On the syntactic typology of topic marking: A comparative study of Japanese and Korean*

REIKO VERMEULEN

Abstract

This paper investigates the syntactic distribution of topics in Japanese and Korean. The literature on the two languages notes a number of similarities, but also some differences particularly with respect to so-called contrastive topics. However, no unified account for the two languages has been proposed. I show that similarities as well as such differences are systematic and predicted by a syntactic typology of information structural notions proposed by Neeleman et al. (to appear). The typology claims that there are syntactic rules that are sensitive to information structural notions [topic], [focus] and [contrast]. I demonstrate that Japanese and Korean exemplify the same rule for [topic] and the same rule for [contrast]. This results in a conflict for contrastive topics. I propose that in such a situation, there is parametric variation as to which operation is adopted. In Japanese, the rule for [topic] is adopted, while in Korean the rule for [contrast] is adopted. Some consequences for phrases marked by the putative topic markers *wa* in Japanese and *nun* in Korean, which are often noted not to behave like topics (Kuroda 1965, 2005, Choi 1999), are also discussed.

1 Introduction

There is overwhelming evidence from a wide ranging languages that [topic], [focus] and [contrast] are autonomous notions of information structure that interact in systematic ways with syntax (e.g., Aboh 2004, Frey, 2004, Rizzi 1997, Vallduví 1992, Vallduví & Vilkuna 1998). Moreover, some authors have argued that items usually referred to as contrastive topic and contrastive focus should be analysed as composites of the notions [topic] and [contrast], and [focus] and [contrast], respectively (Molnár 2002, Giusti 2006). Based on these considerations, Neeleman et al (to appear) propose the typology in (1).

^{*} This paper is part of the output of the AHRC-funded project 'A Flexible Theory of Topic and Focus Movement' at UCL (Grant no. 119403). I also acknowledge financial assistance by the British Academy (Grant no. SG50500). I thank Daniel Büring, Jieun Kim, Ad Neeleman, and Kriszta Szendrői for many inspiring discussions. I also thank my Japanese and Korean informants for their generous help and patience. An earlier version of this paper was presented at the Syntax Seminar at the University of Potsdam. I thank the audience for their helpful comments.

(1)	Syntactic	typology	of topic,	focus	and contrast ¹
-----	-----------	----------	-----------	-------	---------------------------

	Topic	Focus	
non-contrastive	non-contrastive topic [topic]	non-contrastive focus [focus]	
contrastive	contrastive topic [topic] [contrast]	contrastive focus [focus] [contrast]	

The main motivation for the typology comes from the observation that languages show cross-cutting generalisations over the syntactic distribution of items sharing one of the three privative notions. If [topic], [focus] and [contrast] are autonomous notions that can be targeted by the syntax, one would expect to find syntactic operations that are sensitive only to [topic], those sensitive only to [focus], and those sensitive only to [contrast]. Following Neeleman et al. (to app.), I will talk of such syntactic operations as syntactic 'rules' and the information structural notions as 'features' that the syntax may target for convenience. Neeleman et al. provide Japanese, Russian and Dutch as example languages that have discrete syntactic rules regarding [topic], [focus] and [contrast], respectively. In Japanese, they show that a topic, contrastive or non-contrastive, must be licensed in clause-initial position, and items in other positions bearing the putative topic marker wa are not in fact topics. They demonstrate for Russian with data involving scope and socalled split scrambling that focus, contrastive or non-contrastive, is licensed in clause-final position in this language. Finally, in Dutch, a contrastive item licenses A'-scrambling which has a particular effect on the interpretation of the sister constituent of the A'-moved item, regardless of whether this item is contrastive topic or contrastive focus.

This paper provides further evidence from Japanese and Korean for the above typology. The two languages display an additional pattern of cross-linguistic variation. In particular, the table does not preclude the possibility that one language has more than one rule. For example, a language may have a rule for [topic] and a rule for [contrast]. In such an instance, a conflict potentially arises for contrastive topic. If the two rules cannot be satisfied simultaneously, it is not immediately obvious which rule contrastive topic should be subject to. I argue that in such an instance a language adopts one rule over the other. This predicts that if a language has conflicting rules for [topic] and [contrast], contrastive topic in that language

¹ What I call 'non-contrastive topic' and 'non-contrastive focus' are often referred to in the literature as 'aboutness topic' and 'new information focus', as are in Neeleman et al. (to app.). However, to be theory-neutral, and to highlight the opposition to the contrastive types, I adopt the term 'non-contrastive'.

would systematically behave either like non-contrastive topic or contrastive focus with respect to the rules. In this paper, I argue that Japanese and Korean bear out the predicted situation. The two languages have the same rule for [topic] and the same rule for [contrast]. Japanese contrastive topic is subject to the rule for [topic], while Korean contrastive topic is subject to the rule for [contrast]. The rule for [topic] in the two languages is the same as the one mentioned above for Japanese. Moreover, the rule for [contrast] in the two languages turns out to be the same as the one mentioned above in Dutch, but the two rules will be elaborated in much more detail using data from Japanese and Korean below.

The rest of the paper is organised as follows. I will first clarify in Section 2 the notions 'topic', 'focus' and 'contrast' adopted in this paper. Section 3 examines the rule for [topic] in Japanese and Korean. I show that in both languages, noncontrastive topic must appear in clause-initial position. Section 4 shows that the two languages have the same rule for [contrast]. This is demonstrated by the syntactic distribution of contrastive focus in both languages. They optionally undergo scrambling to a clause-medial or clause-initial position. This option is not available for non-contrastive focus. Thus, the optional scrambling is not a rule for [focus]. The syntactic behaviour of contrastive topic is examined in Section 5. There, I show that contrastive topics in Japanese, must occupy clause-initial position, like non-contrastive topics in this language. On the other hand, in Korean, contrastive topics behave syntactically like contrastive foci. Contrastive topic in Japanese is thus regulated by the rule for [topic], while contrastive topic in Korean is regulated by the rule for [contrast]. The section also considers cases where phrases marked by the putative topic markers wa and nun in the two languages induce contrastive readings, but, I argue, are not topics. The current proposal predicts different distributions regarding these items, which are shown to be correct.

2 Terminologies

It is important to note at the outset the distinction between 'sentence topic' and 'discourse topic'. Sentence topic is generally considered the syntactic category that is what the sentence is about, while discourse topic is what the whole discourse is about and can be more abstract (Reinhart 1981). In this paper, I take a narrower notion of 'sentence topic' as a syntactic category that is not merely what the rest of the sentence is about, but that in addition affects the topic of discourse, for example by introducing a new one, re-introducing it, shifting it from one item to another, narrowing down its referent or implicating the existence of a salient alternative. An item having such a set of discourse functions has been noted in several languages to have a distinct set of syntactic properties from an item that is merely what the

sentence is about. It has variously been named 'chain-initial topic' (Givón 1983), 'link' (Vallduví 1992), 'aboutness topic' (Frascarelli & Hinterhölzl 2007). The present paper concerns the syntax of this narrower notion of 'sentence topic'.

A sentence topic in this narrower sense can be identified as the item X in the answer to requests such as *tell me about* X or *what about* X? (Reinhart 1981). Such requests explicitly instruct the hearer to introduce X as the discourse topic. Thus, John in Speaker B's utterance below is a sentence topic.

- (2) A: Tell me about John.
 - B: John likes hiking.

That *John* in (2B) indeed introduces the referent as the topic of discourse, can be seen from the fact that B's utterance is still felicitous even if the request is less specific about what is to be the topic of discourse, such as *tell me about someone in your class*.

Sentence topics must be distinguished from items that simply refer back to them and are thereby interpreted as what the rest of the sentence is about (Vallduví 1992, Lambrecht 1994, Vallduví & Engdahl 1996, Neeleman et al. to app.). The point can be illustrated by the following discourse.

- (3) A: Who did Max see yesterday?
 - B: He saw Rosa yesterday.

Uttered discourse-initially, the question in (3a) introduces Max as the topic of discourse. However, the pronoun he in (3b) is not a sentence topic. It is an anaphoric item that simply refers back to the discourse topic Max (Vallduví & Engdahl 1996). The information structure of the utterance in (3b) is that Rosa, that answers the wh-part of the preceding question, is the focus and the remaining items constitute the background. The sentence in (3b) gives the impression that it is about the referent of he, but this is so only because he refers back to the discourse topic. Thus, a sentence topic is always what the sentence is about, but the item that the sentence is about is not necessarily a sentence topic.

