The syntactic position and quantificational force of FCIs in Hungarian

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Abstract: The topic of my paper is the syntax and the quantificational force of free-choice items (FCIs) in Hungarian. FCIs such as *any* have been at the forefront of research interest in the past decades (e.g., Ladusaw 1979; Kadmon & Landman 1993; Giannakidou 2001). The close interdependence of syntactic, semantic and even pragmatic considerations makes the study of FCIs one of the most interesting research programmes. Earlier investigations of the syntax and semantics of FCIs in Hungarian include Hunyadi (1991; 2002), Abrusán (2007) and Szabó (2012). In my paper, I show that FCIs in Hungarian occupy the syntactic position associated with distributive quantifiers (É. Kiss 2010). Furthermore, I examine the quantificational force of FCIs by the well-known battery of quantification tests (for a previous application for Hungarian, cf. Surányi 2006): *almost*-modification, modification by exceptive phrase, donkey anaphora, predicative use, *is*-modification, incorporation and split reading with modals. My findings of mixed quantificational behaviour provide further corroboration for the analysis of FCIs as quantificationally underspecified intensional dependent indefinites.

Keywords: free-choice items; quantification; syntax-semantics interface; syntax; semantics

1. Introduction

This paper examines the syntactic position and the quantificational force of free-choice items such as *bárki* 'anyone' in Hungarian. FCIs such as *any* have been at the forefront of research interest in the past decades (e.g., Ladusaw 1979; Kadmon & Landman 1993; Giannakidou 2001). The close interdependence of syntactic, semantic and even pragmatic considerations makes the study of FCIs one of the most interesting research programmes. Earlier investigations of the syntax and semantics of FCIs in Hungarian include Hunyadi (1991; 2002), Abrusán (2007) and Szabó (2012).

In this paper, I first examine the canonical syntactic position of FCIs, which I identify with the help of syntactic tests as the position occupied by universal quantifiers (I assume É. Kiss's 2010 analysis of quantification as adjunction). This position is consistent with the universality implicature standardly associated with FCIs (e.g., Giannakidou 2001). I also provide a

detailed analysis of the possible scope relations between FCIs, negation, focus and universal quantification. After that, I examine the quantificational force of FCIs by the well-known battery of quantification tests (for a previous application for Hungarian, cf. Surányi 2006): almost-modification, modification by exceptive phrase, donkey anaphora, predicative use, is-modification, incorporation and split reading with modals. My findings of mixed quantificational behaviour provide further corroboration for the analysis of FCIs as quantificationally underspecified (dependent) indefinites. This paper is based on chapters 3.1 and 3.3 of my doctoral dissertation (Halm 2016).

2. 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 (the Greek examples are taken from Giannakidou 2001):

Affirmative episodic (Giannakidou 1997):

(1) *Idha opjondhipote saw.perf.1sg FC-person '*I saw anybody.'

Modal:

(2) Opjosdhipote fititis bori na lisi afto to provlima. FC student can SUBJ solve.3SG this the problem 'Any student can solve this problem.'

Generic:

(3) Opjadhipote ghata kinigai pondikia. FC cat hunt.3SG mice 'Any cat hunts mice.'

Negation:¹

(4) *Dhen idha opjondhipote not saw.PERF.1SG FC-person '*I saw anybody.'

Note that English any (which is licensed under negation) is properly analyzed as a NPI and has a fundamentally different semantics than bona fide FCIs.

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 and Landman (1993) proposed a uniform analysis of both kinds of *any*.

FCIs have also been closely scrutinized in terms of their quantificational power. While some studies argued for FCIs having a (quasi-)universal quantificational force (Reichenbach 1947; Quine 1960; Horn 1972, chapter 3; Lasnik 1972; Kroch 1975), others aimed to accommodate both a universal and an existential reading of any (Horn 1972, chapter 2; Ladusaw 1979; Carlson 1981; Linebarger 1981; Dayal 1997).

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 2004; Kadmon & Landman 1993; Lee & Horn 1995; Giannakidou 2001; Kratzer & Shimoyama 2002; Giannakidou & Quer 2013).

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

The two currently preeminent schools of the formal semantics of FCIs are (1) the so-called dependent indefinite analysis (Giannakidou 1997; 2001; Giannakidou & Quer 2013) and (2) the universal free choice analysis (involving propositional alternatives and Hamblin sets) (Kratzer & Shimoyama 2002; Aloni 2002; Menéndez-Benito 2010).

In my doctoral dissertation in general and in my analysis of quantificational force in particular, I adopted the dependent indefinite analysis and argued that this approach is more capable of explaining certain phenomena in Hungarian than rival approaches. A key characteristic of this approach is that the distribution of FCIs is derived from their lexical semantics. FC phrases are represented as intensional indefinites, which are grammatical only in contexts providing alternatives (worlds or situations). FCIs are thus licensed in non-veridical and non-episodic contexts (e.g., modals, generics), and ungrammatical in extensional veridical contexts (e.g., episodic sentences, negation, interrogatives). More formally, FC phrases are represented as:

```
(5) [[any student]] = student(x)(w) (or: student(x)(s))
```

The world/situation and individual variable(s) are to be bound by an appropriate Q-operator (i.e., generic, habitual, modal, intensional) in order for the FC phrase to be licensed. Under this analysis, the universality of FCIs is derived from their intensionality and exhaustive variation: the FCI variable is to be assigned a distinct value in each world or situation under consideration (Dayal's 1997 *i*-alternatives).

3. The morphology of FCIs in Hungarian

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

```
akár- 'even' or bár- 'even though'

+ wh-indefinite -ki 'who', -mi 'what', -hol 'when'

= akárki 'anyone', akármi 'anything', akárhol 'anywhere'
```

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

	- <u>ki</u> 'who'	- <u>mi</u> 'what'
akár- 'even'	akár <u>ki</u> 'anyone'	akár <u>mi</u> 'anything'
bár- 'even though'	bár <u>ki</u> 'anyone'	bár <u>mi</u> 'anything'
minden- 'every'	$minden\underline{ki}$ 'everyone'	$\underline{\min} \text{ `everything'}$
vala- (-)	$vala\underline{ki}$ 'someone'	$vala\underline{mi}$ 'something'

Similar patterns have been identified in several languages such as Japanese and Lithuanian (Kratzer & Shimoyama 2002; Abrusán 2007; Szabolcsi 2015).

