Free choice and Focus: FCIs in Hungarian

Tamás Halm

This paper examines free-choice items (FCIs) in Hungarian and puts forward the main claim that these items have the capacity to display both universal and existential quantification, depending on their syntactic position, especially their optional location in the Focus position. The semantics of focused FCIs will be derived from the existence and exhaustivity presuppositions standardly associated with the Focus position and the universal inference of the FCI (due to the scalar presupposition). This result neatly corresponds to semantic accounts proposed for the *wb-ever* family of FCIs in English. This paper presents a useful contribution to the general debate on FCIs in many ways: 1) it presents a clear-cut case of the universal/existential reading of an FCI being constructed compositionally on the sentence level, and 2) shows that free relatives with an FCI flavour (*wh-ever* words) can either be encoded in the lexicon separately from general-purpose FCIs (e.g. English) or can be constructed compositionally (e.g. Hungarian).

Keywords: synax, semantics, free-choice items, focus

1 Introduction

This paper is concerned with free-choice items (FCIs) in Hungarian and especially their interaction with the identificational Focus position. It will be shown that while in general, FCIs in Hungarian act as universals, an existential reading can be elicited compositionally in the Focus position. This reading will be derived straightforwardly from the interaction of the semantics of the FCI *bárki* 'anyone' and the inferences of existence and exhaustivity standardly associated with the Focus position. It will further be shown that a focused FCI in Hungarian has a reading that corresponds to that of the free relative-like FCI wh-ever in English. This indicates that languages have two separate strategies for encoding the two main flavours of FCIs (i.e. *any* and *wh-ever*): a lexical strategy exemplified by English and a compositional one (e.g. in Hungarian).

This paper is organized as follows. In Section 2, the outlines of the main problem and its significance will be provided. Next, a short overview will be given on the behaviour of FCIs cross-linguistically and the main theoretical approaches and accounts (Section 3).In Section 4, we examine the morphology, semantics and syntax of FCIs in Hungarian. Section 5 contains our proposal for an account of the behaviour of FCIs in the Focus position and outlines the wider implications of this solution for the general theory of FCIs. As a conclusion, Section 6 summarizes the main findings of this paper, pointing out some open issues warranting further research.^{*}

^{*} I wish to thank Katalin É. Kiss, Balázs Surányi and an anonymous reviewer for their valuable comments and advice. All remaining errors are mine.

2 The problem: FCIs and Focus

FCIs and the focus position interact delicately in Hungarian:

(1)	(Ha) bárki		ön, üdvözöld	l őt.
	[_{AspP} bárki [_{AspP}	meg jõ	ön]]
	(if) anyone		omes, greet	him.
	'If anyone comes, g	reet him.'		
(2)	(*Ha) BÁRKI jön	m	reg, üdvözöld	őt.
	[_{FocP} bárki jön _i	[_{AspP} n	neg t _i]]
	(*if) anyone come	es P	PRT, greet	him.
	Whoever comes, gr	reet him.'	-	

The sentences below display the FCI *bárki* 'anyone' in a non-focused (1) and in a focused (2) position; the relative order of the (resultative) verbal particle and the verb being one of the standard diagnostics of the identificational focus construction in Hungarian. (Following tradition, the focused element is capitalized.)

The two sentences above raise some thorny questions (to be answered in the sections that follow):

- a) Independent evidence (see Section 4) shows that FCIs act as universals in Hungarian. Universals, however, are taken to be bad candidates for predicate nominals cross-linguistically (Giannakidou and Quer 1995, Puskás 1998, Surányi 2002) and thus non-focusable in Hungarian.
- b) Focus has a profound effect on information structure. How and why exactly do the two sentences above differ in meaning?
- c) What exactly licenses the FCI in the focused sentence? The environment is clearly not modal as the particle *ha* 'if' renders the sentence ungrammatical.

3 FCIs cross-linguistically: theoretical background

Intuitively, FCIs are elements that express free choice (Vendler 1967) and are further distinguished by their (non-)availability in a number of specific environments:

Affirmative episodic:

(3) *I invited anyone.

Possibility modal:

(4) I may invite anyone.

Generic:

(5) Any owl hunts mice.