Below, I will examine the syntactic distribution of 'topic' in Japanese and Korean in this narrower sense. Note that the notion 'topic' is not defined in terms of whether the relevant item is marked by the so-called topic markers *wa* and *nun* in Japanese and Korean, respectively. I have argued in Vermeulen (2009, to app.) that there are *wa*-marked phrases that do not coincide with items identified as topics on discourse considerations in both contrastive and non-contrastive cases and this particle should therefore not be analysed as a topic marker. For Korean too, the literature notes many instances in which *nun* should not be treated as a topic marker (e.g. Choe 1995, Han 1998, Choi 1999, Gill & Tsoulas 2004).

Turning to 'focus', I adopt the widely held view that it provides a highlighted piece of information with respect to the rest of the sentence. As such, it can be identified as the item that answers the wh-part of a preceding question (É Kiss 1998, Erteschik-Shir 2007 and references therein).

Finally. I take a contrastive item to be an item that generates a set of salient alternatives and induces a particular implicature with respect to the alternatives that are not selected. It appears that contrast can be expressed only if the item is also focus or topic. (Vallduví & Vilkuna 1998, Repp 2009). The nature of the implicature seems to depend on whether the item is also focus or topic. Tomioka (2009), for instance, argues that this distinction follows from the different level at which focus and topic operates. He argues that focus operates at the level of proposition, while topic operates at the level of speech act. Consequently, a contrastive focus generates a set of alternative propositions and the reason for selecting that particular item is because the alternative propositions are false. On the other hand, a contrastive topic generates a set of alternative speech acts, and as such the reason for selecting a particular contrastive topic could be pragmatic, for example, the speaker is not sure about the alternatives, or wishes not to make a statement about the alternatives. Contrastive focus and contrastive topic are often associated with distinct tones in English. The former is instantiated by a falling tone, the so-called A-accent, while the latter by a fall-rise tone, the so-called Baccent (Jackendoff 1972). Typical examples of contrastive focus and contrastive topic are given below in (4) and (5), and (6) and (7), respectively. (SMALL CAPS indicate additional discourse-related stress).

- (4) A: Which one of his friends wants to meet John?
 - B: [JANET]_A wants to meet John.

(Erteschik-Shir 2007: 49)

- (5) A: Which of Giorgo and Maria has broken the vase?
 - B: [MARIA]_A has broken the vase.

(based on an Italian example in É Kiss (1998: 269))

- (6) A: Do you think that Fritz would buy this suit?
 - B: Well, [I]_B certainly wouldn't.

(Büring 1997: 56)

(7) A: Can Jack and Bill come to tea?

B: $[BILL]_B$ can.

(Büring 2003: 532)

Janet in (4B) is a focus, because it answers the wh-part of a preceding question, and it is also contrastive, as the question makes it clear that there is a set of salient alternatives out of which Janet has been selected. The answer implies strongly that

other friends did not want to meet John. Similarly, in (5), where the set is made explicitly to contain only two alternatives 'Girogo has broken the vase' and 'Maria has broken the vase', (5B) implicates that the other alternative is false.

I in (6B) is a topic, as it is what the rest of the sentence is about and has shifted the topic of discourse from Fritz, which has been introduced as such by the preceding question. It is also contrastive: shifting the topic of discourse from Fritz to I, the speaker B opted not to make an utterance regarding Fritz, which is in the set of alternatives. A possible implicature here seems much freer than that in (4B) and (5B). It could be that the speaker simply does not know, or wishes not to express his/her opinion regarding Fritz, and so on. Similarly in (7), where the answer makes the alternatives in the set explicit, it does not necessarily imply that the other alternative, namely 'John can come for dinner' is false. It could be that B is unsure about John.

However, there are instances in which items with a B-accent are not contrastive 'topics' in a most obvious way despite generating the same kind of contrastive interpretation as the contrastive topic in (6B) and (7B). Being what the sentence is about, a topic must usually be specific (Reinhart 1981). However, the following examples show that the accent can be used to mark contrast on verbs or quantifiers. It is difficult to see in what sense these non-specific items are what the sentences are about, or how they affect the discourse topic. Conversely, if contrastive topics are identified simply as items bearing this accent, 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]_A 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.

(modified from McNally 1998: 152)

I propose that accents such as the English B-accent only indicate contrast of the type that is proposed in the literature² and the topic status of contrastive topic is identified in terms of aboutness and its effect on the current topic of discourse, discussed above. A B-accented item should then also be able to function as a

² I will not review the vast literature on the precise meaning of the B-accent (e.g., Ward & Hirschberg 1988, Büring 1997, 2003, Constant 2006, Hara and van Rooij 2007, Wagner 2008). However, I will discuss some analyses proposed for Japanese and Korean for a similar contrastive interpretation expressed by the particles *wa* in Japanese and *nun* in Korean in Section 5.

contrastive focus, given an appropriate discourse context. Indeed, I argue that the B-accented items in the examples in (8) and (9) are a type of contrastive focus. The B-accent indicates that the item has a different kind of contrastive implicature from A-accented items such as those in (4B) and (5B), contrary to Büring (2003) and Tomioka (2009).³ Thus, in terms of the syntactic typology in (1), the B-accented items in (8) and (9) are 'contrastive focus'. One argument comes from the observation that a B-accented item can be used to answer a *wh*-question, and it may be the sole pitch bearing item in the sentence, as shown below (Hara 2006: 19). This also means that A-accented items are not the only instantiation of contrastive focus in terms of the typology in (1).

(10) A: Who passed the exam?

B: [Mary did]_B

(Implicature: Possibly, others didn't pass. /I don't know about others.)

In Japanese and Korean, the counterparts to the A-accented foci are marked by case markers, while the putative topic markers *wa* and *nun* mark items that appear in similar environments to those bearing the B-accent in (8), (9), and (10). I will argue in Section 5 that the latter are not contrastive topics, but rather contrastive foci.

To recap, I assume that topic is what the rest of the sentence is about, affecting the topic of discourse, and focus is a highlighted piece of information in the sentence. Contrast generates a set of alternatives with a particular implicature for those alternatives that were not selected. Those are the notions relevant for the syntactic typology in (1). In the next two sections, I will demonstrate that there are cross-cutting generalisations for the syntax of items with the feature [topic] and items with the feature [contrast].

3 [Topic]

Neeleman et al. (to app.) propose that a topic in Japanese, contrastive or not, is subject to the syntactic rule in (11) (See also Vermeulen (2009, to app.)).

(11) [Topic] is licensed in clause-initial position.

³ The idea that a B-accented item can be a focus, however, seems incompatible with Tomioka's (2009) idea that focus operates at the level of proposition, while the B-accent, the accent he associates with contrastive topic, operates at the level of speech act. The implicatures of the B-accent in (8), (9) and (10) appear similar to the ones in (6) and (7). I leave this issue for future research.

The main empirical motivation comes from the distribution of items identified as topics in contexts that require them to be topics. This section demonstrates the above rule in Japanese and Korean by examining the distribution of non-contrastive topics in the two languages. In Section 5, I will show that contrastive topics in Japanese are also subject to the above rule.

Non-contrastive topics in Japanese must be marked by the particle wa. In the literature on Japanese, non-contrastive topics are generally described as typically appearing in clause-initial position, but they can sometimes occupy other positions (e.g. Watanabe 2003). However, in a context that explicitly requires an item to be a non-contrastive topic, it must occupy clause-initial position. Thus, in answering the request in (12), the subject *ano inu-wa* 'that dog-wa' must appear in clause-initial position, as in (13b). A reply in which the wa-phrase occupies a non-clause-initial position, as in (13b), is infelicitous.

- (12) ano inu-nituite nanika osiete-kudasai (J) that dog-about something tell-give 'Tell me something about that dog.'
- (13) a. ano inu-wa kinoo kooen-de John-o kande-simatta John-acc bite-closed that dog-wa yesterday park-at b. #John_i-o ano inu-wa kinoo kooen-de t_i kande-simatta John-acc that dog-wa yesterday bite-closed park-at 'The dog bit John in the park vesterday.'

The same observation obtains when the object in the answer is to be interpreted as the non-contrastive topic. In answering the request in (14), *ano boosi* 'that hat' must appear in clause-initial position, as in (15a), and it cannot remain in its canonical object position, as in (15b).