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, I believe these are due to stylistic factors rather than grammaticality.

4. Licensing environments of FCIs in Hungarian

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

```
(6) #Ismerek bárkit.
know-1sg anyone
'I know anyone.'
```

They are grammatical in possibility modal contexts:

```
(7) Akárhova (el) utazhatsz.
anywhere PRT travel-s2P-POSS
'You can/may travel anywhere.'
```

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

```
(8) *Bármelyik bagoly egerekre vadászik.

any owl mice-onto hunts

'Owls hunt mice.'
```

FCIs are ungrammatical in straight negative episodic sentences:

```
(9) a. I did not see anybody. (PS-any in English.)
b. *Nem láttam bárkit.
not saw-1sG anybody.
'I did not see anybody.'
c. Nem láttam senkit.
not saw-1sG nobody.
'I did not see anybody/I saw nobody.'
```

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

```
(10) Kevesen mondtak bármit (is). few said anything too 'Few people said anything.'
```

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. Furthermore, FCIs are not licensed in straight negative sentences but are grammatical in weakly non-veridical constructions.

5. The grammar of FCIs in Hungarian: Earlier models

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:

```
ak\acute{a}r 'strong even': even (additive presupposition) + Exhaustive Operator + -ki 'who': wh-indefinite = ak\acute{a}rki 'whoever': FCI
```

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.

The first and so far only detailed syntactic analysis of FCIs in Hungarian is due to Hunyadi (1991; 2002). Hunyadi (2002) treats $b\acute{a}r$ - and akár- pronouns as free variants of each other, and analyzes them as universal quantifiers similar to minden-pronouns. Hunyadi (2002) pinpoints the main difference between bárki and mindenki in terms of their relationship with modality: bárki is obligatorily narrow-scope with regard to modality. Hunyadi (2002) motivates this by pointing out that the relative scope of modal operators in Hungarian is mostly unrecoverable, due to the fact that (1) relative operator scope is mainly coded in Hungarian through prosodic prominence and (2) modal operators are in general not individual lexemes but bound morphemes (suffixes of verbs) and thus lack an independent prosodic structure. Thus the only way for Hungarian to recoverably encode the distinction between the broad vs. narrow scope of a universal pronoun with regard to modal operators is to have two sets of universals, one of which is compulsorily narrow-scope, which Hunyadi derives from akárki having the feature [-specific]. Compare (sentences from Hunyadi 2002):

```
(11) a. Mindent meg vehetsz. everything-ACC PRT buy-POT-2SG i. 'Everything, you are allowed to buy' (For every x, you are allowed to buy x.) \forall > MOD ii. 'You are allowed to buy everything.' (It is allowed that for every x, you buy x.) MOD > \forall
```

- Akármit meg vehetsz.
 anything-ACC PRT buy-POT-2SG
 - i. 'You are allowed to buy anything.' (It is allowed that for every x you choose, you buy x.) MOD $> \forall$

In addition to this, Hunyadi assumes that $ak\acute{a}rki$ also differs from mindenki in having a complex semantic structure involving the conditional/modal operator CHOOSE encoding the element of choice with regard to FCIs.

A detailed critical analysis of these proposals is beyond the scope of this paper. For a detailed critical analysis, cf. chapters 2.2 and 2.3 of Halm (2016). For a historical perspective on FCIs in Old Hungarian, cf. Bende-Farkas (2015).

6. The syntactic position of FCIs

Our goal in this section is to explore the syntactic position of FCIs in Hungarian. Throughout the section, I assume the syntactic structure for the Hungarian sentence outlined in É. Kiss (2006):

(12) TodP NegP FocP NegP NNP PredP vP VP ...

PredP is the locus of complex predicate formation: the verb moves up to the Pred head, whereas the (mostly telicizing) secondary predicate lands in Spec,PredP. In sentences containing a NegP and/or a FocP, the verb is extracted from PredP into the head position of a so-called Non-Neutral Phrase (NNP). In a sentence containing a focus projection, negation can be inserted either above PredP and below FocP or above FocP. Q-raising is analyzed as adjunction (optionally left-adjunction or right-adjunction, targeting the functional projections PredP, FocP or NegP (É. Kiss 2010).

Since one of the main focuses of my investigation concerning FCIs will be their quantificational properties, it is important to also review the treatment of quantification in the Hungarian sentence. This section covers existentials, and the next section will review the treatment of universal quantifiers.

Following É. Kiss (2009), I assume that (in contrast to universal quantifiers, see below), existential pronouns such as valaki 'someone' are not quantifiers (which are obligatorily raised into scope positions) but rather Heimian indefinites. They can act as variables bound by existential closure (or an unselective quantifer), in which case they remain obligatorily in situ:

```
(13) Péter meg hívott valakit.

Peter PRT invite-PAST-3SG somebody-ACC

'Peter invited someone.'

[Topp Péter [PredP meg [Pred' hívott [vP Péter [V' hívott [VP valakit (variable) [V] hívott meg]]]]]]]
```

Alternatively, existentials can also be interpreted specifically, in which case they either remain in situ or can optionally be topicalized. (Thus, a topicalized existential is obligatorily interpreted as specific, whereas an in-situ existential can be interpreted as a variable or specifically.)

```
(14) Péter meg hívott valakit.

Peter PRT invite-PAST-3SG somebody[+specific]-ACC

'There is someone (a particular person) whom Peter invited.'

[TopP Péter [PredP meg [Pred' hívott [vP Péter [V' hívott [VP valakit (+specific) [V' hívott meg]]]]]]]
```

```
(15) Valakit meg hívott Péter.
somebody[+specific]-ACC PRT invite-PAST-3SG Peter

'There is someone (a particular person) whom Peter invited.'

[TopP valakit (+specific) [PredP meg [Pred' hívott [VP Péter [V' hívott meg]]]]]]]

[VP valakit (+specific) [V' hívott meg]]]]]]]
```