Negation:

(6) I did not invite anyone.

One school of thought aimed to analyze FCIs as a class of polarity-sensitive items (Baker 1970), with Ladusaw (1979) distinguishing between two kinds of *any*: polarity-sensitive *any* (appearing in negative contexts) and free-choice *any* (appearing elsewhere). Kadmon-Landman (1993) proposed a uniform analysis of both kinds of *any* (see below).

FCIs have also been closely scrutinized in terms of their quantificational power. While some studies argued for *any* having a (quasi-)universal quantificational force (Reichenbach (1947), Quine (1960), Horn (1972, ch.3, 2000), Lasnik (1972), Kroch (1975) and Eisner (1995); others aimed to accomodate both a universal and an existential reading of *any* (Horn (1972, ch.2), Ladusaw (1979), Carlson (1981), Linebarger (1981) and Dayal (1998)):

The apparently variable quantificational force of indefinites and their special morphological composition in many languages have given rise to the analysis of FCIs as indefinites (Heim 1982, Partee 1986, Kadmon and Landman 1993, Lee and Horn 1994, Giannakidou 2001, Kratzer and Shimoyama 2001, Giannakidou and Quer 2012).

Other important factors considered relevant to the behaviour of FCIs include contextual vagueness (Dayal 1997), nonveridicality and nonepidosicity (Giannakidou 1997 and 2001), scalarity (Fauconnier 1975, Lee and Horn 1994, Rooth 1985, Hoeksema and Rullmann 2000, Krifka 1995, Lahiri 1998, Kadmon and Landman 1993) and widening (Kadmon-Landman 1993, Aloni 2002).

4 FCIs in Hungarian

4.1 Morphology

FCIs in Hungarian are morphologically complex, being made up of a lexical element with independent meaning and a wh-indefinite:

	<i>akár</i> - ('even') or <i>bár</i> - ('even though')
+	wh-indefinite -ki ('who'), -mi ('what'), -hol ('when')
=	akárki ('anyone'), akármi ('anything'), akárhol ('anywhere')

Figure 1

This is in fact a general pattern for quantifiers in Hungarians:

	- <mark>ki</mark> ('who')	- <mark>mi</mark> ('what')	- <mark>hol</mark> ('where')
akár- ('even')	akárki ('anyone')	akármi ('anything')	akárhol ('anywhere')
bár- ('even though')	bárki ('anyone')	bármi ('anything')	bár <mark>hol</mark> ('anywhere')
minden- ('every')	mindenki ('everyone')	minden mi ('everything')	mindenhol ('everywhere')
vala- (-)	valaki ('someone')	valami ('something')	valahol ('somewhere')

Figure 2

Similar patterns have been found in several languages such as Japanese and Lithuanian (Kratzer-Shimoyama (2002), Abrusán (2007)).

A peculiarity of Hungarian is that there are in fact two families of FCIs: the $ak\acute{a}r$ -('even') paradigm and the $b\acute{a}r$ - ('even though') paradigm. As far as their syntactic distribution and semantics are concerned, these two versions of FCIs ($b\acute{a}r$ - and $ak\acute{a}r$ -) are completely interchangeable. While Szabó (2012) does point out some frequency differences in certain constructions, we believe these are due to stylistic factors rather than grammaticality.

4.2 Licensing Environments

As far as licencing environments are concerned, FCIs are ungrammatical in plain episodic affirmative sentences:

(7) #Meg néztem bármit.
 PRT saw-1PSG anything
 'I had a look at anything.'

They are grammatical in possibility modal contexts:

(8) *Akárhova (el) utazhatsz.* Anywhere PRT travel-s2P-POSSIB 'You can/may travel anywhere.'

Unlike in many other languages (e.g. English), FCIs in Hungarian are ungrammatical in generic statements:

(9) *Bármelyik bagoly egerekre vadászik. any owl mice-onto hunts 'Any owl hunts mice. (Owls hunt mice.)'

As far as polarity-sensitive (PS-) *any* is concerned, the picture is somewhat complicated. FCIs are ungrammatical in straight negative episodic sentences:

(10) a. *Nem láttam bárkit. Not saw-1PSG anybody 'I did not see anybody.'
b. Nem láttam senkit. Not saw-1PSG nobody. 'I did not see anybody/I saw nobody.'

