message is 'about'; an entity that the hearer is expected or directed to give attention to as the location of information update" and it is part of ground. (This definition of topic is sufficiently similar to the one adopted by this article for the purpose of current comparison.) His proposal is that non-contrastive wa-marking on a subject (but not an object) indicates that it is part or whole of the ground. It appears, however, that this proposal is not able to capture the above data in a most obvious way either. The focus of the statement in (63) in the given context is arguably the complement of anna sugoi sensyu 'such a great player', namely boku-wa hazimete mita 'I saw for the first time'. (I put aside the fact that the information that the player is great also appears to be newsworthy here.) Nevertheless, the subject *boku* 'I' is marked with *wa*. The first person pronoun is usually marked with a nominative case marker if it is (part of) a focus (Kuno 1973). Thus, the contrast between (63) and (63)' is just as unexpected on Oshima's account as on the analysis proposed in this article. Moreover, recall from Section 2.1 that a non-contrastive sentence topic can be new. Thus, in the Japanese counterpart to the exchange Tell me about someone

in your class - John is a student from Canada, John is marked with non-contrastive *wa*. It seems difficult to argue that information provided by *John* is part of the ground, that is, uninformative and expected.

Finally, I believe that a continuation such as (63) is a deviation from the most straightforward information structure favoured by the request. The answer of the form *anno sinnin-sensyu-wa* ... 'that rookie-WA ...' appears much freer in what information is supplied by the following material than in the answer of the form *anna sugoi sensyu-o* ... 'such a great player-ACC ...', as illustrated by the felicitous example below (64a). Deviations are often possible, as speakers are generally willing to accommodate and are extremely adept at doing so (see Beaver and Zeevat 2007 and references therein).²⁸

The main aim of this section has been to demonstrate that the syntactic properties of a sentence topics are distinct from those of items that refer back to discourse topics (however the notion 'discourse topic' is to be elucidated). One such property is that a sentence topic is base-generated in a left-peripheral position and binds an empty pronominal, which allows it to be associated with an argument position inside an island. The other is the obligatory clause-initialness, a property shared with contrastive topics. It is possible for a non-contrastive *wa*-phrase to appear in positions other than clause-initial position, but, like contrastive *wa*-phrases, non-contrastive *wa*-phrases in such positions are not sentence topics in the sense adopted in this article. Thus, the generalisation that a sentence topic in Japanese, contrastive or non-contrastive, must appear in clause-initial position remains intact.

6. Alternative approaches to topics

In this section, I compare my proposal with analyses that propose some similar ideas. In particular, I consider three proposals that adopt a compositional approach to contrastive topics, and the so-called cartographic approach (Rizzi 1997), which treats topics as occupying one of the highest positions in a clause. First, Wagner (2008) proposes that contrastive topics in German and English can be decomposed into two attributes. On his view, a configuration which involves a contrastive topic and a focus is an instance of a structure involving two nested focus operators, such as the following (Wagner 2008: 10):

(65) [FOC.OP 1 Even] the most poisonous snake frightens [FOC.OP2 only] Bill.

Here, the focus operator *even* takes scope over the other focus operator *only*. Adopting Rooth's (1985, 1992) Alternative Semantics to focus, Wagner demonstrates that the

Wagner argues that what is usually considered a contrastive topic corresponds to the item associated with the focus operator with the wider scope. Being a kind of focus, a contrastive topic generates a set of alternatives. Independently, the tune associated with what is typically considered a construction involving a contrastive topic and a focus, namely the combination of the A-accent and the B-accent in English or the HAT contour in German, encodes the 'uncertainty' implicature. (The semantics of the tune that Wagner proposes is similar to the uncertainty aspect of contrastive *wa* proposed by Hara (2005), discussed in Section 4.1, that is, 'the stronger alternative could be false'.) On the analysis adopted in the current article, generation of a set of alternatives and the uncertainty implicature are both part of the semantics associated with contrastive *wa*. Thus, on Wagner's account the two distinct attributes of a contrastive topic are (i) generation of a set of alternatives and (ii) the uncertainty implicature; and on the account proposed here, they are (i) generation of a set of alternative topic.

generated by the focus even the most poisonous snake for the sentence to make sense.

One might wonder whether Wagner's analysis can be carried over to Japanese, with contrastive *wa* corresponding to the tune implicating uncertainty, and the prosodic prominence indicating its focal status. However, if contrastive topic is a kind of focus, it is difficult to maintain the generalisations that hold of contrastive topics and non-contrastive topics. For instance, it is unclear why contrastive topics, like non-contrastive topics, are interpreted as what the sentence is about. Focus is not usually what the sentence is about. Moreover, specifically for Japanese, it is surprising that contrastive topics, like non-contrastive topics, must occupy clause-initial position, while contrastive foci need not, a property which is demonstrated by examples such as (42) and (50).