- (14) ano boosi-nituite nanika osiete-kudasai (J) that hat-about something tell-give 'Tell me something about that hat.'
- (15) a. ano boosi_i-wa John-ga kaimasita kinoo $e_{\rm i}$ that hat-wa John-nom vesterday bought kaimasita b. #John-ga ano boosi-wa kinoo John-nom that hat-wa yesterday bought 'John bought that hat yesterday.'

In Korean too, an item that is interpreted as a non-contrastive topic must occupy clause-initial position. The point is illustrated for subject and object in (16)/(17) and (18)/(19), respectively.⁴

- (16) ku kay-eytayhayse mal-hay-po-a that dog-about tell-do-try-imperative 'Tell me about this dog.'
- (17) a. ku kay-nun/ka ecey kongwen-eyse John-ul mwul-essta this dog-nun/nom yesterday park-at John-acc bit b. #John_i-ul ku kay-nun/ka ecey kongwen-eyse t_i mwul-essta John-acc this dog-nun/nom yesterday park-at bit 'This dog bit John in the park yesterday.'
- (18) ku moca-eytayhayse mal-hay-po-a (K) this hat-about tell-do-try-imperative 'Tell me about this hat.'
- (19) a. ku moca-nun/lul John-i ecey sasse this hat-nun/acc John-nom yesterday bought b. #John-i ku moca-nun/lul ecey sasse John-nom this hat-nun/acc yesterday bought 'John bought this hat yesterday.'

Korean non-contrastive topics, unlike the Japanese counterpart, need not be marked by the putative topic marker *nun*. Choi (1999) claims that *nun* on a clause-initial phrase specifically marks items with functions associated with Vallduví's (1992) notion of 'link', which is equivalent to the notion of 'topic' adopted in this paper, while case markers *ka* and *lul* are neutral with respect to the discourse function of the host item. Thus, the latter are compatible with topics. The situation is different in Japanese, where it seems that topics must be marked by *wa*, although as we will see that *wa* can mark items other than topics. As indicated above, whether the noncontrastive topic is marked by the case marker or *nun* does not affect the syntactic restriction to clause-initial position. I will therefore not discuss this difference between *wa*-marking in Japanese and *nun*-marking in Korean and concentrate on the syntactic distribution of those items identified as topics by discourse considerations.

There is a further syntactic property that non-contrastive topics in the two languages share, supporting the claim that they have the same rule for [topic]. The standard analysis of non-contrastive topics in Japanese is that it is base-generated in

⁴ The nominative case marker is realised as ka after a vowel and as i elsewhere. Similarly, the accusative marker is realised as lul if following a vowel and as ul elsewhere.

a left-peripheral position and can bind an empty pronominal in a thematic position, resulting in a structure typically assumed for dislocation (Cinque 1990), illustrated in (20).

```
(20) Topic_i [_{IP} pro_i ]
```

This analysis explains the well-known observation that a non-contrastive topic can be associated with a position inside an island, such as a relative clause. Thus, in the example in (21), *sono sinsi* 'that gentleman' appears in the main clause and is interpreted as the subject inside the relative clause. The presence of the empty pronominal *pro* can be seen from the fact that it is possible to overtly realise it (Perlmutter 1972, Kuno 1973, Saito 1985, also Hoji 1985).

(21) sono sinsi;-wa kyoo $[NP \emptyset_j][TP \text{ pro/kare}_i$ -ga kinoo e_j kitei-ta] that gentleman-wa today he-nom yesterday wearing-Past yoohuku]-ga yogoretei-ta. suit-nom dirty-Past 'As for that gentleman, the suit (he) was wearing was dirty.' (modified from Kuno (1973: 249))

The same construction is possible in Korean, as shown below. Based on such data, Choe (1995) proposes an analysis along the same line as that in (20).

(22) ku kulim_i-nun nay-ka [NP [TP e_j (kukes_i-ul) kuli-n] salam_j]-ul the picture-nun I-nom it-acc draw-adn person-acc al-ko iss-ta know-and exisit-dec 'Speaking of the picture, I know a person who painted it.'

(modified from Choe 1995: 312)

The following simpler examples illustrate the same point, where the *wa*-marked phrase in Japanese and the *nun*-marked phrase or the nominative phrase in Korean are interpreted as the possessor of the subject. The sentences are felicitous answers to the request 'tell me something about Mary.' 6

⁵ Kuroda (1988), Sakai (1994) and Ishizuka (to app.) argue that topicalisation always involves movement. However, the possibility of linking to a position inside a relative clause is still considered to be a characteristic of (a construction that can feed into) topicalisation.

 $^{^6}$ In the example in (24), if the dislocated item bears the nominative case marker ka, the result is the so-called multiple nominative construction. Unlike Japanese, this construction is possible without the first nominative phrase being interpreted as focus (Vermeulen 2005, Yoon 2009)

- (23) Mary_i-wa kinoo [NP pro_i / kanozyo_i-no otooto]-ga (J) Mary-wa yesterday she-gen younger.brother-nom John-o mita.

 John-ACC saw
- (24) Mary-ka/nun ecey [NP proi tongseng]-i (K)
 Mary-nom/nun yesterday younger.brother-nom
 John-ul po-ass-ta.
 John-acc saw
 'Speaking of Mary, her little brother saw John.'

As mentioned previously, however, a phrase marked by the putative topic marker wa in Japanese can appear in positions other than clause-initial position, as illustrated below. (Watanabe 2003).

- (25) ano inu-wa kinoo dare-o kande-simatta no? (J) that dog-nom yesterday who-acc bite-ended.up Q 'Who did the dog bite?'
- (26) a. ano inu-wa kinoo JOHN-O kande-simatta that dog-wa yesterday John-acc bite-ended.up b. JOHN_i-O ano inu-wa kinoo t_i kande-simatta John-acc that dog-wa yesterday bite-ended.up 'The dog bit John yesterday.'

According to the rule in (11), the *wa*-phrase in (26b) cannot be a topic. As discussed in Section 2 with English examples, the subject in the answer in a context such as the above is not a topic, but it is an anaphoric item referring back to the topic of discourse that is introduced as such by the previous question. It therefore need not occupy clause-initial position.⁷ I call such non-topical *wa*-phrases discourse anaphoric *wa*-phrases. I provide two further pieces of evidence for their non-topical status.

Firstly, in Korean, it is widely documented that a non-contrastive *nun*-phrase cannot appear in positions other than clause-initial position (Choe 1995, Choi 1997, 1999, Han 1998). Thus, in the Korean counterpart of (26b), the subject cannot be marked by *nun*: it must bear the nominative case marker *ka*, as illustrated below. Following Choi (1999), if *nun* is a marker specifically for the narrower notion of topic adopted in this paper, then its unavailability in (28b) indicates the non-topical

 $^{^{7}}$ By virtue of appearing in the same context, one would expect the clause-initial wa-phrase in (26a) also not to be a topic. However, we cannot exclude the possibility that it is a topic, reintroducing the topic of discourse, though somewhat redundantly here.

status of the host item.

- (27) ku kay-ka ecey nwukwu-lul mwul-ess-ni? (K) this dog-nom yesterday who-acc bite-past-Q 'Who did this dog bite?'
- (28) a. ku kay-ka/nun mwul-essta ecey JOHN-UL this dog-nom/nun vesterday John-acc bite-past b. JOHN_i-UL ku kay-ka/#nun ecey t_i mwul-essta John-acc this dog-nom/nun yesterday bite-past

Secondly, if a non-clause-initial wa-phrase is not a topic, it should not be able to take part in a construction like (21)/(23), where it is base-generated in a nonthematic position binding an empty pronominal in a thematic position inside a following island. There appears to be no reason to assume that a discourse anaphoric item is licensed in a dislocated position. The prediction is correct and to demonstrate, we need the following ingredients. First, the phrase that is to be marked with wa in the answer must be mentioned in the preceding question, as it is to be interpreted as discourse anaphoric. Secondly, in the answer, a fronted focus should be present, preceding the wa-phrase, to ensure that we are dealing with a wa-phrase that cannot be a topic (see footnote 6). Fronting of a focused object is permitted in answering an object wh-question, for instance, as we saw in (25)/(26)and (27)/(28), and is most natural if other items in the answer remained the same as in the question. As a consequence, considering that we are attempting to see if the wa-phrase could bind a position inside the subject, it must already do so in the question. These ingredients yield the question in (29). As indicated, the reply in (30) is infelicitous.⁸

- (29) Mary-wa kinoo [NP proi otooto]-ga dare-o mita no? (J) Mary-wa yesterday younger.brother-nom who-acc saw Q 'Speaking of Mary, who did her younger brother see yesterday?'