However, FCIs are grammatical in weakly non-veridical (Tóth 1999) constructions:

(11)	a.	Kevesen	mondtak	bármit	(is).		
		Few	said	anything	(too)		
		'Few peop	Few people said anything.'				
	b.	Ki halle	ott bármit	(is)?			
		Who hear	rd anything	(too)?			
		Who has	heard anything	ç?'			

c. Bánom, hogy bármit (is) el mondtam. Regret-1PSG that anything (too) PRT said-1PSG 'I regret that I said anything (at all).'

In sum, FCIs in Hungarian behave similarly to those in other languages in classical free choice environments, however, they are not licensed in generic constructions. As far as polarity-sensitivity is concerned, FCIs are not licensed in straight negative sentences but are grammatical in weakly non-veridical constructions. Their superficial absence under straight negation may be connected to Negative Concord, however, we will not pursue this topic any further in this paper.

4.3 FCIs in Hungarian: Semantics

Abrusán (2007) provided the first and so far only (semantic) analysis of FCIs in Hungarian, concentrating on the FCI *akárki* 'anyone'. In her account, the FCI *akárki* is composed of two elements:

	akár 'strong even':	even (with additive presupposition) +Exhaustive Operator
+	-ki:	wh-indefinite
=	akárki:	FCI

Figure 3

The meaning of $ak\acute{a}rki$ is thus compositional based on the meanings of its two elements. Abrusán (2007)'s strategy is to first derive the distribution of the particle $ak\acute{a}r$ and then claim that the distribution of the FCI $ak\acute{a}rki$ falls out automatically from this. The two meaning components of $ak\acute{a}r$ (additive presupposition and exhaustivity) are stipulated to clash unless $ak\acute{a}r$ is situated in a suitable environment (e.g. possibility modal) which defuses this inherent tension.

While Abrusán (2007)'s explanation is elegant and fits nicely with solutions proposed for other languages (Lahiri (1998), Kratzer-Shimoyama (2002), we believe that it has a number of significant shortcomings both in terms of empirical cover and theoretical grounding.

As far as empirical cover is concerned, it is important to point out that the *bár*-family of FCIs is completely ignored. We have seen that *bár*-FCIs have an identical meaning and distribution to *akár*-FCIs. If Abrusán (2007)'s theory holds, one would expect to be able to derive their properties compositionally, i.e. from the respective meanings of *bár*- and the wh-indefinite. However, *akár* (strong 'even') and *bár* ('even though') have different meanings and syntax in Hungarian:

(12)	a.	Akár a	diák	is	jelent	tkezhet.
		Even the	stude	ent too	regis	ster-3PSG-POSSIB
		'Even the stuc	lent m	ay registe	er.'	
	b.	Bár	a	diák.	is	jelentkezhet,
		Even though	the	student	too	register-3PSG-POSSIB
		ajánlás		is sz	rüksége	<i>s</i> .
		recommendat	ion	too n	ecessa	ry.
		'Even though	the stu	udent ma	y regi	ster, a recommendation is also
		necessary.'				

If we assume that the meaning of FCIs in Hungarians is constructed compositionally from the meanings of their elements, the difference in the meaning of *bár* and *akár* would necessarily lead to a difference in meaning (and distribution) for the FCIs *bárki* ('anyone') and *akárki* ('anyone'). In fact, however, these two sets of FCIs have identical meaning and syntactic distribution.¹

More generally, analyzing Hungarian FCIs in a compositional way is questionable. Their makeup of a lexical element and a *wh-indefinite* may simply be a fossilized relic of language history that is no longer transparent synchronically. Note that the existential *valaki* is made up of a wh-indefinite -ki 'who' and a bound morpheme 'vala' which has no synchronic existence or meaning.

Theoretically, to assume that a single lexical element (*akár* 'strong even') has a meaning that is contradictory in itself (unless inserted in the right environment) seems arbitrary and contrary to the notion of compositionality.

