# The Distribution of Japanese FCIs and the Left Periphery\*

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This paper demonstrates the distribution of Japanese Free Choice Items and suggests a possible analysis of them in the syntax. It has been argued in the literature that free choice items have two kinds of readings: universal-like readings and existential-like readings. We observe contexts for the two readings and co-occurrences of modifiers or phrases which cannot be seen in other languages. In addition, we claim that among the modifiers, a concessive marker ii-kara is licensed by ForceP and propose two possible analyses of the position of free choice items with ii-kara. The argument on ii-kara makes it possible to investigate free choice items syntactically by adopting the cartographic approach which associates syntax with pragmatics.

Keywords: free choice items, Split CP hypothesis, illocutionary force, desirability

#### 1. Introduction

In the literature, there have been a lot of arguments on Free Choice Items (henceforth FCIs). The core issue has been to explore what environments license FCIs and what mechanism is responsible for their licensing. In order to solve the problems, authors investigate various languages such as English (Carlson (1981), Horn (2000, 2005)), Hindi (Lahiri (1998), Dayal (1998)), Serbo-Croatian (Saebø (2001)), Modern Greek (Giannakidou (2001)), and Chinese (Giannakidou and Cheng (2006)) and offer different proposals for their licensing conditions. For example, summarizing the distribution of FCIs, Giannakidou (2001) claims that non-veridicality and anti-episodicity are necessary for licensing them. Other studies on FCIs have also been made mainly in the fields of semantics and pragmatics.

As for Japanese, Kuroda (1965) points out that the indeterminate pronoun *wh-demo* is similar to English *wh-ever*, and Kratzer and Shimoyama (2002) explore parallels between German and Japanese FCIs in terms of their semantic characteristics. However, the precise distribution of Japanese FCIs has not been focused on in the literature, to the best of my knowledge. This may be because the goal so far has been to capture the general semantic/pragmatic property of FCIs and the Japanese indeterminate system has been treated almost uniformly in that they all contain *wh*-particles and quantificational particles (see Shimoyama (2008) for a list of Japanese indeterminates and a discussion). The present situation is undesirable because it must be confirmed whether the FCI-licensing contexts can be extended to Japanese and whether or not there are idiosyncratic phenomena in Japanese FCIs, so as to correctly describe and explain the general systems of FCIs and indeterminates.

Thus, we discuss in this paper the distribution of Japanese FCIs<sup>1</sup> by comparing them with FCIs in other languages. Japanese FCIs can be modified by quantifiers and the numeral *one* in combination with particular interpretations of FCIs, which is not observed in other languages. In addition, though most contexts license Japanese FCIs, there are some exceptions. One of the exceptions contradicts the anti-episodicity constraint formulated by Giannakidou (2001). The Japanese data therefore suggest the need to modify the generalization of FCI licensing and to investigate other languages further, though we do not attempt to organize a new universal

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<sup>\*</sup>A part of this paper was presented at the 147th meeting of the Linguistics Society of Japan. I am grateful to Akira Watanabe, Noriko Imanishi, Shun'ichiro Inada, Takane Ito, Tohru Noguchi, Terue Nakato, Christopher Tancredi, Ayaka Sugawara, Junya Nomura, Tomoe Arii, Mioko Miyama, Toshiyuki Yamada, Yuki Ishihara, and an anonymous reviewer for giving me helpful comments and suggestions. All remaining errors are, of course, my own.

<sup>&</sup>lt;sup>1</sup> In this paper, the term 'FCI' in Japanese is used for *wh-demo* indeterminates. There are various forms such as *dare-demo* 'whoever', *nan-demo* 'whatever' and so on, but we put aside the differences among them.

generalization or semantic formulation here.

Interestingly, the exceptions (except for one) seem to have semantic-pragmatic and syntactic properties in common; their desirability scale and special illocutionary forces. In order to account for the phenomenon, then, adopting the fine articulated CP domain hypothesized by Rizzi (1997), we propose that ForceP, which has imperative and interrogative features and is associated with desirability, licenses a modifier that licenses Japanese FCIs with a particular interpretation. This proposal makes it possible to investigate FCIs not only semantically and pragmatically but also syntactically. Recently the cartographic approach has contributed to connecting syntax with pragmatics and is one of the most successful frameworks. Since the use of FCIs is related to pragmatics, syntactic analyses by cartography must give us new findings on them.

This paper is organized as follows. Section 2 shows the distribution of Japanese FCIs and their modifiers. The modifiers function as direct or indirect diagnostics for two interpretations. Section 3 proposes that one modifier for existential-like interpretation of Japanese FCIs makes use of a special ForceP. The relationship is captured by syntactic phenomena and semantics. Section 4 concludes the discussion and points to further issues.

## 2. The Distribution of Japanese FCIs

In this section, we will represent examples of FCIs, and make clear the differences between Japanese and other languages.

## 2.1. Licensing Contexts and Two Interpretations of FCIs

Before turning to Japanese FCIs, we briefly review the nature of FCIs by observing their behavior in other languages. Generally speaking, FCIs denote freedom to choose an element from a relevant set or even in the world. They have two kinds of interpretations: universal-like readings and existential-like readings. But unlike true universal or existential quantifiers, FCIs cannot be used in all contexts freely. In the following, we confirm the licensing environments and corresponding interpretations on the basis of Giannakidou (2001) and Giannakidou and Cheng (2006), among others, though we do not discuss the semantics in detail since it is outside the scope of this paper.

FCIs can be licensed in the scope of ability modals, habituals, generics, future modals, stative verbs, and comparatives. Let us look at the examples below.