Tomioka (2010) proposes an analysis of Japanese contrastive topics along a similar line to Wagner's. According to Tomioka, the prosodic prominence of a contrastive *wa*-phrase, that is also associated with a focus (see footnote 15), gives it a focal status, generating a set of alternatives. He assumes that Speech Act is represented in the syntax as SpeechActP and as such it can be manipulated in the semantics. For Tomioka, the particle *wa* is a marker of topic and a *wa*-marked item can be out of the scope of a speech act. Consequently, the alternatives generated by the presence of a contrastive *wa*-phrase are alternative speech acts and not alternative propositions as typically assumed for focus. The uncertainty implicature arises as a result of selection out of a set of alternative speech acts, as opposed to selection out of a set of propositions. In contrast to Wagner's analysis, the claim that *wa* is a topic marker would

explain why the discourse function of topic is associated with contrastive topics despite its focal status. However, Tomioka's analysis, like others in the literature, does not distinguish *wa*-phrases in situ from those that have moved to clause-initial position and therefore cannot explain the distributional and interpretive facts of *wa*-phrases discussed in this article. Specifically, we saw that contrastive *wa*-phrases that appear in situ, as opposed to those that have moved to clause-initial position, are not interpreted as what the rest of the sentence is about and are not subject to the syntactic distribution of a topic predicted by considerations at the interface.

Kuroda (2005) argues that a contrastive *wa*-phrase is not necessarily a contrastive *topic*: it simply has a particular contrastive entailment with respect to its alternatives. He suggests, though without much discussion, that if topics in general appear in SpecCP and if this position can host a contrastive *wa*-phrase, such a *wa*-phrase could be considered a contrastive topic (Appendix III). The proposal put forward in this article shares and explicates the intuition behind this compositional analysis and the data presented here confirm this intuition. The data discussed by Kuroda predominantly involve subject *wa*-marked phrases, making the relevance of the displacement to clause-initial position difficult to observe. I have demonstrated and provided further arguments with object *wa*-phrases that only those displaced to clause-initial position are indeed topics.

Where Kuroda's proposal differs from the current proposal is the analysis of noncontrastive *wa*-phrases. He treats all non-contrastive *wa*-phrases (his "topic" *wa*') as noncontrastive topics. However, as we saw above, this is not the case. Non-contrastive *wa*phrases that appear in positions other than clause-initial position show different syntactic behaviour from non-contrastive topics: they need not appear in clause-initial position and are not base-generated in a dislocated, non-thematic position.

Finally, there have been several accounts of the Japanese left-periphery in the cartographic approach (Rizzi 1997; for Japanese, see Watanabe 2003; Munakata 2006; Endo 2007; Kuwahara 2008), where a designated functional projection for topic, TopP, is postulated as one of the highest functional projections in the CP-domain of a clause, with the complement of Top^o being interpreted as the comment. One may wonder whether the clause-initialness of topics can be derived from such clausal architecture. This may indeed be a way of understanding the relevant facts. It seems possible to capture many of the facts reported here, if sufficiently refined structure with several more functional projections is postulated for the various discourse functions of wa-phrases in different positions in the clause. However, on this approach, it is difficult to capture the observations discussed in Section 4.3, which are

based on the predictions in (35), repeated below.

(35) Syntax

a. topic_i [$_{YP}$ FOCUS t_i] b. *FOCUS_i [$_{YP}$ topic t_i]

It is generally assumed on the cartographic approach, that topics and foci that surface in clause-medial positions move to SpecTopP and SpecFocP, respectively, at LF (Endo 2007; Kishimoto 2009; Tomioka 2010; among others).²⁹ Extending this idea to cases involving embedded clauses, discussed in Section 4.3, one would assume that the focus that surfaces in situ in the embedded clause in (42) must move to SpecFocP in the matrix clause at LF, where it is interpreted. (39) shows independently that that is where it is interpreted. However, as we saw in (41), this movement results in the structure in (35b), which is disallowed. Considering that movement of focus is generally optional, it is not clear why it cannot do so prior to LF if a topic is present.

An anonymous reviewer has pointed out to me that an example like (66) is a felicitous response to *tell me something about that dog*, despite the fact that an adverbial precedes the non-contrastive topic *ano inu-wa* 'that dog-wa', and is thus problematic for the current analysis. The reviewer suggests that it might be better accounted for by the cartographic approach or on Tateishi's (1994) account, who also proposes several projections for *wa*-marked phrases.

(66) kinoo ano inu-wa kooen-de John-o kande-simatta.
yesterday that dog-WA park-at John-ACC bite-ended.up
'Yesterday that dog bit John at the park.'

On the current proposal, it is indeed unclear why an adverbial may be disregarded for the purpose of satisfying the requirement for a sentence topic to occupy clause-initial position. However, it seems to me that an elaborate structure in the left periphery would not provide a more principled account than the current proposal.