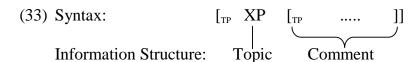
In Korean too, a non-clause-initial *nun*-phrase or nominative phrase cannot take part in the same construction:⁹

⁸ See Samek-Lodovici (2008) for a similar distinction between pre-focus items and post-focus items in Italian, where he argues the former are topics, while the latter are discourse anaphoric.

 $^{^{9}}$ One of my Korean informants reports that the example in (32) is acceptable if *Mary* appears with the nominative case marker ka. I assume that this is because the nominative case marker is

- (31) Mary_i-nun [NP pro_i tongsayng]-i nwukwu-lul po-ass-ni? (K) Mary-nun younger.brother-nom who-acc see-past-Q 'Talking of Mary, who did her younger brother see yesterday?'

Thus, an item bearing the feature [topic] in Japanese and Korean must be licensed in clause-initial position. For concreteness, I propose that topic is in an adjoined position to the highest maximal projection in the clause. Thus, in a simple declarative clause, the topic is adjoined to TP, as shown in (33). Following the standard literature on Japanese and Choe (1995) for Korean, I assume that if the topic is a non-contrastive nominal argument, it is base-generated in the adjoined position, binding an empty pronominal internally to the clause, as we saw above, (20); if it is a non-contrastive PP argument or a contrastive argument, nominal or otherwise, it has undergone movement to that position. The distinction is motivated by the fact that the latter group of items show properties of movement, such as weak crossover, reconstruction effects, licensing of parasitic gaps, and they cannot be associated with an argument position in an island as in the cases we discussed above, (21)-(24) (see Saito 1985, Hoji 1985 for discussion on this point for Japanese and Choe 1995 for Korean). In cases of so-called 'scene-setting topics' (Lambrecht 1994) or 'stage topics' (Erteschik-Shir 1997), I assume that they are base-generated in the adjoined position (Tateishi 1995), while other adverbials such as manner adverbials, have undergone movement to this position. I assume furthermore, following Neeleman & van de Koot (2008), that the sister constituent to the topic is interpreted as the comment in information structure. The displacement of the topic is motivated to facilitate this one-to-one mapping.¹⁰



neutral with respect to the discourse status of its host item, as proposed by Choi (1999) and the speaker has accommodated some alternative interpretation of the subject that licenses multiple nominative constructions (see also footnote 5).

¹⁰ The idea of a transparent mapping is similar in spirit to the so-called cartographic approach initiated by Rizzi (1997). (See Watanabe 2003, Munkata 2006, Endo 2007, Kuwabara 2008 for cartographic analyses of topics in Japanese) I will not compare the above approach to the cartographic approach. See Neeleman & van de Koot (2008) and Vermeulen (to app.) for detailed discussion on this issue.

4 [Contrast]

In this section, I show that Japanese and Korean have the same rule for [contrast]:

(34) [Contrast] licenses A'-scrambling.

The above rule is the same as the one proposed for Dutch in Neeleman et al. (to app.). The rule was motivated on syntactic as well as interpretive grounds. However, here, I concentrate on the syntactic aspects of contrastive items in Japanese and Korean. In Section 2, it was noted that phrases marked by the putative topic markers *wa* and *nun* can also be a kind of contrastive focus, analogous to B-accented items in English. I will deal with them in the next section, concentrating here on case-marked contrastive foci.

The following examples show that contrastive focus can undergo scrambling to an intermediate or sentence-initial position in both languages. The preceding question makes the set of alternatives explicit and the use of *dake* 'only' in Japanese and *man* 'only' in Korean also makes clear the implicature that the alternative proposition regarding the CD is false.

- (35) John-wa Sue-ni hon-to CD-to ryoohootomo ageta no? (J) John-wa Sue-to book-and CD-and both gave Q 'Did John give both the book and the CD to Sue?'
- (36) a. Ie, John-wa Sue-ni CD-dake(-o) agemasita. No. John-wa Sue-to CD-only-acc gave b. Ie. John-wa CD-dake_i(-o) Sue-ni agemasita. No. John-wa CD-only-acc Sue-to gave c. Ie, CD-dake_i(-o) John-wa Sue-ni agemasita. t_i No, CD-only-acc John-wa Sue-to gave 'No, John gave only the CD to Sue.'
- (37) John-i Sue-eykey chayk-kwa CD-lul twul ta cwu-ess-ni? (K) John-nom Sue-to book-and CD-acc two all give-past-Q 'Did John give both the book and the CD to Sue?'
- (38) a. Ani, John-i Sue-eykey CD-man cwu-ess-e. CD-only No. John-nom Sue-to give-past-decl b. Ani. John-i CD_i-man Sue-eykey t_i cwu-ess-e. No, John-nom CD-only Sue-to give-past-decl t_i cwu-ess-e. c. Ani, CD_i-man John-i Sue-eykey No, CD-only John-nom Sue-to give-past-decl 'No, John gave only the CD to Sue.'

That focus may play a role in licensing A'-scrambling has been suggested by many (Saito 1992, Miyagawa 1996, 1997, 2006, Ueyama 2006, a.o. for Japanese; M. Lee 2006 and references therein for Korean). Specifically, Miyagawa argues for Japanese that focus licenses A'-scrambling of the direct object VP-internally and to above the subject. One may therefore wonder whether the relevant feature licensing the optional scrambling is [focus], rather than [contrast]. This may be suggested by the possibility of scrambling the direct object in the answer to a simple object-whquestion, as illustrated below.

- (39) John-wa Sue-ni nani-o ageta no desu ka? (J) John-wa Sue-to what-acc gave nmz cop Q 'What did John give to Sue?'
- (41) John-i Sue-hantey mwues-lul cwuesse? (K)
 John-nom Sue-to what-acc gave
 'What did John give to Sue?'
- (42) a. John-i Sue-hantey i CD-lul cwuesse Sue-to this CD-acc John-nom gave b. John-i I CD_i-LUL Sue-hantey cwuesse t_i John-nom this CD-acc Sue-to gave Sue-hantey c. I CD_i-LUL John-i cwuesse t_i this CD-acc John-nom Sue-to gave 'John gave the CD to Sue.'

However, as has been observed for numerous other languages that have focus movement, including Dutch (Neeleman & van de Koot 2008), Finnish (Vallduví & Vilkuna 1997), Hungarian (É Kiss 1998), Italian (Rizzi 1997, Samek-Lodovici 2005), and Russian (Neeleman & Titov 2009), it seems that only the contrastive type of focus undergoes movement. Most of my informants report, and Choi (1999) claims explicitly for Korean, that an extra contrastive interpretation is required for the (b)- and (c)-examples above, where the object has undergone scrambling, although it is not necessary for the (a)-example, where it remains in-situ.

The point can be made more explicitly. In answering the questions in (39) and (41), if the object is given as an example, not implicating that all other alternatives

are false, scrambling is not possible. The point is illustrated by (43) and (44) for Japanese and Korean, respectively. As shown by the (a)-examples, it is possible for *tatoeba / ye-lul twul-e* 'for example' to follow the object which it modifies. However, the direct object cannot undergo scrambling, as illustrated by the (b)- and (c)-examples. Strictly speaking, adding 'for example' only ensures that the given answer is not exhaustive, not necessarily contrastive. However, assuming that exhaustivity is a specific kind of contrast and in the absence of a better test at present, I take the observations in (43) and (44) to be suggestive of the fact that scrambling of the type in (36) and (38) are limited to contrastive foci. 11,12

(43) *What did John give to Sue?* (= (39))

a. John-wa	Sue-ni	hon-o		tatoeba	agemasita	(J)
John-wa	Sue-to	book-acc		for.example	gave	
b. #John-wa	hon _i -o	Sue-ni	t_{i}	tatoeba	agemasita	
John-wa	book-acc	Sue-to		for.example	gave	
c. #hon _i -o	John-wa	Sue-ni	t_{i}	tatoeba	agemasita	
book-acc	John-wa	Sue-to		for.example	gave	

(44) What did John give to Sue? (=(41))

a. [?] John-i	Sue-hantey	chayk-ul	ye-lul twul-e	cwuesse	(K)
John-nom	Sue-to	book-acc	for.example	gave	
b. #John-i	chayk _i -ul	Sue-hantey	t _i ye-lul twul-e	cwuesse	
John-nom	book-acc	Sue-to	for.example	gave	
c. #chayk _i -ul	John-i	Sue-hantey	t _i ye-lul twul-e	cwuesse	
book-acc	John-nom	Sue-to	for.example	gave	