### Ability modals

(1) Opjosdhipote fititis bori na lisi afto provliima. to student can.3sg solve.3sg the problem subj this 'Any student can solve this problem.' (Modern Greek: Giannakidou (2001))

#### Habituals

(2) Sinithos dhiavaze opjodhipote vivlio me megali prosoxi. usually read.impf.3sg FC book with great attention 'S/he usually reads any book carefully.' (MG: Giannakidou (2001))

#### Generics

(3) Koii bhii ulluu cuuhoN-kaa Sikaar karta hai.
any owl mice hunt
'Any owl hunts mice.' (Hindi: Lahiri (1998))

#### **Future**

(4) Koii bhii aasmii is mez-ko uThaa legaa.

any man this table lift will

'Any man will lift this table.' (Hindi: Lahiri (1998))

### Stative verbs

(5) Any student respects the teacher.

## Comparatives

(6) I Ana trexi grigorotera opjondhipote stin taksi tis. apo FC-person Ann run.3sg faster than in-the class hers 'Ann runs faster than anybody in her class.' (MG: Giannakidou (2001))

In these cases, the FCIs are interpreted like universal quantifiers. For example, (1) is analogous to 'every student can solve the problem'. There is, however, a slight difference between FCIs and true universal quantifiers. The former, on the one hand, implies that there is no exception. As to (3), even a weak or sick owl hunts mice. The latter, on the other hand, does not have such an implication. See Kadmon and Landman (1993) for further discussion.

The quasi-universal FCIs can be modified by a word meaning *almost*. This is considered as a diagnostic for the universal interpretation because *almost* also modifies true universal quantifiers. The following examples are all constructed in English for convenience.

- (7) Almost every student can solve the problem.
- (8) Almost any student can solve the problem.
- (9) John usually reads almost any book carefully.
- (10) Almost any owl hunts mice.
- (11) Almost any man will lift this table.
- (12) Almost any student respects the teacher.
- (13) Ann runs faster than almost anybody in her class.

This modification appears to be rigid for a universal-like interpretation at the first sight but is somehow controversial. We will return to the problem in section 2.2.

Verbs of desire and imperatives also license FCIs but imply another interpretation.

#### Verbs of desire

(14) I want to read any book.

## Imperatives

(15) eet-eηgil-um s'iiTə eDukk-uu Which-if-conj card take-imp 'Pick any card.'

(Malayalam: Jayaseelan (2011))

The construal of (15), for example, is like 'Pick a card' or 'Pick some card', but not 'Pick every card'. In other words, the FCIs in those contexts can be replaced with existential quantifiers (and cannot be replaced with universal quantifiers). Thus, the interpretation is called 'existential-like'.

Unlike quasi-universal FCIs, the existential-like FCIs cannot be modified by almost.

(16) \*I want to read almost any book.

### (17) \*Pick almost any card.

This fact is considered as evidence to distinguish existential-like FCIs from universal-like ones, together with their intuitive interpretations.

In addition to the unambiguous sentences above, there are ambiguous contexts where both universal-like and existential-like readings arise. These include conditionals and some directive intensional verbs. Let us see their examples below.

#### Conditionals

- (18) a. If anyone lifts that stone, I'll be amazed.
  - b. If everyone lifts that stone, I'll be amazed.
  - c. If there is any person who lifts that stone, I'll be amazed.
- (19) An kimithis me opjondhipote, tha se skotoso.

'If you sleep with anyone, I'll kill you.'

(MG: Giannakidou (2001))

Directive intensional verbs (selecting subjunctive)

- (20) a. He insisted that I allow anyone in.
  - b. He insisted that I allow everyone in.
  - c. He insisted that I allow someone in.

(18a) has two meanings: (18b) and (18c). Such ambiguity is not allowed in (1)-(15). Though it is outside the scope of this paper to determine how the ambiguity is derived, the contexts play an important role for the argument of Japanese FCIs in section 2.3.

We have seen FCI-licensing environments so far, but there are anti-licensing ones as well. First, FCIs are infelicitous with necessity modals as opposed to ability modals.

### Necessity modals

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(21) ?*nii eetə puuw-um paRik'k'-aNam
you which flower-conj pick-must
'?*You must pick any flower.' (Malayalam: Jayaseelan (2011))
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Second, episodic contexts do not license FCIs.

### Episodic affirmatives

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(22) *Xthes to apojevma, idha opjondhipote ston kipo.

Yesterday the afternoon saw.perf lsg FC-person in-the Garden

('*Yesterday afternoon I saw anybody in the yard.')

(MG: Giannakidou (2001))
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### Episodic negatives

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(23) *I Roxani dhen idhe tidhipote.

The Roxanne not saw.3sg FC-thing

'Roxanne didn't see anything.'

(MG: Giannakidou (2001))
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### Episodic interrogatives

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(24) *Aghorases opjodhipote vivlio?
bought.2sg FC book
'Did you buy any book?'

(MG: (Giannakidou (2001))
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According to Giannakidou (2001), FCIs in Modern Greek, Spanish, and Catalan are ungrammatical in negative or interrogative sentences when they are episodic, but English *any* is not sensitive to the constraint. This is because *any* can also be used as a negative polarity item. Here we do not take into consideration the relation between negative polarity and free choice *any*, since such a discussion is not the goal of this paper (see Carlson (1981), Kadmon and Landman (1993), Horn (2000, 2005), among others). Turning to true FCIs, they are anti-licensed in those environments as Modern Greek shows. This is a prominent feature of them.

We have seen the (anti-)licensing contexts and the relevant readings of FCIs which have been revealed and generalized in the literature. Now it must be considered to what extent the observations apply to Japanese. In the next section, we will present Japanese data and differences between FCIs in Japanese and other languages.

### 2.2. Universal-like Readings and Modifiers in Japanese

Summarizing the above discussion, FCI licensing contexts for universal-like readings are ability modals, habituals, generics, future modals, stative verbs, and comparatives. Japanese FCIs are licensed in all of those contexts except for comparatives. Let us look at the following examples.

## Ability modals

(25) Sono mondai-wa dono-seito-demo tok-eru.
that problem-top FC-student solve-able
'Any student can solve the problem.'