First, in Tateishi's account, the adverbial would presumably adjoin to his IP, which is the highest projection allowing adjunction and immediately dominates AgrP. The specifier position of AgrP can be occupied by a subject *wa*-phrase, be it a sentence topic or an item referring back to a discourse topic on the notions assumed in this article. However, he also

allows a scrambled object to be adjoined to the same IP in other contexts (Tateishi 1994: 112). We saw that this option is unavailable if the subject *wa*-phrase is a sentence topic, (12b), but is available if it is an item referring back to a discourse topic, (48b), (50b), and (52). Thus, on Tateishi's account too, additional assumptions are required to explain why an adverbial can be adjoined to IP, but not an object, if the subject *wa*-phrase is a sentence topic.³⁰

Secondly, on the cartographic approach, one may argue for a designated projection for the adverbial above the higher TopP. An obvious candidate is ModP, which Rizzi (2002) proposes below lower TopP for Italian. However, there appears to be no principled reason to posit ModP above TopP in Japanese, except to capture the data in (66). In both my approach and the cartographic approach, one option is to argue that an adverbial in examples like (66) need not be part of the comment. As far as I know, however, we currently understand very little about the notion comment independently of topic. The data such as (66) may thus shed light on what needs to be part of a comment. I leave this issue for future research.

7. Conclusion

In this article, I have provided a number of arguments that contrastive and non-contrastive topics are more alike than previously thought: they must both occupy clause-initial position. A contrastive topic undergoes movement to this position, while a non-contrastive topic is base-generated there. First, in specific contexts that require contrastive topics, the relevant contrastive wa-phrase must surface in clause-initial position, like their non-contrastive counterparts. I have also argued that those contrastive wa-phrases that appear in situ are not topics: they have discourse and syntactic properties that are different from those displaced to clause-initial position. They have a particular contrastive implicature, but are not necessarily understood as what the rest of the sentence is about. As for the syntactic properties, contrastive wa-phrases do not optionally undergo movement to clause-initial position, contrary to the standard characterisation in the literature. In contexts that allow a contrastive wa-phrase to surface in situ, the wa-phrase does not have the option to move to clause-initial position. Finally, they are not subject to distributional constraints derived from considerations at the interface between syntax and information structure. Moreover, there are limited cases where a non-contrastive wa-phrase may occupy a non-initial position. I have provided syntactic arguments that a non-initial wa-phrase in such cases is not a sentence topic in the sense understood in this article, as predicted by the proposal, but an item referring back to a discourse topic.

Notes

* Earlier versions of this paper were presented at On Linguistics Interfaces conference at the University of Ulster in Belfast in 2007, the Topicality workshop at DGfS in Bamberg in 2008, Workshop on Altaic Formal Linguistics 5 at SOAS in London in 2008, the Information Structure session at CIL 18 in Seoul in 2008, and at colloquia at UCLA and USC in 2008. I thank the participants for useful comments and questions. I would also like to thank Caroline Heycock, Ad Neeleman, Vieri Samek-Lodovici, Kriszta Szendrői, and Michael Wagner for their insightful comments and helpful discussions, my informants for their patient help and the four anonymous reviewers.

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¹ Kuno (1973) calls the two uses 'contrastive' and 'thematic' and the terms are widely used. Following Heycock (2008), however, I will call the former 'non-contrastive' in order to be less theory-specific.

² Portner and Yabushita (1998, 2001) propose a formal account of aboutness. Their account, however, does not distinguish sentence topics and those that refer back to discourse topics, discussed immediately below. The syntactic generalisations discussed in later sections are therefore difficult to capture on this definition.

³ I have consulted four native speakers regarding the English data reported in this article. The reported judgements were shared by all.

⁴ There are other constructions that introduce an item and instruct that item to be a sentence topic in the subsequent utterance, although the force of the instruction is not as strong as the imperative *tell me about X*. An example is a presentational construction. In (i) below, the first sentence introduces *a wizard* and *he* in the second sentence, referring to the wizard, is a sentence topic (Lambrecht 1994: 177, taken from Givón 1976):

(i) Once there was a wizard. He was very wise, rich and was married to a beautiful witch.

See Portner and Yabushita (2001: 279) for similar examples using aru 'certain' in Japanese.

⁵ There are also other constructions in Japanese whose meaning is described in terms of aboutness, such as the so-called multiple nominative constructions (Saito 1982; Heycock 1993; Vermeulen 2005a,b). The notion of aboutness, however, seems subtly different from the one adopted here for topic constructions. For instance, a multiple nominative construction such as (i) cannot be used as a reply to *tell me about elephants*. I will not elaborate on this issue.

(i) *zoo-ga* hana-ga nagai. elephant-NOM trunk-NOM long

'An elephant's trunk is long.'

⁶ These are functions Büring (1997) attributes to his notion of S(entence)-topic.

⁷ An anonymous reviewer points out that the unified analysis of contrastive and non-contrastive topics presented here comes at the cost of having a *non*-unified analysis of the particle *wa*. However, the distinct sets of syntactic and prosodic properties noted in Section 1, as well as the interpretive differences between contrastive and noncontrastive *wa*, discussed in this section, suggests strongly that the two uses of *wa* should in fact be treated as two lexical items. Moreover, contrastive *wa* is known to attach to a wider range of categories than noncontrastive *wa*, including verbs and adjectives, which are clearly not referential. Thus, there are several arguments for separate treatment. See Tomioka (2010) for a recent uniform analysis of contrastive *wa* and noncontrastive *wa* and see Kuroda (2005: App. III) for discussion on this general point.