It is important to emphasise that I am not claiming that every instance of A'-scrambling is licensed by [contrast]. As is well-known, there are many other motivations for scrambling, even within the domain of information structure. For instance, Miyagawa (1997, 2006) and Ishihara (2001) argue that the object may

i. #John-wa [hon-o tatoeba]i Sue-ni t_i agemasita book-accfor.example Sue-to John-wa gave ii. #[hon-o tatoeba]_i John-wa Sue-ni t_i agemasita book-acc for.example John-wa Sue-to gave

¹¹ It is not the case, at least for Japanese, that *hon-o* 'book-acc' and *tatoeba* 'for.example' must form a constituent, as the examples in (i) and (ii) below show even if the latter is scrambled together, the answers are still infelicitous:

¹² It is not easy to demonstrate that non-contrastive focus cannot undergo scrambling. In order to do so concretely, we must identify a context in which focus is required, but a contrastive interpretation is entirely excluded. However, the difficulty is that a contrastive interpretation can easily arise from the context and be accommodated (Kuroda 2005).

undergo scrambling in order to avoid being interpreted as focus itself. The preverbal position, which is the canonical position for the object, receives a sentential nuclear stress. Scrambling allows the object to escape being interpreted as focus due to receiving the nuclear stress and also allows formation of different kinds of focus domains (in the sense of Reinhart (1995, 2006)), such as the verb and the subject without the object. The claim here is that the [contrast] feature can be one trigger for A'-scrambling of contrastive focus.

5 Contrastive wa- and nun-phrases

In this section, I first show that the syntactic distribution of contrastive topics in Japanese is regulated by the rule for [topic] in (11), while contrastive topics in Korean are subject to the rule for [contrast] in (34). Subsequently, I turn to instances of *wa*- and *nun*-marked phrases that do not appear to be contrastive topics, but more like contrastive foci.

Before proceeding, I would like to spell-out a background assumption I am making here regarding the particles wa and nun. There is a debate as to whether wa in Japanese and *nun* in Korean appearing on non-contrastive topic and contrastive topic are one lexical item or two lexical items in the respective language (Kuno 1973, Kuroda 1992, 2005, Hara 2006, Tomioka 2009 for Japanese; Choi 1997, 1999, Han 1998, Gill & Tsoulas 2003, Y. Lee 2005, M. Lee 2006, Oh 2007 for Korean). Some authors argue that they are two different lexical items, with the contrastive interpretation being part of one and not the other, while others argue that there is only one lexical item and the contrast arises from the context. However, there is overwhelming evidence provided by some of the above mentioned authors that the particles display different syntactic, semantic and prosodic properties in the two circumstances in which they are used. For instance, the contrastive interpretation is invariably associated with freer syntax and an emphatic stress. Thus, I assume here that the contrastive and non-contrastive varieties correspond to two lexical items in each language, and refer to the kind that bears an emphatic stress and induces a contrastive interpretation as 'contrastive wa' and 'contrastive nun'.

5.1 Contrastive topics in Japanese

Contrastive topics in Japanese must be marked by the particle *wa* and bear an emphatic stress, and like non-contrastive topics, they must appear in clause-initial position. The obligatory clause-initialness is illustrated by the following discourse, where the context identifies the direct object in the answer to be a contrastive

topic.¹³ The question in (45) is about *ano CD* 'that CD', but the hearer of this question may not know the relevant information with respect to the CD and offers information regarding *ano hon* 'that book'. In doing so, she has shifted the topic of discourse from the CD to the book, making the latter a contrastive topic. As the contrast in (46) shows, *ano hon* 'that book' must be displaced to clause-initial position.

- (45) Dare-ga Sue-ni ano CD-o ageta no? (J)
 Who-nom Sue-to that CD-acc gave Q
 'Who gave that CD to Sue?'
- (46) Hmm, ano CD-wa doo-da-ka siranai kedo...
 Well, that CD-wa how-cop-whether not.know but
 'Well, I don't know about that CD, but...'
 - Sue-ni a. #JOHN-GA ANO HON-WA kinoo ageteita (yo) Sue-to John-nom that book-wa yesterday gave prt b. ^{??}JOHN-GA ANO HON_i-WA Kinoo Sue-ni t_i ageteita (yo) John-nom that book-wa Sue-to yesterday gave prt c. ANO HON_i-WA JOHN-GA Sue-ni kinoo t_i ageteita (yo) that book-wa John-nom Sue-to yesterday gave prt 'As for that book, John gave it to Sue yesterday.'

The standard view in the literature is that any phrase marked by contrastive *wa* is a contrastive 'topic' and it may appear in-situ (Heycock 2007, Tomioka 2009, and references in those works). A minimal pair of examples is given below:

(47) a. Mary-ga ANO HON-WA katta.

Mary-nom that book-wa bought

b. ANO HON_i-WA Mary-ga t_i katta.

that book-wa Mary-nom bought

'Mary bought that book.'

(Implicature: But, perhaps, she did not buy another one)

However, these examples are often provided without a context and as demonstrated clearly by the exchange in (45)/(46), in a context that requires a contrastive waphrase to be a contrastive topic, it must occupy clause-initial position. Thus, I argue that the clause-initial contrastive wa-phrase in (47b) is a contrastive topic, but the one in (47a) is not. Specifically, I argue in Section 5.3 that contrastive wa-phrases

¹³ A subject contrastive topic must also occupy clause-initial position, but I do not illustrate this here, as it is not possible to see if a subject contrastive topic has moved or is in-situ and there are also further complications, which I discuss together with the relevant data in Vermeulen (2009).

that can appear in-situ, like the one in (47a), is a type of contrastive 'focus', just as a B-accented item in English can function as a type of contrastive 'focus' in an appropriate context, as I argued in Section 2.

Thus, contrastive topics in Japanese, like non-contrastive topics, are regulated by the rule for [topic] and must appear in clause-initial position.

5.2 Contrastive topics in Korean

In Korean, contrastive topics must also bear an emphatic stress and are typically marked by *nun*.¹⁴ In contrast to Japanese, however, Korean contrastive topics need not appear in clause-initial position. They may remain in-situ, scramble to a clause-medial or clause-initial position. This distribution is illustrated by the following parallel exchange to the Japanese examples in (45)/(46):

- (48) John-i nwuku-hantey ku CD-lul ecey cwuesse? (K) John-nom who-to this CD-acc yesterday gave 'To whom did John give this CD yesterday?'
- (49) Hmm, ku CD-nun molu-keyss-ko Well, this CD-nun not-know-but 'Well, I don't know about this CD, but...'

a. John-i **SUE-HANTEY** I CHAYK-UN ecey cwuesse John-nom Sue-to this book-nun yesterday gave b. John-i I CHAYK_i-UN **SUE-HANTEY** ecey t_i cwuesse this book-nun John-nom Sue-to yesterday gave c. I CHAYK_i-UN John-i **SUE-HANTEY** t_i cwuesse ecey this book-nun John-nom Sue-to yesterday gave 'as for this book, John gave it to Sue yesterday.'

The above distribution is identical to that of contrastive focus in Korean and Japanese, examined in Section 4 (see (35)/(36) and (37)/(38)). Thus, I conclude that contrastive topics in Korean are regulated by the rule for [contrast].

In the literature on Korean, contrastive *nun*-phrases that appear in positions other than clause-initial position are often uniformly called contrastive 'focus' (Choe 1995, Choi 1997, 1999, Han 1998, Gill & Tsoulas 2003). Analogous to the case of contrastive *wa*-phrases that appear in non-clause-initial positions in Japanese, I argue that a contrastive *nun*-phrase can function as a particular kind of contrastive focus as well as a contrastive topic, depending on the context. Specifically, in those

¹⁴ My informants report that it is also possible to mark contrastive topics with a case marker, as was the case for non-contrastive topic (see Section 3). However, they also expressed stronger preference for marking with *nun* in cases of contrastive topics.

contexts where a contrastive *wa*-phrase in Japanese can occupy a position other than clause-initial position, the Korean contrastive *nun*-phrase counterpart is a type of contrastive focus. I will return to the latter case in the next sub-section. Here, I provide arguments for the claim that a contrastive *nun*-phrase in positions other than clause-initial position *can* function as a contrastive topic, contrary to the standard view in the literature.