#### Habituals

(26) Taro-wa taitei dono-hon-demo tyuuibukaku yomu.

Taro-top usually FC-book carefully read

'Taro usually reads any book carefully.'

### Generics

(27) Dono-fukurou-demo nezumi-o karu. FC-owl mouse hunt 'Any owl hunts mice.'

### **Future**

(28) Dono-otoko-demo kono tsukue-o motiageru-darou. FC-man this table-acc lift-will 'Any man will lift this table.'

#### Stative verbs

(29) Dono-seito-demo sono sensei-o sonkeisite-iru. FC-student that teacher-acc respect-pres 'Any student respects the teacher.'

## Comparatives<sup>2</sup>

<sup>2</sup> An anonymous reviewer points out that the following sentence is completely acceptable.

(i) Taro-wa (hokano) dono-kurasumeeto yori mo hayaku hasiru. Taro-top other which-classmate than mo fast run

'Taro runs faster than any other classmate.'

The reviewer considers *dono-mo* in this case to be an allomorph of an FCI. This view requires stipulation both that there are allomorphs of FCIs and that a particular allomorph is required in comparatives. But such stipulation for only one

(30) \*Taro-wa (hokano) dono-kurasumeeto-demo yori hayaku hasiru.

Taro-top other FC-classmate than fast run

'Taro runs faster than any other classmate.'

The data from (25) to (29) show a near complete parallel between Japanese, Hindi, Modern Greek, and English in terms of the universal-like readings and acceptability. There is a contrast in (30), however. Although the Modern Greek and English comparative examples observed in section 2.1 are acceptable, the Japanese counterpart is not acceptable at all. This is not predicted by any work on FCIs in the literature. For a complete cross-linguistic generalization, this fact should be taken into account. In this paper, though, the unacceptability of comparative sentences is not given any explanations since the goal of this paper is to present the distribution (and to suggest a syntactic relationship between Japanese FCIs and existential-like readings). We will leave this as an open question, which has no effect on the core of this paper.

Like many other languages, Japanese universal-like FCIs can be modified by *hotondo*, a word meaning *almost*.<sup>3</sup>

- (31) Sono mondai-wa hotondo dono-seito-demo tok-eru.
  that problem-top almost FC-student solve-able
  'Almost any student can solve the problem.'
- (32) Taro-wa taitei hotondo dono-hon-demo tyuuibukaku yomu.

  Taro-top usually almost FC-book carefully read

  'Taro usually reads almost any book carefully.'
- (33) Hotondo dono-hukurou-demo nezumi-o karu. almost FC-owl mouse-acc hunt 'Almost any owl hunts mice.'
- (34) Hotondo dono-otoko-demo kono tsukue-o motiageru-darou. almost FC-man this table-acc lift-will 'Almost any man will lift this table.'
- (35) Hotondo dono-seito-demo sono sensei-o sonkeisite-iru. almost FC-student that teacher-acc respect-pres 'Almost any student respects the teacher.'

Giannakidou (2001) notes that 'almost' modification does not guarantee universality, since in addition to universal quantifiers 'almost' in English and Modern Greek can also modify predicates and some cardinals (c.f. Partee (2004), Horn (2005)). Japanese *hotondo* 'almost', however, cannot modify predicates or cardinals. See the following examples.

context (i.e. comparatives) is undesirable.

Moreover, the reviewer takes -mo in comparatives to be a universal quantificational particle. However, Japanese has a dialect that allows -ka, which is normally recognized as an existential quantificational particle, to occur in comparatives with the same function as -mo.

This means that the property of -mo in this case should be discussed in connection with -ka. Thus we claim here that -mo cannot be considered as a universal quantificational particle and that wh-mo is essentially different from wh-demo.

<sup>(</sup>ii) Taro-wa (hokano) dono-kurasumeeto yori ka hayaku hasiru.

Taro-top other which-classmate than ka fast run

'Taro runs faster than any other classmate.'

<sup>&</sup>lt;sup>3</sup> *Hotondo* stands for 'most' as a nominal in some contexts. The detail must be researched for the precise discussion of *hotondo*, but I leave this for future study.

- (36) \*?Kare-wa hotondo baka-da. 3sg-top almost idiot-cop
  - 'He is almost an idiot.'
- (37) \*?Kare-niwa hotondo ni-hyaku-nin-no tomodati-ga iru.
  3sg-top almost two-hundred-CL-gen friend-nom exist
  'He has almost two hundred friends.'

We can observe that *hotondo* is not entirely parallel with *almost*. Instead, other words are used for predicate and cardinal modification: *douzen* and *hobo*. <sup>4</sup> *Douzen* is compatible with predicates (or events) and *hobo* with cardinals.

- (38) Kare-wa baka-douzen-da.

  3sg-top idiot-almost-cop
  'He is almost an idiot.'
- (39) Kare-niwa hobo ni-hyaku-nin-no tomodati-ga iru. 3sg-top almost two-hundred-CL-gen friend-nom exist 'He has almost two hundred friends.'

These facts suggest that English *almost* consists of some independent ingredients, such as event sensitivity or numerical sensitivity, for example. We will not investigate the details here, since an account for this fact is not a task of this paper. At least, however, we can conclude that the problems of *almost* modification in non-universal contexts cannot be maintained as evidence against the validity of the *almost* diagnosis on universality in Japanese.