⁸ Judgements reported here and below have been provided by at least five native speakers of Japanese. Unless otherwise indicated, the judgements were shared by all.

⁹ For reasons not entirely clear to me, an object *wa*-phrase seems to prefer not to surface adjacent to the verb. In order to circumvent this effect, an adverbial is inserted between the object and the verb throughout the article. I assume following Neeleman and Reinhart (1998), that a structure in which an argument has scrambled across an adverbial can be base-generated, hence the absence of an empty category below the adverbial in (14a). This does not affect the discussion in the main text.

¹⁰ It is possible that a non-contrastive topic is interpreted with contrast due to the context (Kuroda 2005: App. III; see also Brunetti [2009] for the idea that contrast for a topic arises only from the context). Thus, one may simply infer from a sequence of statements such as *John buys Japanese novels and Bill buys English novels* that John and Bill are somehow contrasted. In all cases considered here, such contexts are avoided. Contrastive *wa*-phrases are set in contexts where they must carry tone prominence and a reading without contrast is not available. They also show movement properties. Non-contrastive *wa*-phrases are set in contexts where they do not carry tone prominence, no obvious contrast is implied and they show no movement properties.

¹¹ I concentrate on nominal argument topics in this article. See Kuroda (1986a,b, 1988) for discussion on *wa*-marked adverbials, and also footnote 26. See Hoji (1985) for arguments that PP-topics are always contrastive.

 12 Note that *wa* can mark *minna* 'everyone' if the sentence is negative, as in (i), as this allows for a stronger scalar alternative. See Hara (2006) for further discussion.

(i) minna-wa ko-nakatta.

everyone-WA come-not.PST

'Not everyone came.'

¹³ One exception is Fiengo and McClure (2002), who propose that the contrastive interpretation is parasitic on the *wa*-phrase occupying a clause-medial position, including object *wa*-phrases in situ. However, as many examples in this article show, the contrastive reading is not limited to clause-medial positions.

¹⁴ One question that arises is why a contrastive topic is then not realised with two instances of wa, one contrastive, indicating B-contrast, and the other non-contrastive, marking topicality. As the example in (1b) shows, a contrastive topic bears only one wa, and the form *ano hon-wa-wa* is ungrammatical. I tentatively propose that there is a morphological restriction on their co-occurrence. There are other similar restrictions in Japanese. For instance, nominative and accusative case markers cannot co-occur with either contrastive or non-contrastive *wa*, as the examples in (1) and (2) also show, and a case marker cannot co-occur with particles such as *mo* 'also' either (Kuroda 2005: App. III).

¹⁵ A question arises as to what the information structural status of a contrastive *wa*-phrase in situ is. Kuroda (1965, 2005) and Oshima (2008) suggest with examples like (23) that contrastive *wa* is a focal particle like *mo* 'also' and *sae* 'even'. The prosodic properties of a contrastive *wa*-phrase are also like those of focus: they carry the same tone prominence, are followed by suppression of pitch movement and can be the sole focal accent of the sentence (Nakanishi 2001; Hara 2006; Ishihara 2007; Oshima 2008; Tomioka 2007b, 2010). However, we saw above that a contrastive *wa*-phrase can clearly function as a contrastive topic.

The notion 'contrast' is generally taken to be parasitic on topic or focus (Molnár and Winkler 2010 and references therein). I tentatively suggest, therefore, that the B-contrastive interpretation is compatible with both topic and focus and that contrastive *wa*-phrases in situ are in fact a type of focus, similar to foci modified by *sae* 'even' or *mo 'also'*. I assume that this line of analysis can extend to the corresponding data in English and German discussed in Section 2.2, though I will not pursue this idea here (See Wagner 2010 for related ideas).

¹⁶ An anonymous reviewer notes that both (30a) and (30b) are highly awkward for him/her, and that they would be less awkward if *John-ga* is replaced by *John-wa*. Three of my five informants did feel that (30a) is less than perfect, while the remaining two found it perfect. Crucially, however, all my informants observed a clear contrast between (30a) and (30b), with the latter being completely infelicitous. Moreover, four out of my five informants felt that an example with *John-wa* is completely unacceptable, regardless of whether *kasa-wa* is in situ or moved. The one remaining informant noticed no difference between an example with *John-wa* and one with *John-ga*, finding both versions less than perfect, though still acceptable, with *kasa-wa* in situ, and completely unacceptable with *kasa-wa* moved to clause-initial position. At present, I have no account of the reviewer's judgement.

¹⁷ An anonymous reviewer points out that (32a) sounds better for him/her if the question were *John-wa osenbeeto kukki-o katta no?* 'Did John buy rice crackers and cookies?' This question merely makes it explicit what the salient entities are in the context referred to by *nani* 'what' in (31) and makes no difference to the point being made here. Another anonymous reviewer notes that both (32a) and (32b) are felicitous for him/her. However, none of my five informants accepted this example in this context. I have no explanation for his/her judgement, other than to suggest that the reviewer was somehow capable of accommodating the interpretation of *osenbeewa* as a contrastive topic in this context. Contexts can never force an interpretation of particular items as topics or foci: they can only strongly favour such interpretations (Neeleman and van de Koot 2009).