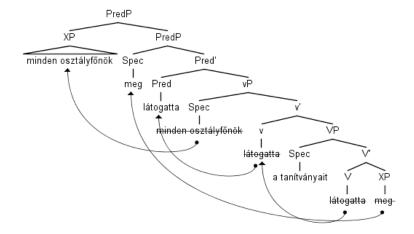
Following É. Kiss (2009; 2010), I analyze Q-raising as adjunction (optionally left-adjunction or right-adjunction), targeting the functional projections PredP, FocP or NegP (É. Kiss 2009; 2010). Scopal relations between quantifiers and and other scope-bearing elements such as Neg and Foc fall out naturally from the c-command relations between the relevant elements. As my analysis of the syntactic positions available for FCIs builds heavily on É. Kiss (2009, 2010) with some crucial modifications, it is essential to review this account here in detail.

QPs can be adjoined to the functional projections PredP, FocP or NegP. Both left and right-adjunction are possible, as is multiple adjunction to the same functional projection and several simultaneous instances of adjunction to the different functional projections in one sentence. Right-adjoined quantifiers undergo the effects of free linearization typical of the postverbal section of the Hungarian sentence, subject to Behaghel's Law of Growing Constituents influencing the relative naturalness of the grammatical word orders. In what follows, for each sentence, only the most natural-sounding version will be provided for the sake of brevity.

While the above rules are straightforward, the number of possible combinations coupled with the effect of post-verbal (quasi-)free linearization

means that even a concise overview of the relevant facts can be, indeed, be quite lengthy. However, since my account for the syntactic position of FCIs heavily builds upon the syntax of quantification, it is necessary to give a relatively detailed account.

QPs can be adjoined to PredP. First consider left-adjunction:



(16) Minden osztályfőnök meg látogatta a tanítványait. every form-master PRT visit-PAST-3SG the pupil-POSS-PL-ACC 'Every form-master visited his pupils.'

Right-adjunction to PredP results in two possible surface orders (linearizations) due to post-verbal free linearization, see below the more natural-sounding version (following the Law of Growing Constituents):

(17) Meg látogatta a tanítványait minden osztályfőnök.

PRT visit-PAST-3SG the pupil-POSS-PL-ACC every form-master

'Every form-master visited his students.'

[PredP [PredP meg [Pred] látogatta [vp...a tanítványait...]]] minden osztályfőnök]

In case of multiple universal quantifiers, the scope relations can be straightforwardly derived from the c-command relations:

(18) Minden osztályfőnök kétszer is meg hívta a tanítványait.

every form-master twice too PRT invited the pupil-POSS-PL-ACC

'Every form-master invited his pupils twice.'

(For every form-master, it is the case that he invited his pupils twice.)

[PredP minden osztályfőnök [PredP kétszer is [PredP meg [Pred' hívta [VP...a tanítványait...]]]]]

Here, minden osztályfőnök 'every form-master' c-commands kétszer is 'twice', and this is reflected in the fact minden osztályfőnök 'every form-master' scopes over kétszer is 'twice'.

Consider the opposite situation, where it is *kétszer is* 'twice' which c-commands *minden osztályfőnök* 'every form-master'. (19) is also an example where the QP is right-adjoined:

(19) Minden osztályfőnök meg hívta a tanítványait kétszer is.
every form-master PRT invited the pupil-POSS-PL-ACC twice too
'Twice, every form-master invited his pupils.'
(On two occasions, ever form- master invited his pupils.)
[PredP [PredP minden osztályfőnök [PredP meg [Pred/ hívta [VP...a tanítványait...]]]] kétszer is]

QPs can also be adjoined to functional projections such as FocP. Consider:

(20) Mindenki CSAK JÁNOST látogatta meg.
everyone only John-ACC visit-PAST-3SG PRT
'Everyone visited only John.'
(For everyone, it was only John that he visited.)
[FocP mindenki [FocP CSAK JÁNOST [NNP látogatta [PredP meg...]]]]

In case of right-adjunction, two possible surface orders emerge due to post-verbal free-linearization, with (21) being the less marked, more natural-sounding version:

(21) CSAK JÁNOST látogatta meg mindenki.
only John-ACC visit-PAST-3SG PRT everyone
'Everyone visited only John.'
(For everyone, it was only John that he visited.)

[FocP [FocP CSAK JÁNOST [NNP látogatta [PredP meg...]]] mindenki]

The relative scope order of the focus operator and a universal quantifier is defined by the c-command relations. In (20) and (21) above, the quantifier *mindenki* 'everyone' c-commands and thus scopes over the FocP *csak Jánost* 'only John'. Consider now (22) and (23) below, where the c-command (and scope) relations are reversed:

(22) CSAK JÁNOST látogatta meg mindenki.
only John-ACC visit-PAST-3SG PRT everyone
'It was only John that everyone visited.'

[Focp CSAK JÁNOST [NNP látogatta [PredP mindenki [PredP meg...]]]]

```
(23) CSAK JÁNOST látogatta meg mindenki.
only John-ACC visit-PAST-3SG PRT everyone
'It was only John that everyone visited.'

[FocP CSAK JÁNOST [NNP látogatta [PredP [PredP meg...] mindenki]]]
```

Note that while the surface word order of (21) and (22) is similar, there is a crucial difference in stress patterns: in (21), the quantifier *mindenki* 'everyone' is stressed, in (22), it is destressed. This is consistent with the general observation that the c-command domain of FocP is obligatorily destressed.

In negative sentences we attest negative concord (the quantificational force and negativity of n-words, specifically the interaction of universal and existential quantification and negation). The model presented below is based on É. Kiss (2009) (which incorporates elements of Surányi 2002; 2006).