Although *hotondo* combines with universal-like readings of FCIs, this is at best indirect evidence of the readings. Interestingly, however, Japanese seems to have a direct diagnostic of universal readings: co-occurrence of universal quantifiers.<sup>5</sup>

- (40) Sono mondai-wa dono-seito-demo mina tok-eru. that problem-top FC-student all solve-able
- (41) Taro-wa dono-hon-demo zenbu tyuuibukaku yomu. Taro-top FC-book all carefully read
- (42) Dono-hukurou-demo mina nezumi-o karu. FC-owl all mouse-acc hunt
- (43) Dono-otoko-demo mina kono tsukue-o motiageru-darou. FC-man all this table-acc lift-will
- (44) Dono-seito-demo mina sono sensei-o sonkeisite-iru. FC-student all that teacher-acc respect-pres

In these sentences, universal quantifiers, as it were, emphasize the readings of FCIs (though some find the examples above somehow redundant). This phenomenon supports the view that FCIs have a universal quantificational interpretation. We adopt this as a direct diagnosis to distinguish universal-like readings from existential-like readings described below.

We have seen the distribution of Japanese FCIs with universal readings. It was revealed that they cannot occur in the context of comparatives unlike FCIs in other languages. In addition, we suggested that English (and other languages') *almost* is not a single item, but a set of some modifiers. Moreover, we found that there is direct

<sup>4</sup> Japanese has various words almost equivalent to them: *daitai*, *ooyoso*, *douyou*, for instance. We do not take them into account here, however.

<sup>5</sup> There are various items in Japanese which function as universal quantifiers, but we do not take them into account here.

evidence for universal-like interpretation in Japanese FCIs. In this way, detailed data of modifiers added to nominal phrases in Japanese often give us some aspects that are invisible in other languages. In the next section, we will present another new aspect of FCIs which we cannot see in other languages.

### 2.3. Existential-like Readings and Modifiers in Japanese

Existential FCIs show interesting and surprising distribution. Unlike other FCIs, Japanese FC sentences are degraded if FCIs occur by themselves in verbs of desire and imperatives, whether they are FC-nominals or FC free relatives (in the term of Giannakidou and Cheng (2006)).

### Verbs of desire

(45) ?Donna-hon-demo yomi-tai. FC-book read-want 'I want to read any book.'

### **Imperatives**

(46) ??Dono-kaado-demo tori-nasai. FC-card take-imp 'Pick any card.'

English and Malayalam FCIs are completely acceptable but Japanese ones are not. In order to improve (45) and (46), we must add a concessive phrase, *ii-kara*. <sup>6,7</sup>

(47) Donna-hon-demo ii-kara yomi-tai. FC-book good-because read-want

'I want to read any book.'

(48) Dono-kaado-demo ii-kara tori-nasai. FC-card good-because take-imp

'Pick any card.'

Such a phenomenon as ii-kara modification is unique in Japanese existential FCIs, to my best knowledge.<sup>8</sup> This

This sentence means that the hearer must get in the habit of eating any food and try to overcome his or her dislike for particular foods. We conclude that this is a habitual sentence, so that it is properly licensed in spite of the absence of *ii-kara*.

Directive intensional verbs

(i) Watashi-wa donna-hon-demo ii-kara sagasi-teiru. 1sg-top FC-book good-because look.for-prog

'I'm looking for any book.'

(i) a. Nanika kasitekudasai. Something lend.me.please 'Please lend me something.'

b. \*Nanika ii-kara, kasitekudasai. Something good-because lend.me.please

<sup>&</sup>lt;sup>6</sup> There is a case where imperatives license FCIs without *ii-kara* and the FCIs have a universal reading.

<sup>(</sup>i) Nan-demo tabe-nasai anything eat-imp

<sup>&#</sup>x27;Eat anything.'

<sup>&</sup>lt;sup>7</sup> Carlson (1981) reports that the English example below appears strange at first sight but has an acceptable reading. While this may also be the case in Japanese, I put it aside here.

<sup>&</sup>lt;sup>8</sup> Though we adopt *ii-kara* as a diagnostic for quasi-existential interpretation, a reviewer points out that *ii-kara* cannot incorporate true existential quantifiers.

modification specific to Japanese is a key to investigate the distribution and the syntax of FCIs.

There are two additional pieces of direct evidence that FCIs have an existential-like interpretation. FCIs with *ii-kara* can be modified by existential indeterminate pronouns and the numeral *one*.

### **Existential Quantifiers**

(49)	Donna-hon-demo	ii-kara	nanika	yomi-tai.
	FC-book	good-because	something	read-want
(50)	Dono-kaado-demo	ii-kara	doreka	tori-nasai.
	FC-card	good-because	somethin	g take-imp

### Numeral one

(51)	Donna-hon-demo	ii-kara	is-satsu	yomi-tai.
	FC-book	good-because	1-CL	read-want
(52)	Dono-kaado-demo	ii-kara	ichi-mai	tori-nasai.
	FC-card	good-because	1-CL	take-imp

Given that universal quantifiers are taken as a direct diagnostic for universal interpretation, one can say that these modifications are also direct diagnostics for existential interpretation.

Crucially, *ii-kara* is not compatible with quasi-universal contexts, whereas *almost*, including *hotondo*, *hobo* and *douzen*, cannot appear in quasi-existential contexts.

### *Ii-kara* in universal contexts

(53) *Sono	mondai-wa	dono-seito-demo	o ii-	kara	tok-eru.	
that	problem-top	FC-student	go	ood-because	solve-able	
(54) *Taro-w	a taitei	dono-hon-demo	ii-k	ara	tyuuibukaku	yomu.
Taro-to	p usually	FC-book	goo	d-because	carefully	read
(55) *Dono-l	nukurou-demo	ii-kara	ne	ezumi-o	karu.	
FC-ow	1	good-because	m	ouse-acc	hunt	
(56) *Dono-o	otoko-demo	ii-kara	kono	tsukue-o	motiageru-da	rou.
FC-ma	n	good-because	this	table-acc	lift-will	
(57) *Dono-s	seito-demo	ii-kara	sono	sensei-o	sonkeisite-i	ru.
FC-stu	dent	good-because	that	teacher-acc	respect-pres	;

### Almost in existential contexts

- (58) a. ??{Hotondo/Hobo} donna-hon-demo yomi-tai. almost FC-book read-want
  - "I want to read almost any book."
  - b. \*Dono-hon-demo douzen yomi-tai.
- (59) a. \*{Hotondo/Hobo} dono-kaado-demo tori-nasai. almost FC-card take-imp
  - "Pick almost any card."
  - b. \*Dono-kaado-demo douzen tori-nasai.