¹⁸ Contra Krifka (1992) and Jäger (1994), however, I do not assume that a topic is also further partitioned into a focus-background structure.

¹⁹ The ideas in (33)-(35) apply to non-contrastive topics and foci, too. In the case of non-contrastive topics in Japanese, the topic in the structure in (35a) would be base-generated in its surface position, binding a *pro*.

²⁰ Some of my informants allow long-distance scrambling of a focus also in answering a *wh*-question. Thus, they can utter (39) without *ie* 'no' as an answer to the question *to whom_i does Bill think that Mary gave this CD* t_i *in his shop?*. However, a contrastive interpretation is obligatorily accommodated in such cases (Saito 1985; Miyagawa 2006; among others), suggesting that only the contrastive type can move long-distance.

 21 In the corresponding English example in (5), the subject in the answer is a pronominal, while in (47)/(48), a full DP is repeated. Pronominals in Japanese have certain social implications and are not frequently used (Shibatani 1990). Being a pro-drop language, discourse anaphoric items are often not overtly expressed. However, there is some evidence that an item must be mentioned twice before it can be pro-dropped (Clancy 1980), and no awkwardness is present due to the repeated use of the full DP in (48).

 22 Kuroda (1988) suggests that the *wa*-phrase in examples such as (48b) and (50b) is a 'downgraded' topic, behaving like a parenthetical (see also Saito 1985). See Sheard (1991) for arguments against Kuroda's view.

 23 It is possible for the subjects in (48) to be marked with the nominative case marker, instead of *wa*. However, such sentences have particular rhetorical effects. See Hinds et al. (1987) for discussion. Similarly, the subject in the question in (47) can be marked with the nominative case marker, but in this case the *wh*-phrase must precede

it, encoding a different information structure (see Tomioka 2007a). Crucially, a question of this form cannot be uttered discourse-initially, so I will leave such cases aside here.

²⁴ Kuroda (1986a,b), Sakai (1994) and Ishizuka (2010) argue that topicalisation always involves movement, but the possibility of linking to a position inside an island is still considered a characteristic of (a construction that feeds into) topicalisation.

²⁵ Kishimoto (2009) claims that *wa*-marked phrases always move to the CP-zone. Crucially, he claims that the movement can be covert. The data in Section 3 show that the clause-initialness requirement pertains to overt syntax. My suggestion is that items that refer back to discourse topics are not base-generated and surface in the configuration in (53), an option that can be made compatible with Kishimoto's proposal.

²⁶ It is sometimes reported that multiple non-contrastive *wa*-phrases sound a little awkward, though multiple contrastive wa-phrases are fine (Tomioka 2010). However, a wa-marked adverbial may precede a wa-marked subject without either wa-phrase being interpreted as contrastive, as shown below (Kuroda 1965, 1986a, 1988):

(i) kinoo-wa ano inu-wa kooen-de John-o kande-simatta. John-ACC bite-ended.up yesterday-WA that dog-WA park-in

I propose that kinoo here is the topic, while ano inu-wa is referring back to a discourse topic. (i) cannot be used where the subject is a topic: it cannot answer the request *tell me about the dog*. Rather, it is more naturally used as an answer to a question such as I know that the dog bit Bill today, but what about yesterday?

 27 An anonymous reviewer points out a fact that seems at odds with the claims made here. It is the fact that X in the request of the form *what/how about X*? bears *wa*, as illustrated by (i). On the current proposal, one might expect that X in the reply would behave like an item referring back to a discourse topic, like those in (50b) and (52). However, X in the reply must occupy clause-initial position, parallel to the pattern in (12).

(i) ano inu-wa doo desu ka?

that dog-WA how COP Q

'How about that dog?'

Functionally, tell me about X and how about X appear the same cross-linguistically (Vallduví and Engdahl 1996): they both strongly favour X in the reply to be a sentence topic. At present, I do not have a complete explanation for the above observation. However, there is some evidence that X in how about X is not a sentence topic, just as X is not in tell me about X. It can be non-referential, as shown by (iia), and it cannot be linked to a position inside an island, as illustrated by (iib). I leave this issue for future research.

(ii) a. [Looking for someone for a certain task,] [kurasu-no hito dareka]-wa doo ka? desu class-GEN person someone-WA how COP Ο

'How about someone in your class?' ka?

desu

b. *John_i-wa [proi otooto]-ga

> younger.brother-NOM how COP Q John-wa

'How about John's younger brother?'

²⁸ The reviewer also provides the following example to make the same point as (62)/(63). In (i), the discourse topic is arguably 'unemployed college students', but a previously unmentioned item is marked with wa.

doo

(i) [Nowadays, there are many young people who have earned a college degree and yet cannot find a secure job] konoyoona wakamono-o seihu-wa vori sekkyokutekini sien-suru-bekidesu. such young people-ACC government-WA more positively support-do-should

'The government should take more active measures to support such young people.'