There are three reasons to believe that the labelling is a matter of convention, rather than based on the actual interpretations of contrastive *nun*-phrases obtained in relevant discourse contexts. Firstly, the discourse context in the exchange in (48)/(49) above makes it clear that a contrastive *nun*-phrase can be a contrastive topic. Secondly, the description of the interpretation given for contrastive *nun*-phrases in the literature suggests that it is indeed similar to that given to contrastive *wa*-phrases discussed in the previous sub-section, and the B-accent in English. For instance, Choi (1999), provides the following description with respect to the example in (50), which contains a contrastive *nun*-phrase in-situ: "[(50)] implies that 'Swuni met Inho, but she probably did not meet other people', or 'Swuni met Inho at least, but we do not know whether she met other people as well." (Choi 1999: 168). The uncertainty expressed by such paraphrases is typical of implicature associated with contrastive *wa*-phrases in Japanese and items bearing a B-accent in English, both of which can function as contrastive topics, as we saw above.

Furthermore, C. Lee (1999, 2003a, 2003b, 2008) and Hetland (2007) illustrate that in contexts that require an item to bear a B-accent in English, the Korean counterpart has a *nun*-marked item, as the following example, slightly modified (only in notation) from Hetland (2007: 123), shows:

(51) CHELSWU-NUN ca-n-ta
Chelswu-nun sleep-pres-dec
'[Chelswu]_B is sleeping' (His sister is awake, however)

Finally, C. Lee (2003a, 2008), who argues that contrastive *nun*-phrases are contrastive topics, shows that in contexts that are generally considered to require a contrastive focus, namely those that make it explicit that the alternatives are false, such as those considered in (4), (5) and (37)/(38), a case marker must be employed:

(52) aki-ka ton-ul mence cip-ess-ni (ttonun/animyen) (K) baby-nom money-acc first pick-past-Q (or/if.not) phen-ul mence cip-ess-ni? pen-acc first pick-past-Q 'Did the baby pick the money first or did she pick the pen first?'

(53) (aki-ka) ton-ul/?*ton-un mence cip-ess-e¹⁵ baby-nom money-acc/money-CT first pick-past-dec 'The baby picked the money first/?*money_{CT} first.'

(C. Lee 2003a, ex. (20)/(21))

Thus, I argue, following C. Lee (1999, 2003a, 2003b, 2008) that a contrastive *nun*-phrase can function as a contrastive topic if it appears in an appropriate discourse context. As demonstrated by (48)/(49), its syntactic distribution is identical to that of contrastive focus. I now turn to cases where, I argue, contrastive *wa*- and *nun*-phrases do not function as contrastive topics, but more like contrastive foci.

5.3 Contrastive wa- and nun-phrases that are contrastive foci

I suggested above that contrastive *wa*-phrases in Japanese in positions other than clause-initial position are not contrastive topics and contrastive *nun*-phrases that are the Korean counterparts to such contrastive *wa*-phrases are also not contrastive topics. I argue that this is correct both from interpretational and syntactic points of view: they are not interpreted as what the rest of the sentence is about and in Japanese, they behave syntactically more like contrastive focus, than contrastive topic.

Let us first consider the interpretation associated with contrastive *wa*- and *nun*-phrases. There is much recent work on the precise meaning of contrastive *wa* and *nun*. Several authors have argued that the semantics of contrastive *wa* and *nun* is akin to what is encoded by the B-accent in English or the rising pitch accent in German (C. Lee 1999, 2003b, 2008, Hara 2006, M. Lee 2006, Hetland 2007, Hara & Van Rooij 2007, Oshima 2008, Tomioka 2009). Hara (2006), for instance, proposes that Japanese contrastive *wa* implicates the existence of a stronger scalar alternative which could be false. To illustrate, let us consider the following example.

¹⁵ The glossing of *un* as 'CT' as well as the translation are as given in Lee (2003a).

The above example has the meaning given in (55a). According to Hara's analysis, it has the presupposition that there is a stronger scalar alternative such as (55b), 'everyone came'. The sentence also induces the implicature that this alternative could be false, giving rise to the implicature that '(it is possible that) not everyone came'. Lee (2003b, 2008) proposes that Korean *nun* has similar semantics.

- (55) a. ∃(x) [[person(x)] [came (x)]]
 b. stronger scalar alternative: ∀(x) [[person(x)] [came (x)]]
 - c. (b) can be false.

There are obviously differences amongst the proposals mentioned above. However, they all argue that the use of a contrastive *wa-/nun*-phrase generates a set of alternatives, and that there is a particular implicature regarding the alternatives, that gives rise to the impression of incompleteness or uncertainty. I believe that this line of analysis provides a correct characterisation of the interpretation of contrastive *wa/nun*-phrases in general. However, there is nothing inherent in this kind of interpretation itself that makes a contrastive *wa/nun*-phrase a contrastive 'topic', i.e., what the rest of the sentence is about, affecting the current topic of discourse. I propose therefore that contrastive *wa- or nun*-phrases in general have the type of contrastive interpretation proposed in the recent literature, but they are in addition interpreted as a topic if the context requires it to be so. In other words, topicality and the particular contrastive interpretation associated with contrastive *wa/nun*-phrases are two independent features of a contrastive topic (Kuroda 2005, Tomioka 2009), in accordance with the typology in (1).

In the same vein, one would then expect that contrastive wa- or nun-phrases can also be interpreted as focus if the context requires it, with the same contrastive interpretation. If argue that this is indeed the case. For instance, a contrastive wa/nun-phrase can be used to answer a wh-question, as illustrated by the object wa-phrase in-situ in (56)/(57) and the object nun-phrase in (58)/(59). If we take seriously the ability to answer a wh-question as indicative of focus-hood, then the object wa-phrase in (57) and the nun-phrase in (59) must be a contrastive focus.

¹⁶ Similarly, one would expect that case-marked phrases can perhaps be interpreted as topics. This is presumably the situation in Korean, which I discussed above briefly in Section 3, in relation to Choi's (1999) proposal that case markers in Korean are discourse neutral. In Japanese, it seems that *wa*-marking is obligatory for all topics. I leave this issue for future research.

 $^{^{17}}$ Some authors have argued for Japanese that the properties of contrastive wa are akin to other focal particles such as mo 'also' and sae 'even' (Kuroda 1965, 2005, Oshima 2008). Kuroda (2005) claims precisely on the basis of examples like (56)/(57) that a wa-phrase is not necessarily a topic.

- (56) Mary-wa nani-o katta no?

 Mary-wa what-acc bought Q

 'What did Mary buy?'
- (57) Mary-wa HON-WA kinoo katta Mary-wa book-wa yesterday bought 'Mary bought a book.' (Implicature: 'But, perhaps, she did not buy other things')
- (58) Mary-ka nwukwu-lul po-ass-ni? (K)
 Mary-nom who-acc see-past-Q
 'Who did Mary see?'
- (59) Mary-ka JOHN-NUN po-ass-ta.

 Mary-nom John-nun see-past-decl
 'Mary saw John.'

 (Implicature: 'But, perhaps, she did not see Bill.')

The fact that contrastive wa- and nun-marked phrases can be a type of contrastive focus, predicts a further difference between Japanese and Korean. Contrastive waand *nun*-phrases of the type in (57)/(59) should be subject to the rule for [contrast] and behave like contrastive foci in these languages. In Korean, contrastive topics are also subject to the rule for [contrast]. Thus, contrastive *nun*-phrases of the type in (59) and contrastive topics should show the same syntactic distribution. By contrast, Japanese contrastive topics are subject to the rule for [topic]. Thus, contrastive wa-phrases of the type in (58) should behave differently from those contrastive wa-phrases that appear in contexts requiring them to be contrastive topics. This is already indicated by the fact that the object wa-phrase in (57) is insitu. A further relevant consideration here is that topics in Japanese must be marked by wa. Consequently, one would expect from a functional perspective that this language would interpret any contrastive wa-phrase displaced to clause-initial position as a contrastive topic. Thus, the precise prediction is that like case-marked contrastive focus, a contrastive wa-phrase answering a wh-question should be able to appear in-situ and scramble to clause-medial position. However, it cannot move to clause-initial position, because it would be automatically interpreted as a contrastive topic when the context does not identify it as such. The predictions for the two languages are schematically illustrated below:

(60) Japanese

a. contrastive wa-phrase: $(^{\dagger}DO_{i}-WA)$ S $(DO_{i}-WA)$ IO (DO-WA) V b. contrastive topic: $(DO_i - WA)$ S ($^{\#}DO_i - WA$) IO (*DO-WA) V

(61) Korean

a. contrastive *nun*-phrase: (DO_i-NUN) S (DO_i-NUN) (DO-NUN) IO b. contrastive topic: $(DO_{i}-NUN)$ S $(DO_{i}-NUN)$ IO (DO-NUN) V

The prediction is borne out. In the following exchanges in Japanese and Korean, the object in the reply answers the wh-part of the preceding question. It is a contrastive wa/nun-phrase, inducing the relevant implicature. In Japanese, it can remain in-situ, as in (63a), or scramble to an intermediate position, as in (63b), but not to clause-initial position, (63c). In Korean, the contrastive nun-phrase may appear in any of the three potential position, as illustrated by (64).