A key element of the account of Abrusán (2007) is that FCIs in Hungarian contain an Exhaustive Operator. However, in Hungarian, it is the identificational focus position that is standardly taken to be associated with exhaustivity (e.g. Horváth 2000). Therefore, if FCIs do indeed contain an Exhaustive Operator, one would expect them to be obligatorily focused, which is not the case.

While we are not going to present a full-fledged theory of FCIs in Hungarian here, concentrating instead on the interaction of FCIs and the Focus position, it should be noted that as far as the environments examined by Abrusán (2007) are concerned, the behaviour of FCIs in Hungarian can be predicted based on standard theories of FCIs (Kadmon-Landman 1993, Aloni 2002 etc.).

4.4 Syntax

So far, attention in the literature has been mainly focused on the semantics of FCIs in Hungarian. In this section, we present the results of tests to establish the quantificational force and syntactic position of FCIs in Hungarian.

Bár- ('any') patterns with universals in the standard test of modification by adverbials (Horn 1972)²:

(13) a. **szinte valaki* almost somebody 'almost somebody'

(i) *Jöjjön bár/akár a pápa ne engedd be!* Come-IMP.3SG even though/even the pope not let- IMP.2SG in 'Should even the pope come, do not let him in.'

Using this version of *bár*, *bárki* can be derived the same way as *akárki* following Abrusán (2007). I accept this does go a considerable way towards salvaging the account of Abrusán (2007), I nevertheless wish to point out that this use of *bár* is rather archaic, meaning that while this compositional account may be plausible from a diachronic point of view, it is not necessarily synchronically relevant. Which again leads us to the more general question whether these wh-indefinite-based quasi-quantifiers are synchronically transparent or just fossilized remnants of language history.

² It is to be noted, though, that the use of the *almost*-test as a means to gauge quantificational force is controversial (Penka 2006).

¹ An anonymous reviewer argues that there is a version of bár that is interchangeable with akár.

b. szinte mindenki almost everybody 'almost everbody'
c. szinte bárki almost anybody 'almost anybody'

Likewise, *bár*- ('any') patterns with universals in the test of modification by an exceptive phrase:

(14)	a.	*?Meg hívhatsz	valakit,	kivéve	Jánost. ³		
		PRT invite-2PSG-POSSIB	someone	except	John		
		*You can invite someone	except John	,			
	b.	Meg hívhatsz	mindenkit,	kivéve	Jánost.		
		PRT invite-2PSG-POSSIB	everyone	except	John		
		You can invite everyone e	xcept John.'				
	c.	Meg hívhatsz	bárkit, ki	véve Jár	nost.		
		PRT invite-2PSG-POSSIB	anyone ex	cept Jol	hn		
		'You can invite anyone except John.'					

As far as the syntactic position of FCIs vis-à-vis universal quantifiers, focus and negation is concerned, we are to show that the facts are mainly consistent with a quantifier position. The Hungarian sentence structure adopted here is based on É. Kiss (2010):

[TP [NegP [FocP [NegP [PredP/AspP [vP [VP ··]]]]]]

Figure 4

I adopt the analysis of Q-raising as adjunction, targeting PredP/AspP, FocP or NegP (É. Kiss 2010).

First, we examine the iteration and relative position of several FCIs. Just like universals or existential quantifiers⁴, one or several FCIs can appear both pre- and postverbally, with the appropriate scope readings:

- (15) a. Bárki bármit meg nézhet. Anyone anything PRT look-3PSG-POSSIB 'Anyone can have a look at anything.'
 - b. Bármit bárki megnézhet.
 - c. Bárki megnézhet bármit.
 - d. Bármit megnézhet bárki.
 - e. Megnézhet bármit bárki.
 - f. Megnézhet bárki bármit.

³ An anonymous reviewer finds (14a) acceptable. My very clear personal intuition is that this sentence is unacceptable, and this intuition is shared by several native speakers I consulted.

⁴ All sentences in (15-17) work the same way if we exchange the universal quantifier *mindenki* with the existential quantifier *valaki*.

The relative position of FCIs and universal quantifiers shows a similar picture:

(16)	a.	Mindenki	bármit	meg	nézhet.
		Everyone	anything	PRT	look-3 PSG-POSSIB
		'Everyone	can have a l	ook at a	anything.'