I assume that the same considerations apply to this example. Talking about the state of unemployment, it seems plausible that 'the government' or 'what the government should do' is somewhat accessible. It is also not immediately obvious on Oshima's (2009) account why *seihu* 'government' should be part of the ground.

 29 The definitions of topics assumed by these authors are much broader than the definitions adopted here. They do not distinguish between what I call sentence topics and items referring back to discourse topics, or between contrastive topics and B-contrastive *wa*-phrases, hence the description 'clause-medial topics'.

³⁰ Tateishi (1994) assumes four functional projections whose specifiers a *wa*-marked phrase may occupy: CP>ModP>IP>AgrP. CP, ModP and IP are reserved for conditional topics, pure topics (his terminology; akin to what is commonly known as hanging topics) and major subject, respectively, and a *wa*-marked subject occupies SpecAgrP. A further problem with Tateishi's approach is that in a response to the request *tell me about x*, where *x* in the reply is the subject, it is unclear why the specifiers of the higher projections must remain unoccupied.

References

Beaver, David & Henk Zeevat. 2007. Accommodation. In Gillian Ramchand & Charles Reiss (eds.), *The Oxford handbook of linguistic interfaces*, 503-538. Oxford: Oxford University Press.

Beck, Sigrid & Shin-Suk Kim. 1997. On *wh-* and operator scope in Korean. *Journal of East Asian Linguistics* 6. 339–384.

Bianchi, Valentina & Mara Frascarelli. To app. Is topic a root phenomenon? Iberia.

- Chafe, Wallace. L. 1976. Givenness, contrastiveness, definiteness, subjects, topics, and point of view. In Charles Li (ed.), *Subject and topic*, 25-56. New York: Academic Press.
- Choi, Hye-Won. 1999. *Optimizing structure in context: Scrambling and information structure*. Stanford: CSLI.
- Clancy, Patricia. 1980. Referential choice in English and Japanese narrative discourse. In Chafe, Wallace L. (ed.), *The pear stories: Cognitive, cultural, and linguistic aspects of narrative production*, 127-202. Norwood, NJ: Ablex.
- Büring, Daniel. 1997. The meaning of topic and focus. London: Routledge.
- Büring, Daniel. 2003. On D-trees, beans, and B-accents. Linguistics and Philosophy 26. 511-545.
- Constant, Noah. 2006. *English rise-fall-rise: A study in the semantics and pragmatics of intonation*. Santa Cruz: University of California Santa Cruz MA thesis.
- Endo, Yoshio. 2007. Locality and information structure. Amsterdam: John Benjamins.
- Erteschik-Shir, Nomi. 1997. *The dynamics of focus structure*. Cambridge: Cambridge University Press.
- Fiengo, Robert & William McClure. 2002. On how to use *-wa. Journal of East Asian Linguistics* 11. 5-41.
- Fox, Danny. 2000. Economy and semantic interpretation. Cambridge, MA: MIT Press.

- Frascarelli, Mara & Roland Hinterhölzl. 2007. Types of topics in German and Italian. In Kerstin Schwabe & Susanne Winkler (eds.), On information structure, meaning and form, 87–116. Amsterdam: John Benjamins.
- Fukui, Naoki. 1995. The principles-and-parameters approach: a comparative syntax of English and Japanese. In Shibatani, Masayoshi & Theodora Bynon (eds.), *Approaches to language typology*, 327–372. Oxford: Oxford University Press.
- Giusti, Giuliana. 2006. Parallels in clausal and nominal periphery. In Mara Frascarelli (ed.), *Phases of interpretation*, 163–186. Berlin: Mouton de Gruyter.
- Givón, Talmy. 1976. Topic, pronoun and grammatical agreement. In Charles Li (ed.) Subject and Topic, 149-188. New York: Academic Press.
- Givón, Talmy. 1983. Introduction. In Talmy Givón (ed.) *Topic continuity in discourse*, 5-41. Amsterdam/Philadelphia: John Benjamins.
- Gundel, Jeanette. 1988. Universals of topic–comment structure. In Mark Hammond, A. Moravcsik & Jessica Wirth (eds.), *Studies in syntactic typology*, 209–239. Amsterdam: John Benjamins.
- Hajičová, Eva, Barabara H. Partee & P. Sgall. 1998. *Topic-focus articulation, tripartite structures and semantic content*. Dordrecht: Kluwer.
- Hara, Yurie. 2006. *Grammar of knowledge representation: Japanese discourse items at interfaces*. Newark: University of Delaware PhD dissertation.
- Hara, Yurie & Robert van Rooij. 2007. Contrastive topics revisited: A simpler set of topicalternatives. Paper presented at *North Eastern Linguistics Society (NELS)* 38, University of Ottawa, Canada, 26-28 October.
- Hetland, Jorunn. 2007. The Korean particle *nun*, the English fall-rise accent and thetic/categorical judgements. In Kerstin Schwabe & Susanne Winkler (eds.) *On information structure, meaning and form*, 117-127. Amsterdam/Philadelphia: John Benjamins.
- Heycock, Caroline. 1993. Syntactic predication in Japanese. *Journal of East Asian Linguistics* 2. 167-211.
- Heycock, Caroline. 2008. Japanese -wa, -ga, and information structure. In Shigeru Miyagawa & Mamoru Saito (eds.), *The Oxford handbook of Japanese linguistics*, 54-83. Oxford: Oxford University Press.
- Hinds, John, Senko Maynard & Shoichi Iwasaki. 1987. *Perspectives on topicalization: The case of Japanese WA*. Amsterdam: John Benjamins.
- Hirsch, Aron & Michael Wagner. 2011. Patterns of Prosodic Prominence in English Intransitive Sentences. Paper presented at Generative Linguistics in the Old World Colloquium 34, 28-30 April 2011, Vienna, Austria.
- Hoji, Hajime. 1985. *Logical form constraints and configurational structures in Japanese*. Seattle: University of Washington PhD dissertation.