Thus, almost and ii-kara show complementary distribution. In contrast to almost, ii-kara behaves as if it were a

Watanabe (2013) notes that *ii-kara* modifies *demo*, whether it is a scalar focus particle or a minimizer. Based on this, we assume that *ii-kara* is associated with the particle *demo*, not with existential quantificational interpretation or existential quantifiers. Thus the example (i) is not counted as a counter-example to the quantifier tests.

marker of existentiality. We propose, however, that *ii-kara* itself is not an existentiality marker but a scale introducer in existential (episodic) contexts. A precise account will be given in section 3.

How about other modifiers? Neither existential indeterminates nor numeral *one* can be associated with FCIs in universal contexts. In contrast, universal quantifiers can occur in existential contexts, although with no straightforward interpretations.

#### Existential indeterminates in universal contexts

(60)	*Sono	mondai-wa	dono-se	ito-demo	)	dareka	tok-eru	•
	that	problem-top	FC-stud	lent		someone	solve-a	ble
(61)	*Taro-w	a dono-hon	-demo	doreka		tyuuibukak	u y	yomu.
	Taro-to	p FC-book		somethi	ng	carefully	1	read
(62)	*Donna-	hukurou-demo	nani	ka		nezumi-o	karu.	
	FC-owl		some	ething		mouse-acc	hunt	
(63)	*Dono-o	otoko-demo	dareka		konc	tsukue-o	mot	iageru-darou.
	FC-mai	n	someone		this	table-acc	lift-	will
(64)	*Dono-s	eito-demo	dareka		sono	sensei-o	so	nkeisite-iru.
	FC-stuc	lent	someone		that	teacher-acc	res	spect-pres

### Numeral *one* in universal contexts<sup>9</sup>

(65)	*Sono	mondai-wa	dono	o-seito-demo		hito-ri	tol	k-eru.	
	that	problem-top	FC-s	student		1-CL	so	lve-able	
(66)	*Taro-wa	a taitei		dono-hon-de	mo	is-sa	tsu	tyuuibukaku	yomu.
	Taro-to <sub>j</sub>	p usually	7	FC-book		1-CI		carefully	read
(67)	*Donna-	hukurou-demo		ichi-wa	nez	umi-o	karu.		
	FC-owl			1-CL	mo	use-acc	hunt		
(68)	*Dono-o	toko-demo	hito-ri	kono	С	tsukue	e-o	motiageru-daro	u.

FC-man 1-CL this table-acc lift-will (69) \*Dono-seito-demo hito-ri sono sensei-o sonkeisite-iru.
FC-student 1-CL that teacher-acc respect-pres

### UOs in existential-like contexts

(70) Donna-hon-demo subete yomi-tai.
FC-book all read-want
(%existential)

(71) Dono-kaado-demo subete tori-nasai.
FC-card all take-imp
(\*existential)

On the one hand, sentences (60)-(69) are completely unacceptable. (70) and (71), on the other hand, are acceptable though the acceptability and interpretation varies among informants. For example, some informants allow the FCI in (70) to have a universal-like reading; that is, a speaker who utters (70) wants to read every book that is contextually present or even exists in the world. The same speakers feel that *subete* 'all' in (70) can also have a part-whole relation to *hon* 'book'; that is, given any book, one wants to read the book from cover to cover. In this interpretation, the FCI can be given existential interpretation because it can be modified by *ii-kara*.

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<sup>&</sup>lt;sup>9</sup> Numeral *one* can co-occur with FCIs if it is not associated with them.

<sup>(</sup>i) Dono-seito-demo hito-tsu-wa mondai-o tok-eru. FC-student 1-CL-top problem-acc solve-able 'Any student can solve at least one problem.'

(72) Donna-hon-demo ii-kara subete yomi-tai. FC-book good-because all read-want

As for (71), some speakers interpret *subete* as distributive. In this interpretation, 52 cards, for instance, are not presented at the same time. Instead, every card is given to the hearer individually and she is ordered to take each of the cards. In this case, the FCI seems to have a universal interpretation. These phenomena are not found in other languages. One could say that Japanese FCIs are potentially ambiguous in those contexts and are disambiguated by the modifiers.

We have seen the complementary distribution of universal and existential readings in Japanese FCIs, which involve *almost/UQs* and *ii-kara/EQs/one* modifications. Though there are some exceptional cases involving those modifiers, we basically recognize them as diagnostics for both sides of interpretation. In the next section, we will use the modifiers to diagnose interpretations in ambiguous contexts.

## 2.4. Ambiguous Contexts in Japanese

As mentioned in section 2.1, FCIs become ambiguous in the scope of conditionals and directive intentional verbs. This is also the case with Japanese.

### Conditionals

- (73) a. Dare-demo sono isi-o motiage-tara watashi-wa odorok-u. anyone that stone-acc lift-cond I-top surprised-impf 'If anyone lifts that stone, I'll be amazed.'
  - b. If everyone lifts that stone, I'll be amazed.
  - c. If there is any person who lifts that stone, I'll be amazed.

Directive intensional verbs (selecting subjunctive)

- (74) a. Kare-wa watashi-ni dare-demo ireru-you youkyu-sita.

  3sg-top 1sg-dat anyone allow.in-subj insist-past

  'He insisted that I allow anyone in.'
  - b. He insisted that I allow everyone in.
  - c. He insisted that I allow someone in.