First, we consider the case where universal quantification has scope over negation. In line with our general assumption of quantification as adjunction, the QP is adjoined to NegP. However, instead of the universal quantifier mindenki 'everybody', the QP position is occupied by the negative polarity universal quantifier (negative universal) senki 'nobody'. In É. Kiss (2009), Hungarian is analyzed as a strict negative concord language, where negation is carried by the negative particle nem 'not', and the negative polarity quantifier senki 'nobody' (which in itself does not convey negation) is licensed by the negative particle. Consider:

```
(24) Senki nem látogatta meg a gyerekeket.

nobody not visit-PAST-3SG PRT the child-PL-ACC

'Nobody visited the children.'

(For everbody, it was the case that they did not visit the children.)

[NegP senki mindenki [NegP nem [NNP látogatta [PredP meg...a gyerekeket...]]]]
```

Right-adjunction is also a possibility:

```
(25) Nem látogatta meg a gyerekeket 'senki.
not visit-PAST-3SG PRT the child-PL-ACC nobody
'Nobody visited the children.'
(For everbody, it was the case that they did not visit the children.)

[NegP [NegP nem [NNP látogatta [PredP meg...a gyerekeket...]]] senki mindenki]
```

When negation has scope over universal quantification, the QP is adjoined to PredP. In this case, negative concord is not triggered and the universal quantifier *mindenki* 'everybody' emerges:

- (26) Nem látogatta meg mindenki a gyerekeket.

 not visit-PAST-3SG PRT everybody the child-PL-ACC

 'It is not the case that everyone visited the children.'

 [NegP nem [NNP látogatta [PredP mindenki [PredP meg...a gyerekeket...]]]]
- (27) Nem látogatta meg a gyerekeket mindenki.

 'It is not the case that everyone visited the children.'

 [NegP nem [NNP látogatta [PredP [PredP meg...a gyerekeket...] mindenki]]]

Note that É. Kiss (2010) considers it as possible to adjoin a QP to the NNP as well. This enables us to account for sentences such as (28):

(28) Nem mindenki látogatta meg a gyerekeket.
not everybody visit-PAST-3SG PRT the child-PL-ACC
'Not everyone visited the children.'

[NegP nem [NNP mindenki [NNP látogatta [PredP meg...a gyerekeket...]]]]

Contra É. Kiss (2010), I argue that Q-adjunction to NNP (as depicted above) is not possible. Beside the fact that it was proposed earlier that nem mindenki be analyzed as a negated constituent (Bernardi & Szabolcsi 2008), note that the same sentence with an adverbial is clearly ungrammatical:

(29) *Nem kétszer is látogatta meg az osztályfőnök a gyerekeket.

not twice too visited PRT the form-master the child-PL-ACC

'It is not the case that twice, the form-master visited the children.'

Similarly, while I will show later on in detail that $b\acute{a}rki$ patterns with min-denki in all syntactic structures, (30) is clearly ungrammatical in contrast to (31):

- (30) *Nem bárki látogatta meg a gyerekeket. not anybody visit-PAST-3SG PRT the child-PL-ACC 'Not anyone visited the children.'
- (31) Nem mindenki látogatta meg a gyerekeket. not everybody visit-PAST-3SG PRT the child-PL-ACC 'Not everyone visited the children.'

This is another indication that Q-adjunction to NNP is not possible and nem mindenki is probably best analyzed as a single negative existential constituent. Note that it is probably more precise to say that nem_minden is a single constituent:

- (32) a. Nem_mindenki látogatta meg a gyerekeket.

 not_every_one visit-PAST-3SG PRT the child-PL-ACC

 'Not everyone visited the children.'
 - b. Nem_minden fiú látogatta meg a gyerekeket. not_every boy visit-PAST-3SG PRT the child-PL-ACC 'Not everyone visited the children.'

So far, I have overviewed the cases where a sentence contains a universal quantifier and either negation or focusing. Naturally, it is perfectly possible for a sentence to contain all three operators. In such cases, the scope relations of the operators can be clearly derived from the c-command relations. To keep the discussion concise, below, I review only the cases involving left-adjunction.

First, consider the situation where quantification scopes over negation, which in turn scopes over focusing:

```
    (33) Senki nem CSAK JÁNOST látogatta meg.
        nobody not only John-ACC visit-PAST-3SG PRT
        'Nobody visited only John.' (For everybody, it is not the case the he visited only John.)

    [NegP senki [NegP nem [FocP CSAK JÁNOST [NNP látogatta [PredP meg...]]]]]
```

Next, consider the situation where quantification scopes over focusing, which in turn scopes over negation:

```
(34) Mindenki CSAK JÁNOST nem látogatta meg.
everybody only John-ACC not visit-PAST-3SG PRT
'Everybody failed to visit only John.'
(For everbody, it was only John that he did not visit.)

[Foop mindenki [Foop CSAK JÁNOST [NegP nem [NNP látogatta [PredP meg ...]]]]]]
```

In the sentence below, negation scopes over focusing, which in turn scopes over quantification:

```
(35) Nem CSAK JÁNOST látogatta meg mindenki.
not only John-ACC visit-PAST-3SG PRT everyone
'It is not the case that is was only John that everyone visited.'

[NegP nem [FocP CSAK JÁNOST [NNP látogatta [PredP mindenki [PredP meg ...]]]]]
```

In the next example, negation scopes over quantification, which in turn scopes over focusing. This configuration has some unique challenges for our model; therefore, in addition to our base sentence, it is necessary to present a sentence with an adverbial quantifier, and also to review right-adjunction.

The first observation concerning the left-adjoined quantification case is that while it seems to be working as expected with mindenki 'everyone', the corresponding sentence with $k\acute{e}tszer$ is 'twice' is clearly ungrammatical. Consider (36) vs. (37):

- (36) Nem mindenki CSAK JÁNOST látogatta meg.
 not everyone only John-ACC visit-PAST-3SG PRT
 'Not everyone visited only John.'
 (It is not the case that for everyone it was only John that he visited.)

 [NegP nem [FocP mindenki [FocP CSAK JÁNOST [NNP látogatta [PredP meg ...]]]]]]
- (37)*Nem kétszer is CSAK JÁNOST látogatta meg az osztályfőnök.

 not twice too only John-ACC visited PRT the form-master

 'It is not the case that twice, it was only John that the form-master visited.'