- Ishihara, Shin. 2007. Major phrase, focus intonation, multiple spell-out. *The Linguistic Review* 24. 137-167.
- Ishizuka, Tomoko. 2010. Alienable-inalienable asymmetry in Japanese and Korean possession. In John Scott Stevens (ed.), UPenn Working Papers in Linguistics 16. 91-100. http://repository.upenn.edu/pwpl/vol16/iss1/11 (15 January 2011)
- Jackendoff, Ray. 1972. Semantic interpretation in generative grammar. Cambridge, MA: MIT Press.
- Jacobs, Joachim. 1997. Bemerkungen zur I-Topikalisierung. Linguistische Berichte 168. 91-133.
- Kishimoto, Hideki. 2009. Topic prominency in Japanese. The Linguistic Review 26. 465-513.
- Krifka, Manfred. 1992. A compositional semantics for multiple focus constructions. In Joachim Jacobs (ed.), *Informationsstruktur und Grammatik: Linguistische Berichte Sonderheft 4*, 17-53. Opladen: Westdeutscher Verlag.
- Kiss, Katalin, É. 1998. Identificational focus versus information focus. Language 74. 245-273.
- Kuno, Susumu. 1973. The structure of the Japanese language. Cambridge, MA: MIT Press.
- Kuroda, S.-Y. 1965. *Generative grammatical studies in the Japanese language*. Cambridge MA: MIT PhD dissertation. [reproduced by Garland, New York, (1979)]
- Kuroda, S.-Y. 1979. The semantics of the Japanese topic marker *wa*. *Linguisticæ Investigationes* 3. 75-85.
- Kuroda, S.-Y. 1986a. Movement of noun phrases in Japanese. Reprinted in Kuroda S.-Y. 1992, *Japanese syntax and semantics: Collected papers*, 229-271. Dordrecht: Kluwer
- Kuroda, S.-Y. 1986b. What happened after the movement of noun phrase in La Jolla. Reprinted in Kuroda S.-Y. 1992. Japanese syntax and semantics: Collected papers, 293-314. Dordrecht: Kluwer.
- Kuroda, S.-Y. 1988. Whether we agree or not: A comparative syntax of English and Japanese. *Linguisticae Investigationes* 12. 1-47.
- Kuroda, S.-Y. 1992. Judgement forms and sentence forms. In *Japanese syntax and semantics: Collected papers*, 13-77. Dordrecht: Kluwer.
- Kuroda, S.-Y. 2005. Focusing on the matter of topic: A study of *wa* and *ga* in Japanese. *Journal of East Asian Linguistics* 14. 1–58.
- Kuwabara, Kazuki. 2008. Peripheral effects in Japanese questions and the fine structure of CP. Ms. Kanda University of International Studies, Chiba.
- Lambrecht, Knud. 1994. Information structure and sentence form. Cambridge: CUP.
- McNally, Louise. 1998. On recent formal analyses of topic. In Jonathan Ginzburg, Zurab Khasidashvili, Carl Vogel, Jean-Jacques Lévy, & Enric Vallduví (eds.), *The Tbilisi symposium on language, logic, and computation: Selected papers*, 147–160. Stanford: CSLI.

Miyagawa, Shigeru. 1997. Against optional scrambling. Linguistic Inquiry 28. 1-25.