In these contexts, some speakers prefer universal-like readings to existential-like ones. However, when we add *almost* and UQs or *ii-kara*, EQs, and numeral *one* to FCIs in these contexts, the FCIs become unambiguous. The former ones make FCIs quasi-universal, and the latter ones make them existential-like.

- (75) a. Hotondo dare-demo sono isi-o motiage-tara watashi-wa almost anyone that stone-acc motiage-cond I-top odorok-u.

  surprised-impf
  - 'If almost anyone lifts that stone, I'll be amazed.'
  - b. Dare-demo ii-kara sono isi-o motiage-tara watashi-wa anyone good-because that stone-acc motiage-cond I-top odorok-u. surprised-impf
    - 'If anyone, whoever he is, lifts that stone, I'll be amazed.'

- c. Dare-demo mina sono isi-o motiage-tara watashi-wa anyone all that stone-acc lift-cond I-top odorok-u.
  surprised-impf
  - 'If everyone, whoever he is, lifts that stone, I'll be amazed.'
- d. Dare-demo ii-kara dareka sono isi-o motiage-tara anyone good-because someone that stone-acc lift-cond watashi-wa odorok-u.

  I-top surprised-impf
  - 'If someone, whoever he is, lifts that stone, I'll be amazed.'
- Dare-demo hito-ri isi-o ii-kara sono motiage-tara anvone good-because 1-CL that stone-acc lift-cond watashi-wa odorok-u. surprised-impf I-top 'If one person, whoever he is, lifts that stone, I'll be amazed.'
- (76) a. Kare-wa watashi-ni hotondo dare-demo ireru-you youkyu-sita.

  3sg-top 1sg-dat almost anyone allow-in-subj insist-past

  'He insisted that I allow almost anyone in.'
  - Kare-wa watashi-ni dare-demo ii-kara ireru-you youkyu-sita.
     3sg-top 1sg-dat anyone good-because allow-in-subj insist-past
     'He insisted that I allow anyone in, whoever he is.'
  - c. Kare-wa watashi-ni dare-demo minna ireru-you youkyu-sita.

    3sg-top 1sg-dat anyone all allow-in-subj insist-past

    'He insisted that I allow everyone in, whoever he is.'
  - d. Kare-wa watashi-ni dare-demo ii-kara dareka ireru-you youkyu-sita.
     3sg-top 1sg-dat anyone good-because someone allow-in-subj insist-past
     'He insisted that I allow someone in, whoever he is.'
  - e. Kare-wa watashi-ni dare-demo ii-kara hito-ri ireru-you youkyu-sita. 3sg-top 1sg-dat anyone good-because 1-CL allow-in-subj insist-past 'He insisted that I allow one person in, whoever he is.'

What is important is that FCIs in conditionals and some directive intensional verbs can be modified by all the modifiers introduced above. This is apparently different from universal-only contexts (e.g. ability modals, habitual, etc.), but rather similar to existential contexts (e.g. imperatives, verbs of desire) in that they allow co-occurrence of those modifiers. Again, the contexts of imperatives and verbs of desire can be considered as ambiguous contexts, although their interpretations are less straightforward than those in *true* ambiguous contexts. In particular, the imperative context has been recognized as either existential or lacking universal interpretation in the literature (Carlson (1981), Giannakidou (2001), Horn (2005), among others). But the observations here open up one possibility to reanalyze such contexts. Though we do not investigate it any further in this paper, at least we can say that modifications by *hotondo*, universal quantifiers, *ii-kara*, existential quantifiers, and numeral *one* make it possible for us to observe the (un)ambiguity of FCIs explicitly.

So far, we have seen various Japanese FC-contexts, where there are three interesting phenomena. The first is that Japanese FCIs cannot be licensed in comparatives at all unlike other languages. The second is that, in order to be acceptable, Japanese existential FCIs must be modified by *ii-kara*, which shows complementary distribution with *hotondo* in terms of the readings it allows. The third is that there are additional direct diagnostics for the two readings. The summary is given in the Table 1 below.

Table 1

	Universal	Hotondo	UQ	Existential	Ii-kara	EQ	Numeral
	readings	modification	modification	readings	modification	modification	one
Ability	OK	OK	OK	*	*	*	*
Habituals	OK	OK	OK	*	*	*	*
Generics	OK	OK	OK	*	*	*	*
Future	OK	OK	OK	*	*	*	*
Stative verbs	OK	OK	OK	*	*	*	*
Comparatives	*	*	*	*	*	*	*
Verbs of	*	*	OK	?	OK	OK	OK
desire							
Imperatives	*	*	OK	??	OK	OK	OK
Conditionals	OK	OK	OK	OK	OK	OK	OK
Directive	OK	OK	OK	OK	OK	OK	OK
intensional							
verbs							

### 3. Syntax of Ii-kara

Again, those phenomena observed above have not been observed in the literature. Especially, the finding of *ii-kara* modification in Japanese is important since such modification cannot be seen in other languages and it improves FCIs in some contexts where they are not licensed in other languages. The contexts have semantic/pragmatic and syntactic properties in common. In this section, we argue that the *ii-kara* modification suggests the possibility that *ii-kara* has to do with the left periphery in that a special illocutionary force licenses FCIs with *ii-kara*.

## 3.1. Ii-kara and the Left Periphery

Recall the fact shown in section 2.1 that FCIs are not licensed in veridical and episodic contexts. This is also the case with Japanese basically, but there is one exception to this constraint. As is presented below, Japanese FCIs can be used in episodic interrogatives if *ii-kara* modifies them.<sup>10</sup>

### Episodic affirmatives

(77) \*Watashi-wa kinou dono-hon-demo yon-da.

1 sg-top yesterday FC-book read-past

'\*I read any book yesterday.'

# Episodic negatives

(78) \*Watashi-wa kinou dono-hon-demo yoma-nak-katta.

1sg-top yesterday FC-book read-neg-past
'I didn't read any books yesterday.'