 [NegP nem [FocP kétszer is [FocP CSAK JÁNOST [NNP látogatta [PredP meg ... az osztályfőnök ...]]]]]

In the right-adjoined case, both the sentence with mindenki 'everyone' and the sentence with $k\acute{e}tszer$ is 'twice' is grammatical:

- (38) Nem CSAK JÁNOST látogatta meg mindenki.
 not only John-ACC visit-PAST-3SG PRT everyone
 'Not everyone visited only John.'
 (It is not the case that for everyone it was only John that he visited.)

 [NegP nem [FocP [FocP CSAK JÁNOST [NNP látogatta [PredP meg ...]]] mindenki]]
- (39) Nem CSAK JÁNOST látogatta meg az osztályfőnök kétszer is. not only John-ACC visited PRT the form-master twice too 'It is not the case that twice, it was only John that the form-master visited.'

 [NegP nem [FocP [FocP CSAK JÁNOST [NNP látogatta [PredP meg ... az osztályfőnök ...]]] kétszer is]

To summarize the facts (adding the corresponding sentences with $b\acute{a}rki$ 'anyone'):

- (40) a. Nem mindenki CSAK JÁNOST látogatta meg. not everyone only John-ACC visit-PAST-3SG PRT 'Not everyone visited only John.' (It is not the case that for everyone it was only John that he visited.)
 - b. *Nem kétszer is CSAK JÁNOST látogatta meg az osztályfőnök. not twice too only John-ACC visited PRT the form-master 'It is not the case that twice, it was only John that the form-master visited.'

c. *Nem bárki CSAK JÁNOST látogatta meg. not anyone only John-ACC visit-PAST-3SG PRT 'It is not the case that for anyone it was only John that he visited.'

Note that all these sentences are grammatical when the phrase in the quantifier position is right-adjoined:

- (41) a. Nem CSAK JÁNOST látogatta meg mindenki.
 not only John-ACC visit-PAST-3SG PRT everyone
 'Not everyone visited only John.'
 (It is not the case that for everyone it was only John that he visited.)
 - b. Nem CSAK JÁNOST látogatta meg az osztályfőnök kétszer is. not only John-ACC visited PRT the form-master twice too 'It is not the case that twice, it was only John that the form-master visited.'
 - c. Nem CSAK JÁNOST látogatta meg bárki.
 not only John-ACC visit-PAST-3SG PRT anyone
 'It is not the case that for anyone it was only John that he visited.'

The most straightforward explanation for this contrast between the left-adjoined and right-adjoined cases is that what rules out the ungrammatical sentences above is a phonological requirement that *nem* and the focussed constituent be adjacent, with no intervening element. The only apparent counterargument to this account is the grammaticality of the sentence:

(42) Nem mindenki CSAK JÁNOST látogatta meg.
not everyone only John-ACC visit-PAST-3SG PRT
'Not everyone visited only John.'
(It is not the case that for everyone it was only John that he visited.)

Note, however, that earlier I made a strong argument that *nem mindenki* should in fact be analyzed as a negated constituent and not in the way depicted in the above tree diagram. Therefore, the above sentence is no real counterargument to my proposal.

The next configuration that we consider is when focus scopes over quantification, which in turn scopes over negation. Due to the fact that quantification scopes immediately above negation, negative concord is at play. Consider both left-adjunction and right-adjunction of the QP below:

(43) *CSAK JÁNOST senki nem látogatta meg.
only John-ACC nobody not visit-PAST-3SG PRT
'It is only John whom everybody did not visit.'

[Foop CSAK JÁNOST [NegP senki [NegP nem [NNP látogatta [PredP meg ...]]]]]

The ungrammaticality of (43) is due to an independently motivated phonological constraint: Foc and the negated V must form one phonological word (É. Kiss 2010; cf. Kenesei 1994, 330). Correspondingly, the right-adjoined counterpart below is grammatical:

```
(44) CSAK JÁNOST nem látogatta meg senki.

only John-ACC not visit-PAST-3SG PRT nobody

'It is only John whom everybody failed to visit.'

[FocP CSAK JÁNOST [NegP [NegP nem [NNP látogatta [PredP meg ...]]]] senki]]
```

Finally, we consider the case where focus scopes over negation, which in turn scopes over quantification:

```
(45) CSAK JÁNOST nem látogatta meg mindenki.
only John-ACC not visit-PAST-3SG PRT nobody
'It is only John whom not everbody visited.'

[FocP CSAK JÁNOST [NegP nem [NNP látogatta [PredP mindenki [PredP meg ...]]]]]
```

This concludes our overview of the model of Q-raising that I will assume in this paper. In what follows, I will follow the account of Q-raising as adjunction as outlined above, that is, mainly following É. Kiss (2010), with three modifications:

- I stipulate that adjunction to NNP is impossible.
- I assume that *nem mindenki* is properly analyzed as a single negative existential constituent.
- I stipulate a phonological constraint which requires that nem and the focused constituent be adjacent, with no intervening phonological word.

With this, we have also concluded our overview of the syntactic structure of the Hungarian sentence that I will assume throughout the paper. In the next section, I will explore the syntactic position of FCIs in the Hungarian sentence.

6.1. FCIs in the positions available to existentials?

Since FCIs such as bárki 'anyone' are morphologically related and semantically akin to universal quantifiers such as mindenki 'everyone' and existentials such as valaki 'someone', it is a natural first step to explore whether they are indeed in the same syntactic position as either universal quantifiers or existentials.

While it might be tempting to posit that FCIs such as $b\acute{a}rki$ 'anyone' (analyzed semantically as dependent indefinites, see Giannakidou 2001) occupy the same syntactic positions as existentials such as valaki 'someone' (analyzed semantically as Heimian indefinites, see Heim 1982), such a move is theoretically very problematic and is also not borne out by word order facts.