- (62) Mary-wa Sue-ni nani-o desu ka? **(J)** ageta no Mary-wa Sue-to what-acc gave nmz cop Q 'What did Mary give to Sue?'
- (63) a. Mary-wa Sue-ni ANO HON-WA agemasita. Mary-wa Sue-to that book-wa gave b. Mary-wa ANO HON_i-WA Sue-ni t_i agemasita. Mary-wa that book-wa Sue-to gave c. ^{??}ANO HON_i-WA Mary-wa t_i agemasita. Sue-ni that book-wa Mary-wa Sue-to gave 'Mary gave that book to Sue.'

(Implicature: 'But I'm not sure if she gave anything else')

- (64) John-i Sue-hantey mwu-lul cwuesse? (K) John-nom Sue-to what-acc gave 'What did John give to Sue?'
- (65) a. John-i Sue-hantey i CD-nun cwuesse John-nom Sue-to this CD-nun gave I CD_i-NUN Sue-hantey b. John-i t_i cwuesse this CD-nun Sue-to John-nom gave c. I CD_i-NUN John-i Sue-hantey t_i cwuesse this CD-nun John-nom Sue-to gave

'John gave the CD to Sue.'

(Implicature: 'But, I'm not sure if she gave anything else)

Unfortunately, my Japanese informants report that the judgement for (63c) is rather subtle, only expressing dispreference, rather than infelicity. On the other hand, they report robust judgements in cases where there are only two arguments and the prediction is borne out: a contrastive *wa*-phrase answering the *wh*-part of a previous question cannot undergo scrambling to clause-initial position, while in Korean, the contrastive *nun*-phrase may move to clause-initial position.¹⁸

- (66) John-wa nani-o katta no?

 John-wa what-acc bought Q

 'What did John buy?'

 (J)
- (67) a. John-wa OSEENBEE-WA tikaku-de katta John-wa rice.crackers-wa near-at bought b. #OSEENBEE_i-WA John-wa t_i tikaku-de katta rice.crackers-wa John-wa near-at bought 'John bought rice crackers nearby.' (Implicature: 'But, perhaps, he didn't buy cookies.')
- (68) Mary-ka nwukwu-lul po-ass-ni? (K)
 Mary-nom who-acc see-past-Q
 'Who did Mary see?'
- (69) a. Mary-ka JOHN-UN po-ass-ta. (= (59))

 Mary-nom John-nun saw

 b. JOHN_i-UN Mary-ka t_i po-ass-ta.

 John-nun Mary-nom saw

 'Mary saw John'

 (Implicature: 'But perhaps, she didn't see Bill.')

phrase in Korean can, as demonstrated by the (b)-examples.

There is another context that bears out the prediction. This context exemplifies a further peculiar property of contrastive *wa/nun*: contrastive *wa-* and *nun-*phrases can project the contrast to a larger constituent. This is illustrated by (70a) and (71a), respectively. The two clauses in these examples are not statements about rain or an umbrella. None of the *wa-* and *nun-*marked phrases is therefore a contrastive 'topic'. It is also not the case that rain and umbrella are contrasted with each other. Rather, the two events described by the two clauses are contrasted with each other. Again, in Japanese, the object contrastive *wa-*phrase in the second clause cannot

undergo scrambling to clause-initial position, while the object contrastive nun-

 $^{^{18}}$ Following Neeleman & Reinhart (1998), I assume that a structure in which the object precedes an adverbial can be base-generated. Thus, I do not consider the example in (67a) to exemplify the case where the object contrastive *wa*-phrase has undergone scrambling to an intermediate position.

- (70) a. [AME-WA hutteiru ga] [John-ga KASA-WA motteikanakatta] (J) rain-wa is.falling but John-nom umbrella-wa bring-went-not
 - b. #[AME-WA hutteiru ga] [KASA_i-WA John-ga t_i motte-ika-nakatta] rain-wa is.falling but umbrella-wa John-nom bring-go-not.past 'It is raining, but John did not bring an umbrella.'

(modified from Kuno (1973: 46) attributed to Minoru Nakau (p.c.))

- (71) a. [pi-nun o-nuntey] [John-i WUSAN-UN kacyeo-ci an-hassta] (K) rain-nun come-but John-nom umbrella-nun bring-neg neg-past
 - b. [pi-nun o-nuntey] [WUSAN_i-UN John-i t_i kacyeo-ci an-hassta] rain-nun come-but umbrella-nun John-nom bring-neg neg-past 'It is raining, but John didn't bring an umbrella.'

On the standard analysis for Japanese contrastive wa-phrases, where they are treated as contrastive topics uniformly irrespective of their position, it is difficult to capture the differences in the interpretation and the syntactic distribution between those contrastive wa-phrases that are identified as contrastive topics and those that are not. Moreover, the proposed idea that a language adopts one rule over the other in cases of conflict provides a uniform account of the differences in the syntactic distribution of contrastive topics in Japanese and Korean.

6 Summary

In the preceding sections, I have argued that Japanese and Korean both have syntactic rules for the interpretive features [topic] and [contrastive]. Moreover, I argued that where a conflict arises, as in the case of contrastive topic, there is parametric variation as to which rule a particular language adopts. In Japanese, the rule for [topic] is adopted, which was demonstrated by the fact that both contrastive and non-contrastive types of topic must appear in clause-initial position in this language. On the other hand, in Korean, the rule for [contrast] is adopted, which was illustrated by the fact that both contrastive foci and contrastive topics in this language optionally undergo A'-scrambling. These observations are patterns that are predicted to exist by the syntactic typology of information structural notions proposed by Neeleman et al. (to app.) in (1) and therefore provide further empirical support for it.

References

- Aboh, Enoch Oladé 2004. The Morphosyntax of Complement Head Sequences: Clause Structure and Word Order Pattern in Kwa. OUP: Oxford.
- Büring, Daniel. 1997. The Meaning of Topic and Focus. London: Routledge.
- Büring, Daniel. 2003. On D-trees, beans, and B-accents. Linguistics & Philosophy 26:511–545.
- Choe, Hyon Sook. 1995. Focus and topic movement in Korean and licensing. In K. É. Kiss (ed.) *Discourse Configurational Languages*. Oxford University Press: Oxford. 269-334.
- Choi, Hye-Won. 1997. Topic and focus in Korean: The information partition by Phrase structure and morphology. In *Japanese and Korean Linguistics* 6. CSLI: Stanford. 545-560.
- Choi, Hye-Won. 1999. *Optimizing Structure in Context: Scrambling and Information Structure*. CSLI: Stanford.
- Cinque, G. 1990. Types of A'-dependencies. Cambridge: MIT Press.
- Constant, Noah. 2006. English Rise-Fall-Rise: A study in the Semantics and Pragmatics of Intonation. MA Diss. UC Santa Cruz.
- É Kiss, Katalin 1998. Identificational focus versus information focus. Language 74:245-273
- Endo, Yoshio. 2005 *Locality and Information Structure: a Cartographic Approaches to Japanese*. Amsterdam: John Benjamins.
- Frascarelli, Maria & Roland Hinterhölzl 2007. Types of topics in German and Italian. In S. Winkler and K. Schwabe (eds.), *On Information Structure, Meaning and Form*, 87-116. Amsterdam/Philadelphia, John Benjamins.
- Frey, Werner 2004. A Medial Topic Position for German. Linguistische Berichte.
- Gill Kook-Hee & George Tsoulas 2004. Peripheral Effects without Peripheral Syntax: The Left Periphery in Korean. In David Adger, Cécile De Cat and George Tsoulas (eds.) *Peripheries*. Kluwer: Dordrecht.
- Giusti, Giuliana 2006. Parallels in clausal and nominal periphery. In: Mara Frascarelli (ed.), *Phases of Interpretation*. Berlin: Mouton de Gruyter.
- Givón, Talmy. 1983. Introduction. In Talmy Givón (ed.) *Topic Continuity in Discourse*. Benjamins, Amsterdam/Philadelphia. pp. 5-41.
- Haig, John. 1982. Japanese *ga* and Korean *ka/i*. Paper presented at the Second International Conference on Korean Linguistics, Honolulu, Hawaii.
- Hajičová, Eva, Barbara. H. Partee & P. Sgall 1998. *Topic-focus Articulation, Tripartite Structures, and Semantic Content.* Kluwer, Dordrecht.
- Han, Chung-hye. 1998. Asymmetry in the interpretation of -(n)un in Korean. In *Japanese / Korean Linguistics* 7. CSLI: Stanford.
- Hara, Yurie 2006. Grammar of Knowledge Representation: Japanese Discourse Items at Interfaces. PhD dissertation. University of Delaware.
- Hara, Yurie & Robert van Rooij. 2007. Contrastive Topics Revisited: a Simpler Set of Topic-Alternatives. Talk given at NELS 38, University of Ottawa, Canada.
- Hetland, Jorunn. 2007. The Korean particle *nun*, the English fall-rise accent and thetic/categorical judgements. In Schwabe, K. & S. Winkler (eds.) *On Information Structure, Meaning and Form.* John Benjamins: Amsterdam/Philadelphia. 117-127.
- Heycock, Caroline 2007. Japanese -wa, -ga, and Information Structure. In Mamoru Saito & Shigeru Miyagawa (ed.) Oxford Handbook of Japanese Linguistics. Oxford University Press: Oxford.
- Hoji, Hajime 1985. Logical Form Constraints and Configurational Structures in Japanese. PhD dissertation, University of Washington.