<sup>&</sup>lt;sup>10</sup> This judgment seems to vary among speakers. However, not a few informants, including the author, find the example to be well-formed.

Episodic interrogatives

(79) Kinou dono-shinbun-demo \*(ii-kara) yon-da no? yesterday FC-book good-because read-past C 'Did you read any newspaper yesterday?'

In this way, *ii-kara* explicitly sanctions FCIs in episodic interrogatives. No such phenomenon has been observed in any other languages in the literature (cf. section 2.1).

Crucially, *ii-kara* cannot occur in declarative sentences but can occur in interrogative sentences productively.

(80)	*Watashi-wa	kino	ou	dono-hon	ı-demo	ii-kara	yon-da.		
	1sg-top	yest	erday	FC-book		good-because	read-past		
(81)	*Watashi-wa	kinc	u	dono-hon	-demo	ii-kara	yoma-nak-katt	a.	
	1sg-top	yest	erday	FC-book		good-because	read-neg-past		
(82)	Dono-otoko-der	no	ii-kara		kono	tsukue-o	motiageru-darou	ı ka?	
	FC-man		good-be	ecause	this	table-acc	lift-will	Q	(Cf. (56))
(83)	Dono-seito-dem	Ю	ii-kara		sono	sensei-o	sonkeisite-iru	no?	
	FC-student		good-be	ecause	that	teacher-acc	respect-pres	Q	(Cf. (57))

From these facts, episodicity or quasi-universal/existential contexts seem to be irrelevant for *ii-kara* modification. The only apparent difference here is occurrence of Q(uestion)-particles. How can we explain this?

Recall that *ii-kara* is compatible with imperatives as well. The difference between declaratives and imperatives/interrogatives is illocutionary force. Thus, adopting Rizzi's (1997) proposal on the CP domain, we hypothesize that *ii-kara* is licensed if there is a marked Force head: that is, imperative force or interrogative force.<sup>11</sup>

This assumption seems to be compatible with Butler' (2003) analysis of the structure of modal auxiliary verbs. He proposes that a Split CP system is embedded above vP and that modals can be mapped into each head on the basis of scope relations between modals and negation. The relevant data and the proposed structure are presented below.

(84) The children mustn't do that in here

Scope: subject > root necessity > negation

(85) The children can't do that in here

Scope: subject > negation > root possibility.

(86) 
$$\begin{bmatrix} \text{TP} & \text{T}^0 & \begin{bmatrix} \text{ForceP} & \text{Force}^0 & \begin{bmatrix} \text{FocP} & \text{Foc}^0 & \begin{bmatrix} \text{FinP} & \text{Fin}^0 & \text{vP} \end{bmatrix} \end{bmatrix} \end{bmatrix}$$
  $\begin{bmatrix} \text{nec} \end{bmatrix}$   $\begin{bmatrix} \text{neg} \end{bmatrix}$   $\begin{bmatrix} \text{poss} \end{bmatrix}$ 

In this analysis, necessity lies in the Force head, negation in the Foc head, and possibility in Fin head (see Butler (2003) for a precise discussion). If this is the case, it is predicted that *ii-kara* can be used in the context of necessity modals but not in the context of only negation or possibility. This prediction appears correct from the examples below.

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According to Kuwabara (2013), *ka* is the head of ForceP and *no* is the head of FinP. In addition, he argues that a covert Force head merges above *no*. Thus, interrogative ForceP exists in both (82) and (83).

### Necessity modals

(87) Natsuyasumi-tyuuni seito-wa sono-naka-no dono-hon-demo ii-kara summer.vacation-during student-top it-in-gen FC-book good-because yoma-nakerebanaranai read-must

'\*The students must read any of those books during the summer vacation.'

## Negation

(88(=81)) \*Watashi-wa kinou dono-hon-demo ii-kara yoma-nak-katta. 1sg-top yesterday FC-book good-because read-neg-past

Possibility modals

(89(=53)) \*Sono mondai-wa dono-seito-demo ii-kara tok-eru. that problem-top FC-student good-because solve-able

Thus, only a necessity context as in (87) licenses *ii-kara* and the sentence becomes grammatical. This is remarkable because FCIs are unacceptable in such a context in other languages as noted in section 2.1. Of course, even in a possibility context like (89), for example, *ii-kara* can occur if the sentence becomes interrogative.

(90) Sono mondai-wa dono-seito-demo ii-kara tok-eru no? that problem-top FC-student good-because solve-able Q

From these facts, it is plausible to maintain that special Force heads play a role in licensing *ii-kara*.

This suggestion is supported by the semantics of *ii-kara*. Watanabe (2013) claims that *ii-kara* comes with a desirability scale. Desirability is apparently related with the attitude of speakers. ForceP is one form which is associated with illocutionary force, that is, speakers' attitude in the utterance. Thus it is well-motivated to assume that *ii-kara* has a close relation with ForceP in terms of desirability.

However, we immediately face a question of why sentences with an unmarked ForceP, that is, declaratives, do not license *ii-kara*. One possible answer is that declaratives involve no scale for *ii-kara* to replace with a desirability scale. In Watanabe (2013: 210, 211), he proposes that "imperatives impose the same desirability ordering on possible world [as verbs of desire do]" and that "desirability implicature induced by *ii-kara* is parasitic on the ordering already found in imperatives and complements to verbs of desire". But episodic declaratives seem to have no such ordering because they assert just one event in the actual world. Thus *ii-kara* is incompatible with declarative Force. In contrast, it is not implausible to assume that interrogatives have some implicature which can be replaced by the desirability scale of *ii-kara*. Israel (2011: 69) suggests that "the act of posing a question is itself enough to express a scale-reversing doubt". This doubt is often changed into desirability in actual communications. For instance, when you say "Will I win the lot?", you wish, or desire, it will be the case. Given this, I claim that the doubt scale made by an illocutionary act can be replaced with the desirability scale by *ii-kara* with imperatives and verbs of desire. Thus, ForceP correctly licenses *ii-kara* in imperatives and interrogatives and anti-licenses it in declaratives.