It is a solid observation in Hungarian syntax that non-individual denoting elements are not allowed to stand outside the predicate part of the sentence, i.e., they cannot be topicalized (with the exception of contrastive topics, see Halm (2016), chapter 3.2). Since FCIs are par excellence non-individual denoting and never have a referential reading, it is unwarranted to assume that they can be in a topic position (except as a result of contrastive topicalization, see Halm (2016), chapter 3.2).

Independently from such considerations, the sentence below clearly indicates that a pre-verbal non-topic position is available for FCIs in Hungarian:

(46) Mindenki bárkit meg hívhat.

everyone anyone-ACC PRT invite-POT-3SG
'Everyone can invite anyone.'

Since mindenki 'everyone' is adjoined to a functional phrase (a PredP), and topics are generated above the highest functional phrase, $b\acute{a}rkit$ clearly cannot be in topic position in the sentence above.

Sentence adverbial tests prove that FCIs cannot be in topic position:

- (47) a. Állítólag bárki meg hívhatja Marit. allegedly anyone PRT invite-POT-3SG Mari-ACC 'Allegedly anyone can invite Mary.'
 - b. *Bárki állítólag meg hívhatja Marit. Anyone allegedly PRT invite-POT-3SG Mari-ACC 'Allegedly anyone can invite Mary.'

Sentence adverbials obligatorily precede the predicate part of the sentence but otherwise, their order related to the topics of the sentence is free (É. Kiss 2002). (Note that while FCIs cannot undergo ordinary topicalisation, they can be topicalized as so-called contrastive topics, see chapter 3.2 of Halm 2016.)

Excluding topicalisation would limit the available positions for FCIs radically, to the set of $in \ situ$ positions. However, under this assumption, we would be unable to generate a number of perfectly grammatical sentences: in essence, all the sentences where $b\acute{a}rki$ appears pre-verbally:

- (48) a. Bárki meg látogathatja a tanítványait. anyone PRT visit-POT-3SG the pupil-POSS-PL-ACC 'Anyone can visit her pupils.'
 - b. Bárki bármit meg tehet.
 anyone anything-ACC PRT do-POT-3SG
 'Anyone can do anything.'

The failure to analyze FCIs as taking the same positions as existentials leads us to explore the option of examining the position of universal quantifiers, especially in light of the fact that as we have seen, numerous authors have proposed to analyze FCIs as universal quantifiers, and even those accounts which treat FCIs as indefinites or similar elements without true quantificational force ascribe a universal implicature of sorts to them (e.g., scalar accounts such as the dependent indefinite analysis of Kadmon & Landman 1993 and Giannakidou 2001).

6.2. FCIs in quantifier position

As FCIs are scope-bearing elements, it is natural to assume that they occupy the same scope positions as universals (adjunction to PredP, FocP or NegP), and indeed, under this assuption we can readily derive all word order possibilities of FCIs, and also the scope phenomena displayed by multiple FCIs and FCIs and other elements (universals, focus, negation). In the type examples below, the positions available for FCIs and their interaction with other elements such as negation can be modelled in exactly the same fashion as in the case of universals such as mindenki (see section 6.6).

Under the analysis of FCIs adopted by us (Giannakidou 2001), the universality of FCIs is derived from their intensionality and exhaustive variation: the FCI variable is to be assigned a distinct value in each world or situation under consideration, that is, it ranges over denotation – possible world pairs $(\langle x, w \rangle)$. In terms of negative concord, it will be shown below that just like the universal quantifier mindenki, $b\acute{a}rki$ also cannot have scope over negation (unless there is an intervening focus operator): in such cases, the negative universal senki emerges.

Below, I will show how the sentences containing FCIs can be derived using the model for quantification presented earlier, starting from the simple sentences containing a single FCI to more complex sentences containing multiple FCIs and focus and negation operators. To account for all surface word orders, both left- and right-adjunction will be considered.

A QP containing bárki can be left-adjoined to PredP. Consider:

(49) Bárki meg látogathatja a barátait.
 anyone PRT visit-POT-3SG the friend-POSS-PL-ACC
 'Anyone can visit his friends.'
 [PredP bárki [PredP meg ...látogathatja a barátait...]]

Surface forms where $b\acute{a}rki$ is post-verbal can be derived by right-adjunction to PredP:

(50) Meg hívhatja a barátait bárki.

PRT invite-POT-3SG the friend-POSS-PL-ACC anyone
'Anyone can invite his friends.'

[PredP [PredP meg ...hívhatja a barátait...] bárki]

Importantly, this derivation predicts that in these instances, the post-verbal FCI $b\acute{a}rki$ is obligatorily stressed. This is indeed the case: the sentences with neutral prosody and a destressed $b\acute{a}rki$ are clearly ungrammatical:

- (51) a. Meg hívhatja a barátait bárki.
 PRT invite-POT-3SG the friend-POSS-PL-ACC anyone
 - b. *Meg hívhatja a barátait bárki.

 PRT invite-POT-3SG the friend-POSS-PL-ACC anyone 'Anyone can invite his friends.'

A very heavy stress on *meg* would enable a verum focus reading, which would make (51b) grammatical due to the stress reduction in the scope of the focus. FCIs in the scope of focus will be examined in more detail later on in this section.

It is possible to adjoin multiple FCIs to PredP. Due to the fact that each of these adjunctions can be realized as left- or right-adjunction, there are several possible syntactic configurations. However, due to post-verbal free linearization, many of these collapse in terms of surface order.

First consider the case where two FCIs are left-adjoined to PredP:

(52) Bárki bárkit meg hívhat.
 anyone anyone-ACC PRT invite-POT-3SG
 'Anyone can invite anyone.' (For anyone, it is the case that he can invite anyone.)
 [PredP bárki [PredP bárkit [PredP meg ...hívhat...]]]

When the two FCIs are right-adjoined to PredP, the original c-command relation cannot be reconstructed from the surface order due to post-verbal free linearization:

- (53) a. Meg hívhat bárkit bárki.