- b. Bármit mindenki megnézhet.
- c. Mindenki megnézhet bármit.
- d. Bármit megnézhet mindenki.
- e. Megnézhet bármit mindenki.
- f. Megnézhet mindenki bármit.

The relative position of FCIs and focused elements is also consistent with the hypothesis that FCIs occupy the position of quantifiers:

(17)	a.	A DLÁKOT	látogathatja	meg	bárki.
		the student-ACC	visit-3PSG-POSSIB	PRT	anyone
		'It is the student that			
	b.	Bárki A DLÁKOT lá	togathatja meg.		
	c.	*A DLÁKOT bárki la	ítogathatja meg.		
	0.				

(17) c. is ungrammatical because of an independently motivated phonological constraint (cf. Kenesei 1994:330). To conclude, the tests of modification by adverbials and modification by an exceptive phrase indicate that the FCIs have a universal quantificational force. The tests for the syntactic position of FCIs show that FCIs occupy a quantifier position.⁵

5 FCIs and Focus

Identificational focus is a much-examined phenomenon in Hungarian (Brody 1991, Szabolcsi 1981, É. Kiss 1998, Horváth 2004 among others). The focus position is generally described as a pre-verbal position targeted by the movement of the element to be focused, which also brings about the movement of the main verb (one indication of which is the change of the surface order of the verb and the verbal particle in sentences which contain a verbal particle in the first place). Semantically, the focus position expresses exhaustive identification:

(18)	a.	Péter	meg	érkezett.
			PRT	arrived
			s arrived.	
	b.	PÉTER	érkezett	meg.
		Peter	arrived	PRT
		'It is Pet	er who ha	as arrived.'

⁵ It should be noted that these results do not reveal whether FCIs in Hungarian are true universals or existentials with a universal inference.

The FCI bár- cannot be focused in simple sentences:

(19)	a.	Bármelyik	virágot	ki	választhatod.	
		Any	flower	PRT	choose-2PSG-PO	SSIB
		'You can cl	hoose any	y flowe	er.'	
	b.	*Bármelyik	virágot	válasz	zthatod	ki.
		Any	flower	choo	se-2PSG-POSSIB	PRT
		'It is any flower that you can choose.'				

This is in fact to be expected if we assume that FCIs in Hungarian are universals. Cross-linguistically, universals have been found to be bad candidates for predicate nominals (Giannakidou and Quer 1995, Puskás 1998, Surányi 2002) and thus predicted to be non-focusable in Hungarian.⁶

FCIs in Hungarian can, however, be focused in certain constructions:

(20)	(Ha)	bárki	meg	jön	ı,	üa	lvözöld	őt.
	[AspP	bárki	[_{AspP} meg	jöı	n]]
	(if)	anyone	PRT		mes	gr	eet	him.
	'If an	nyone coi	nes, greet l	him.'				
(21)	(*Ha) BÁRKI	jön		meg,		üdvözöld	őt.
	FocP	bárki	jön _i	[AspP	meg	t _i]]
	(*if)	anyone		1	PRT		greet	him.
	Who	ever com	nes, greet h	im.'				

While (20) is a straightforward case of modal licensing in the antecendent of a conditional, (21) is more intriguing and raises a number of questions:

- What licenses the FCI in this clearly non-modal environment?
- If *bár* is universal, how is it possible to focus it?
- How exactly does the combination of focus and an FCI elicit a free relative reading (cf. *wh-ever* in English)?

As a first step, we examine the subtle but very significant differences in meaning between the two sentences. The sentence with Focus (21) seems to presuppose that:

- Someone will come (whereas the focusless sentence only entertains the possibility of somebody coming).
- There is exactly one event of 'coming' being referred to; however, the exact identity of the person (or set of persons) satisfying this 'coming' event is unclear/irrelevant.

This is even more visible if we consider a paraphrase of (21):

⁶ Surányi (2006a,b) deals with a somewhat similar situation: the availability of N-words (variously universals or indefinites based on their syntactic position) in the Focus position.

(22) Bárki is legyen az, aki megjön, üdvözöld őt!'No matter who will be the person that comes, greet him.'