If this is on the right track, it must be explained how ForceP licenses *ii-kara*. Here we hypothesize that *ii-kara* phrases are located in the specifier of ForceP and are licensed through a Spec-Head relation. Look at the next example.

(91) ??Dare-demo ii-kara douyatte sono-mondai-o toi-ta no? FC-person good-because how that-problem-acc answer-past Q 'Lit. How did anyone solve the problem?'

Kuwabara (2013) argues that *wh*-features are checked by the Force head. Adopting this analysis and assuming that Japanese does not allow multiple-Specs, we attribute the degradedness of (91) to the impossibility of licensing more than one element in the same projection. In (91), the *ii-kara* phrase must be licensed in the specifier of ForceP by desirability but the *wh*-feature of *douyatte* 'how' must be checked there at the same time. In order to compute the sentence, multiple-Spec positions are needed, a need that is incompatible with the ordinary Japanese syntactic system. Thus (91) is degraded, though not completely unacceptable.

## 3.2. Problems with Location of Ii-kara: Movement vs. Base-Generation

Given the licensing mechanism, one might wonder where the entire phrase is originally located. We briefly suggest two possibilities; one is that the *ii-kara* phrase moves from an argument position to Spec, ForceP and the other is that the phrase is base-generated in Spec, ForceP. Of course it is possible that the landing site is not in the domain of ForceP, but we take only these into consideration here.

In addition to the modifiers or phrases seen in section 2, Japanese FCI with *ii-kara* occurs with demonstratives.

- (92) Donna-hon-demo ii-kara sore-o yomi-tai.
  FC-book good-because it-acc read-want 'I want to read any book.'
- (93) Dono-kaado-demo ii-kara sore-o tori-nasai. FC-card good-because it-acc take-imp 'Pick any card.'

The demonstrative *sore* 'it' here looks like a resumptive pronoun. This may be the reason why the judgment of (92) and (93) is not straightforward. If this were resumption, the FCI would be base-generated at the complement of the verbs (*yomi*- and *tori*-) and moved to the left periphery. In a movement analysis of resumption, the resumptive pronoun represents the D head of the moved DP (McCloskey (2006)). This might appear compatible with the Japanese FCIs above; *sore* would be a realization of stranded D.

This analysis, though, is problematic. As noted above, Japanese FCIs can occur with existential indeterminate pronouns. It is unclear whether the indeterminates are also resumptive elements.

(94)	Donna-hon-demo	ii-kara	nanika	yomi-tai.
	FC-book	good-because	something	read-want
(95)	Dono-kaado-demo	ii-kara	doreka	tori-nasai.
	FC-card	good-because	something	take-imp

If they are not resumptive, we cannot explain why two DPs (FCI and EQ) are interpreted as an object of the same verb.

The other possibility is base-generation. In this case, an *ii-kara* phrase is base-generated in Spec, ForceP due to desirability. A good point of this analysis is that both demonstratives and indeterminates can be the object of the same verb without any problems. This explanation requires that those elements be freely deleted phonologically at PF. This sounds unproblematic since Japanese allows *pro-*drop in argument position. This approach also faces a similar problem, however. It is not easy to explain how FCIs with *ii-kara* and existential quantifiers are associated with each other. In order to resolve this problem, it is required to stipulate a mechanism to connect the two elements.

We have seen two possibilities for the location of *ii-kara*. To determine which approach is correct or to find another well-founded explanation, one must carefully investigate relevant data including resumption and island effects in Japanese and other languages. We leave this open for future study.

### 4. Conclusion

In this article, we have investigated the distribution of Japanese FCIs and raised the possibility that FCIs are licensed by special Force heads involving a desirability scale. The distribution is almost analogous to that of other languages, but there are a few crucial differences. There are a lot of modifiers or phrases which co-occur with FCIs and function as indirect or direct diagnostics of the two interpretations. One problem left is the unacceptability in comparatives. Unlike other languages, Japanese does not allow FCIs to occur in comparatives at all. The key may exist in the internal syntax of FCIs (cf. Hiraiwa (2013)) and the property of *yori* 'than'. This question remains open.

Among the modifiers, *ii-kara* is especially important since it gives rise to the possibility to explore FCIs syntactically. Based on Rizzi's (1997) proposal for the CP domain, we suggested that FCIs are associated with ForceP by means of *ii-kara* and its desirability scale. This is supported by Butler's (2003) analysis of modals and acceptability of FCIs with *ii-kara* in imperatives and episodic interrogatives. Crucially, the possibility has not been suggested in the literature because other languages have no such phenomenon.

This proposal for the relationship between FCIs and the left periphery has at least two implications (but problems at the same time). First, one can say that verbs of desire and directive intensional verbs have a special Force head in their complement. Both verbs have a flavor of imperatives in that they make universal quantification for all possible worlds and the speaker hopes the proposition(s) come true. This could be extended to conditionals for some reasons (but see Haegeman (2003, 2006) for discussion of Force in adverbial clauses including conditionals). In order to prove this, one must investigate their semantics and syntactic phenomena precisely. Second, it is implied that declarative Force is to some extent distinguishable from imperative and interrogative Force in terms not only of their semantics/pragmatics but also of their syntax. In the recent cartographic approach, it has been attempted to connect pragmatics with syntax. It is well-known that FCIs are sensitive to pragmatics and therefore they have been the main focus in that field, but their syntax has received less attention than that of other indeterminate pronouns like universal quantifiers or existential quantifiers. Based on the cartography, however, our argument raises the possibility of associating FCIs with syntax. Ultimately, all the indeterminates can be explained by the interaction of semantics or pragmatics with syntax. We hope this paper opens up the door to such an explanation.

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