- Miyagawa, Shigeru. 2006. On the "undoing" property of scrambling: A response to Bošković. *Linguistic Inquiry* 37. 607-624.
- Molnár, Valéria. 2002. Contrast from a contrastive perspective. In Hilde Hallelgard, Stig Johansson, Bergljot Behrens & Cathrine Fabricius-Hansen (eds.), *Information structure in a cross-linguistic perspective*, 147-161. Amsterdam: Rodopi.
- Molnár, Valéria & Susanne Winkler. 2010. Edges and gaps: Contrast at the interfaces. *Lingua* 120. 1392–1415.
- Munakata, Takashi 2006. Japanese topic-constructions in the minimalist view of the syntax-semantics interface. In Cedric Boeckx (ed.) *Minimalist essays*, 115-159. Amsterdam: John Benjamins.
- Nakanishi, Kimiko. 2001. Prosody and information structure in Japanese: A case study of topic marker wa. Japanese / Korean Linguistics 10. 434-447.
- Neeleman, Ad & Tanya Reinhart. 1998. Scrambling and the PF interface. In Mirium Butt & Wilhelm Gueder (eds.), *The projection of arguments*, 309-353. Stanford: CSLI.
- Neeleman, Ad & Hans van de Koot. 2008. Dutch scrambling and the nature of discourse templates. *Journal of Comparative Germanic Linguistics* 11. 137-189.
- Neeleman, Ad & Hans van de Koot. 2009. Scope Inversion. Ms. University College London.
- Oshima, David Y. 2008. Morphological vs. phonological contrastive topic marking. In *Chicago Linguistics Society (CLS)* 41. 371-384.
- Oshima, David Y. 2009. On the so-called thematic use of wa: Reconsideration and reconciliation. *Pacific Asia Conference on Language Information and Computation (PACLIC)* 23. 405-414.
- Portner, Paul & Katsuhiko Yabushita. 1998. The semantics and pragmatics of topic phrases. *Linguistics and Philosophy* 21. 117-157.
- Portner, Paul & Katsuhiko Yabushita. 2001. Specific indefinites and the information structure theory of topics. *Journal of Semantics* 18. 271-297.
- Reinhart, Tanya. 1981. Pragmatics and linguistics: An analysis of sentence topics. *Philosophica* 27. 53-94.
- Reinhart, Tanya. 1995. Interface strategies. *OTS Working Papers in Linguistics*, TL-95-002. Utrecht: Utrecht University.
- Reinhart, Tanya. 2005. *Interface strategies: optimal and costly computations*. Cambridge, MA: MIT Press.
- Rizzi, Luigi. 1990. Relativized minimality. Cambridge, MA: MIT Press.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In Liliane Haegeman (ed.) *Elements of Grammar*. 281-337. Dordrecht: Kluwer.
- Rooth, Mats. 1985. Association with focus. Amherst: University of Massachusetts PhD thesis.
- Rooth, Mats. 1992. A theory of focus interpretation. Natural Language Semantics 1. 75–116.

Saito, Mamoru. 1982. Case marking in Japanese: A preliminary study. Ms., MIT.

- Saito, Mamoru. 1985. *Some asymmetries in Japanese and their theoretical implications*. Cambridge MA: MIT PhD dissertation.
- Saito, Mamoru. 1989. Scrambling as semantically vacuous A'-movement. In Baltin, Mark & Anthony Kroch (eds.), *Alternative conceptions of phrase structure*, 182-200. Chicago: University of Chicago Press.
- Sakai, Hiromu. 1994. Complex NP constraint and case conversion in Japanese. In Masaru Nakamura (ed.), Current topics in English and Japanese: the Second English/Japanese comparative syntax workshop, 179-203. Tokyo: Hituzi Syoboo.
- Samek-Lodovici, Vieri. 2009. Topic, focus, and background in Italian Clauses. In Andreas Dufter & Daniel Jacob (eds.), *Focus and background in Romance languages* (Studies in Language Companion Series 112). Amsterdam: John Benjamins.
- Sheard, Yoshiko. 1991. The parenthetical NP wa in Japanese. Lingua 84. 283-313.
- Shibatani, Masayoshi. 1990. The languages of Japan. Cambridge: Cambridge University Press.
- Tateishi, Koichi. 1994. The syntax of subjects. Stanford: CSLI.
- Tomioka, Satoshi. 2007a. Pragmatics of LF intervention effects: Japanese and Korean Whinterrogatives. *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 Malte Zimmermann & Caroline Féry (eds.) *Information structure: Theoretical, typological and experimental perspectives*, 115-138. Oxford: Oxford University Press.
- Vallduví, Enric. 1992. The informational component. New York / London: Garland.
- Vallduví Enric & Elisabet Engdahl. 1996. The linguistic realization of information packaging. *Linguistics* 34. 459-519.
- Vallduví, Enric & Maria Vilkuna. 1998. On rheme and kontrast. In Peter W. Culicover & Louise McNally (eds.), *Syntax and semantics 29: The limits of syntax*, 79-108. San Diego: Academic Press.
- Vermeulen, Reiko. 2005a. Possessive and adjunct multiple nominative constructions in Japanese. *Lingua* 115. 1329-1363.
- Vermeulen, Reiko. 2005b. *The syntax of external possession: Its basis in theta-theory*. London: University College London PhD Thesis.
- Vermeulen, Reiko. 2010. Non-topical wa-phrases in Japanese. In Rafaella Folli & Christiane Ulbrich (eds.) Interfaces in Linguistics: New research perspectives, 135-148. Oxford: Oxford University Press.
- Wagner, Michael. 2008. Contrastive topics decomposed. Ms. Cornell University.

Watanabe, Akira. 2003. Wh and operator constructions in Japanese. *Lingua* 113. 519–558.