- Ishihara, S. 2001. Stress, focus and scrambling in Japanese. In MIT Working Paper in Linguistics 39, 142-175.
- Ishizuka, T. To appear. Alienable-Inalienable Asymmetry in Japanese and Korean Possession. UPenn Working Papers in Linguistics 16.
- Jackendoff, Ray. 1972. Semantic Interpretation in Generative Grammar. Cambridge: MIT Press.
- Kuno, Susumu. 1973. The structure of the Japanese language. Cambridge, Mass.: MIT Press.
- Kuroda, S.-Y. 1965. Generative Grammatical Studies in the Japanese Language. PhD dissertation, MIT. [reproduced by Garland, New York, (1979)]
- Kuroda, S.-Y. 1992 Judgment Forms and Sentence Forms. In Japanese Syntax and Semantics: Collected Papers. Kluwer, Dordrecht, 13-77.
- 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.
- Lambrecht, Knud. 1994. Information Structure and Sentence Form. Cambridge University Press: Cambridge.
- Lee, Chungmin. 1999. Contrastive topic: A locus of the interface evidence from Korean and English. In K. Turner (ed.) The Semantics / Pragmatics Interface from Different Points of View.
- Lee, Chungmin 2003a. Contrastive topic and/or contrastive focus. In McClure, B. (ed.) Japanese/Korean Linguistics 12. CSLI: Stanford.
- Lee, Chungmin 2003b. Contrastive topic and proposition structure. in Di Sciullo, A-M. (ed.) Asymmetry in Grammar. John Benjamins. 345-371.
- Lee, Mina. 2006. Overt Focus Movement and Minimal Information Marking. PhD Diss. USC
- Lee, Youngjoo. 2005. Exhaustivity as agreement: the case of Korean man 'only'. Natural Language Semantics 13: 169–200
- McNally, Louise. 1998. On recent formal analyses of topic. In J. Ginzburg et al. (eds.) The Tbilisi Symposium on Language, Logic, and Computation: Selected Papers. CSLI Publications, 147-
- Miyagawa, Shigeru. 1997. Against Optional Scrambling. Linguistic Inquiry 28.1:1-25
- 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 H. Hallelgard, Stig Johansson, Bergliot Behrens, and Cathrine Fabricius-Hansen (eds.) Information Structure in a Cross-Linguistic Perspective. Amsterdam/New York: Rodopi. pp. 147-161.
- Munakata, Takashi 2006. Japanese topic-constructions in the minimalist view of the syntax semantics interface. In Cedric Boeckx (ed.) Minimalist Essays. John Benjamin: Amsterdam, 115-159.
- 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. & Tanya Reinhart 1998. Scrambling and the PF interface. In M. Butt and W. Gueder (eds.) The Projection of Arguments. CSLI: Stanford. 309-353.
- Neeleman, Ad, and Elena Titov. 2009. Focus, contrast, and stress in Russian. LI 40:514-524.
- Neeleman, Ad, Elena Titov, Hans van de Koot and Reiko Vermeulen. To appear. A syntactic typology of topic, focus and contrast. In J. Van Craenenbroeck (ed.) Alternatives to Cartography. Berlin: Mouton de Gruyter.
- Oh, Chisung. 2007. Topic and Focus Constructions in Spoken Korean. PhD dissertation. University of Texas at Austin.
- Oshima, David Y. 2008. Morphological vs. phonological contrastive topic marking. In Proceedings of CLS 41. 371-384.

- Perlmutter, David. 1972. Evidence for shadow pronouns in French. In P. M. Perantueau, J. N. Levi & G. C. Phares (eds.), *The Chicago Which Hunt*. Chicago Linguistic Society: Chicago. 73-105.
- Reinhart, Tanya. 1981. Pragmatics and linguistics: An analysis of sentence topics. *Philosophica* 27: 53-94.
- Reinhart, Tanya. 1995. Interface Strategies. OTS.
- Reinhart, Tanya. 2005. Interface Strategies. Cambridge: MIT.
- Repp. S. 2009. Defining 'contrast' as an information-structural notion in grammar. Lingua.
- Rizzi, L. 1997. The fine structure of the left periphery. In Liliane Haegeman (ed.) *Elements of Grammar*. Dordrecht: Kluwer.
- Saito, Mamoru. 1985. Some Asymmetries in Japanese and their Theoretical Implications. PhD diss, MIT.
- Sakai, Hiromu. 1994. Complex NP constraint and case conversion in Japanese. In Nakamura, M. (Ed.), Current Topics in *English and Japanese: Proceedings of the Second English/Japanese Comparative Syntax Workshop*, Tohoku University, Sendai, Japan, 1994. Hituzi Syoboo, Tokyo. 179-203.
- Samek-Lodovici, Vieri 2005. Prosody-syntax interaction in the expression of focus. *Natural Language & Linguistic Theory* 23: 687–755.
- Samek-Lodovici, Vieri. 2008. Topic, focus and discourse anaphoricity in the Italian clause. Talk presented at Parallel Session on Information Structure, CIL 18, Seoul, Korea.
- Shimojo, M. & H.-W. Choi 2001. On asymmetry in topic marking: The case of Japanese WA and Korean Nun. In Boyle, J., J-H. Lee & A. Okrent (eds.) *Proceedings of CLS* 36. 454-467.
- Tomioka, Satoshi 2009. Contrastive topics operate on Speech Acts. In Zimmermann, Malte and Caroline Féry (eds.) *Information Structure: Theoretical, Typological, and Experimental Perspectives*. Oxford: Oxford University Press.
- Vallduví, Enric. 1992. The Informational Component. Garland, New York / London.
- Vallduví, Enric & Maria Vilkuna. 1998. On rheme and kontrast. On rheme and kontrast. In Peter W. Culicover and Louise McNally (eds) *Syntax and semantics* 29: *The limits of syntax*. San Diego: Academic Press. pp. 79-108.
- Vallduví Enric & Elisabet Engdahl. 1996. The linguistic realization of information packaging. *Linguistics* 34: 459-519.
- Vermeulen, Reiko. 2005. Possessive and adjunct multiple nominative constructions in Japanese. *Lingua* 115, 1329-1363.
- Vermeulen, Reiko. 2008. Topics in Japanese: A unified analysis of contrastive and non-contrastive topics in Japanese. Ms. University College London.
- Vermeulen, Reiko. 2009. Topic, contrast and contrastive topics in Japanese. Vermeulen, R. & R. Shibagaki (eds) *Proceedings to the Workshop on Formal Altaic Linguistics* 5. 361-372.
- Vermeulen, Reiko. To app. Non-topical wa-phrases in Japanese. In Folli, Rafaella and Christiane Ulbrich (ed.) *Interfaces in Linguistics: New Research Perspectives*. 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.
- Yoon, James. 2009. The Distribution of Subject Properties in Multiple Subject Constructions. Japanese /Korean Linguistics 16.