Formally:

(23) BÁRKI jön meg, üdvözöld őt.
'Whoever comes, greet him.' Paraphrase:
'No matter who will be the person that comes, greet him when he comes.' Existential presupposition:
'There will be someone that comes.=The event of coming will materialize' Exhaustivity inference:
'There is exactly one event of 'coming' being referred to, with the identity of the 'comer' being unclear/irrelevant.'⁷

These facts show that focused FCIs in Hungarian have an existential and exhaustive interpretation. This corresponds neatly to the two presuppositions generally associated with the focus position: existence and exhaustivity.

An interesting question is how the movement of the FCI into Focus position brings about a reading akin to the free relative *wh-ever* in English. Consider another paraphrase:

(24) BARKI jön meg, üdvözöld őt.

'Whoever comes, greet him.'

Paraphrase: 'There are several possible courses of events, but what is certain is that a 'coming' event shall take place, and that it is the person or sets of persons satisfying this event that I want you to great.'

The interaction of the FCI and the exhaustivity-inducing focus can be mapped as follows. The FCI itself introduces a universal inference because of the scalar presupposition (e.g. Kadmon-Landman 1993, Rullmann 2000, Abrusán 2007): the proposition is true of the least likely candidate and of all the likelier candidates. To be more precise, let S denote the set of the least likely candidate and all the likelier candidates, and S' the set which contains all the possible subsets of S. Then, in each accessible possible world, the proposition is true for a subset of S', and in at least one possible world, this subset of S' contains at least one set that contains the least likely candidate.

(ii) Bárki jön be, üdvözöld őt.
 whoever comes in greet him.
 Whoever enters, greet him.'

The editor points out that this exhortation surely refers to all the guests that may enter, not only the first one. I believe, however, that this is only a superficial problem. The instruction given by the manager refers to the generalized event of a guest coming (whoever that guest may exactly be). Therefore, what we have here is a single event being referred to.

⁷ The editor of this volume provided an apparent counterexample to this claim: A hotel manager tells a newly hired receptionist:

Because of the exhaustive operator of the focus, the proposition is only true for one element of S' in each possible world, that is, for one subset of S. That is, in each accessible possible world, one person (or set of persons) will satisfy the 'coming' event.

This corresponds nicely to current theories of *wh-ever* (Dayal 1997, von Fintel 2000):

(25) There is a lot of garlic in whatever Arlo is cooking.
Presupposes:
'there are at least two accessible possible worlds which differ in what Arlo is cooking.'
Asserts:
'in all accessible possible worlds, there is a lot of garlic in what Arlo is cooking'

It is interesting to note that there is another construction in Hungarian where a scalar element and Focus interact, namely, the case of focused cardinals:

(26)	a.	Meg ettem öt fánkot.
		PRT ate-1PSG five bagel
		'I ate five or more bagels.'
	b.	Öt fánkot ettem meg.
		five bagel ate-1PSG PRT
		'I ate exactly five bagels.' ('It was five bagels that I ate.')

While cardinals in neutral sentences refer to an interval with an open upper bound, the exhaustivity induced by the focus reduces this interval to one element, that is, its lower bound.

6 Conclusion

This paper was concerned with free choice items (FCIs) in Hungarian and especially their interaction with the identificational Focus position. It was shown that it is possible to derive the semantics of focused FCIs from the exhaustivity standardly associated with the focus position and the universal inference of the FCI (attributed to the scalar presupposition). Moreover, this result neatly corresponds to semantic accounts proposed for the wh-ever family of FCIs in English (Dayal 1997, von Fintel 2000).

These results present a useful contribution to the general debate on FCIs in many ways: 1) they present a clear-cut case of the universal/existential reading of an FCI being constructed compositionally on the sentence level, and 2) show that the free relatives with an FCI flavour (wh-ever words) can either be encoded in the lexicon separately from general-purpose FCIs (a strategy employed by English) or can be brought about compositionally, by using the focus construction and exploiting the presuppositions of existence and exhaustivity (maximality) associated with it. Also, 3) by showing that exhaustivity is in fact a differentiating factor between plain FCIs (e.g. *any*) and FCIs with a free relative reading (e.g. *wh-ever*), these results provide a challenge for recent accounts of FCIs based on exhaustivity (e.g. Giannakidou and Quer 2012).

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