 PRT invite-POT-3SG anyone-ACC anyone
 - b. Meg hívhat 'bárki 'bárkit.
 PRT invite-POT-3SG anyone anyone-ACC
 'Anyone can invite anyone.' (For anyone, it is the case that he can invite anyone.)
 [PredP [PredP [PredP meg ...hívhat...] bárkit]

As we have seen, QPs can be adjoined to higher functional projections as well, such as FocP. Consider:

- (54) Bárki CSAK JÁNOST látogathatja meg.
 anyone only John-ACC visit-POT-3SG PRT
 'For anyone, it is only John that he can visit.'
 [FocP bárki [FocP CSAK JÁNOST [NNP látogathatja [PredP meg...]]]]
- (55) CSAK JÁNOST látogathatja meg bárki.
 only John-ACC visit-POT-3SG PRT anyone
 'For anyone, it is only John that he can visit.'

 [FocP [FocP CSAK JÁNOST [NNP látogathatja [PredP meg...]]] bárki]

The fact that $b\acute{a}rki$ is stressed in (55) is crucial. The c-command domain of the focus is known to be obligatorily destressed, so that fact that $b\acute{a}rki$ is stressed clearly indicates that even though post-verbal in a linear sense, it is not in the c-command domain of focus. The prosody of (55) is essential to recover the syntactic structure, and by way of the c-command relations, the scope relations as well. Regarding (55), the clear intuition of native speakers is that the FCI scopes above the focus, which is a strong corroboration of our model.

Consider now the opposite situation, where focus scopes above the FCI. There are two corresponding structures (due to the possibilty of left-or right-adjunction of the FCI):

```
    (56) CSAK JÁNOST látogathatja meg bárki.
    only John-ACC visit-POT-3SG PRT anyone
    'It is only John that anyone can visit.'
    [FocP CSAK JÁNOST [NNP látogathatja [PredP bárki [PredP meg...]]]]
    [FocP CSAK JÁNOST [NNP látogathatja [PredP [PredP meg...]] bárki]]]
```

While the structures are different, they completely collapse in terms of surface linearization due to post-verbal free linearization. In stark contrast to (54) and (55), $b\acute{a}rki$ is destressed in (56). This is due to the fact that here, $b\acute{a}rki$ is in the c-command domain of focus. This means that in case of post-verbal FCIs, the stress patterns make it possible to unambiguously identify the scope relations between focus and the FCI:

(57) a. CSAK JÁNOST látogathatja meg bárki. only John-ACC visit-POT-3SG PRT anyone 'For anyone, it is only John that he can visit.'

FCI > Foc

b. CSAK JÁNOST látogathatja meg bárki. only John-ACC visit-POT-3SG PRT anyone 'It is only John that anyone can visit.'

Foc > FCI

Looking at FCIs and negation, we first consider the case where negation scopes above an FCI. Left- and right-adjunction result in the same surface structure due to post-verbal free linearization:

(58) Nem látogathatja meg bárki a gyerekeket.

not visit-POT-3SG PRT anyone the child-PL-ACC

'It is not the case that anyone can visit the children.'

[NegP nem [NNP látogathatja [PredP bárki [PredP meg ...a gyerekeket...]]]]

[NegP nem [NNP látogathatja [PredP [PredP meg ...a gyerekeket...]]]]

Note that the FCI $b\acute{a}rki$ is obligatorily destressed when in the scope of negation. Moreover, it seems that a stressed $b\acute{a}rki$ is in general unacceptable postverbally in a sentence with negation. This is different from the focus case, where, as we have seen, both a stressed and unstressed postverbal FCI is acceptable, with stress indicating wide scope (above focus) and the lack of stress indicating narrow scope (below focus):

- (59) a. *Nem látogathatja meg a gyerekeket bárki.

 not visit-POT-3SG PRT the child-PL-ACC anyone

 'For anyone, it is the case that he cannot visit the children.'
 - b. Nem látogathatja meg a gyerekeket bárki. not visit-POT-3SG PRT the child-PL-ACC anyone 'It is not the case that anyone can visit the children.'
 - c. CSAK JÁNOST látogathatja meg bárki. only John-ACC visit-POT-3SG PRT anyone 'For anyone, it is only John that he can visit.'

FCI > Foc

d. CSAK JÁNOST látogathatja meg bárki. only John-ACC visit-POT-3SG PRT anyone 'It is only John that anyone can visit.'

Foc > FCI

This state of affairs is, in fact, reminiscent of what we have seen concerning universals and negation. Consider:

- (60) a. *em látogathatja meg a gyerekeket 'bárki.

 not visit-POT-3SG PRT the child-PL-ACC anyone

 'For anyone, it is the case that he cannot visit the children.'
 - b. Nem látogathatja meg a gyerekeket bárki.

 not visit-POT-3SG PRT the child-PL-ACC anyone

 'It is not the case that anyone can visit the children.'
 - c. *Nem látogatta meg a gyerekeket mindenki.

 not visit-PAST-3SG PRT the child-PL-ACC everybody

 'For everyone, it is the case that he did not visit the children.'
 - d. Nem látogatta meg a gyerekeket mindenki. not visit-PAST-3SG PRT the child-PL-ACC everybody 'It is not the case that everyone visited the children.'

The reason for the ungrammaticality of (60c) is straightforward: the fact that the postverbal universal is stressed indicated that it scopes above negation: however, we have seen earlier that in such cases, the negative polarity universal quantifier senki 'nobody' is inserted instead of mindenki 'everyone' under negative concord. That fact that (60a) is similarly ungrammatical and that we analyze FCIs as having universal force due to their intensionality and exhaustive variation makes it natural to assume that the FCI $b\acute{a}rki$ participates in negative concord similarly to the universal quantifier mindenki:

- (61) a. *Bárki nem látogathatja meg a gyerekeket. anyone not visit-POT-3SG PRT the child-PL-ACC
 - b. Senki nem látogathatja meg a gyerekeket. nobody not VISIT-POT-3SG PRT the child-PL-ACC 'Nobody can visit the children.' (For everybody, he cannot visit the children.) $[N_{\rm egP} \ {\rm senki} \ \frac{{\rm b\acute{a}rki}}{{\rm kegP}} \ {\rm nem} \ [N_{\rm NP} \ {\rm l\acute{a}togathatja} \ [P_{\rm redP} \ {\rm meg} \ ... \ {\rm a} \ {\rm gyerekeket...}]]]]$
- (62) a. *Nem látogathatja meg a gyerekeket bárki.
 not visit-POT-3SG PRT the child-PL-ACC anyone
 - b. Nem látogathatja meg a gyerekeket 'senki. not visit-POT-3SG PRT the child-PL-ACC nobody 'Nobody can visit the children.' (For everybody, he cannot visit the children.) [NegP [NegP nem [NNP látogathatja [PredP meg ...a gyerekeket...]]] senki bárki]

At first sight, it may seem radical to propose that both universals such as mindenki 'everyone' and FCIs such as $b\acute{a}rki$ 'anyone' are replaced by the same lexeme, senki 'nobody' in negative environments. Note, however, that É. Kiss (2009) and Surányi (2006) have convincingly argued that both universal quantifiers such as mindenki 'everyone' and existentials such as valaki 'someone' are replaced in negative environments by se-pronouns such as senki 'nobody', which duly display a dual syntactic behaviour (universal or existential). Remember that we analyze FCIs as dependent indefinites with a universality derived from their intensionality and exhaustive variation: FCIs such as $b\acute{a}rki$ are both syntactically and semantically closely related to both universals and existentials. Moreover, as we will see in the next section, they display symptoms of both universal and existential quantification. In light of this, the fact that FCIs are replaced by se-pronouns in certain negative contexts is no longer surprising.

Besides adjunction to PredP and the functional projections FocP and NegP, it could be technically possible to adjoin an FCI to NNP as well. However, in section 6.1, I argued that $pace \, \acute{\rm E}$. Kiss (2010), Q-adjunction to NNP is not possible. Given that we analyze FCIs as occupying the same positions as universal quantifiers, we expect that FCIs cannot be joined to NNP either. In fact, the ungrammaticality of sentences such as (63) confirms this:

```
(63) *Nem bárki látogathatja meg a gyerekeket.
not anyone visit-POT-3SG PRT the child-PL-ACC
'Not anyone can visit the children.'

[NegP nem [NNP bárki [NNP látogathatja [PredP meg ...a gyerekeket...]]]]
```

Naturally, it is possible for a sentence to contain a focus, negation and an FCI. In these complex cases as well, scope, word order and stress phenomena can clearly be derived using the basic model of the Hungarian sentence, the analysis of Q-raising as adjunction, and the positioning of FCIs in the positions available to universal quantifiers.

First, consider the situation where the FCI scopes over negation, which in turn scopes over focusing:

```
(64) a. *Bárki nem JÁNOST látogathatja meg. anyone not John-ACC visit-POT-3SG PRT
```

```
b. Senki nem JÁNOST látogathatja meg.
nobody not John-ACC visit-POT-3SG PRT
'For everyone/anyone, it is not the case that it is John that he can visit.'
[NegP senki bárki [NegP nem [FocP JÁNOST [NNP látogathatja [PredP meg...]]]]]
```

Since the FCI scopes directly above negation, we experience negative concord and *senki* 'nobody' emerges. Consider next the same configuration with right-adjunction of the FCI:

- (65) a. *Nem JÁNOST látogathatja meg bárki. not John-ACC visit-POT-3SG PRT anyone
 - b. Nem JÁNOST látogathatja meg senki.
 not John-ACC visit-POT-3SG PRT anyone
 'For everyone/anyone, it is not the case that it is John that he can visit.'

 [NegP [NegP nem [FocP JÁNOST [NNP látogathatja [PredP meg...]]]] senki bárki]

Importantly, the post-verbally linearized *senki* 'nobody' is stressed, since it is outside the c-command domain of negation (and the focus).

Consider the next the case where the FCI scopes over focus, and focus in turn scopes over negation. The scope relations can be derived straightforwardly from the c-command relations:

- (66) Bárki JÁNOST nem látogathatja meg.
 anyone John-ACC not visit-POT-3SG PRT
 'For anyone, it is John that he cannot visit.'
 [FocP bárki [FocP JÁNOST [NegP nem [NNP látogathatja [PredP meg...]]]]]
- (67) JÁNOST nem látogathatja meg bárki.

 John-ACC not visit-POT-3SG PRT anyone
 'For anyone, it is John that he cannot visit.'

 [FocP [FocP JÁNOST [NegP nem [NNP látogathatja [PredP meg...]]]] bárki]

Similarly to the case before, the post-verbally linearized $b\acute{a}rki$ 'anyone' is stressed, since it is outside the c-command domain of focus (and of negation).

In case negation scopes over the FCI, which in turn scopes over focus, the grammaticality depends on the direction of adjunction. As we have seen before, there is phonological constraint which requires that *nem* 'not' and the focused element be adjacent (after linearization). Accordingly, the left-adjoined case where the FCI intervenes between negation and the focused element is ungrammatical:

(68) *Nem bárki CSAK JÁNOST látogathatja meg.
not anyone only John-ACC visit-POT-3SG PRT
'It is not the case that for anyone it is only John that he can visit.'
[NegP nem [FocP bárki [FocP CSAK JÁNOST [NNP látogathatja [PredP meg...]]]]]

In the case of right-adjunction, this condition is not violated as the FCI is linearized post-verbally. Since the FCI is within the c-command domain of negation, it is destressed:

(69) Nem CSAK JÁNOST látogathatja meg bárki. not only John-ACC visit-POT-3SG PRT anyone 'It is not the case that for anyone it is only John that he can visit.'
[NegP nem [FocP [FocP CSAK JÁNOST [NNP látogathatja [PredP meg...]]] bárki]]

In the case where negation scopes over focus, which in turn scopes over the FCI, both left- and right-adjunction result in the same surface order due to post-verbal free linearization. The FCI, being in the scope of negation, is destressed:

(70) Nem CSAK JÁNOST látogathatja meg bárki.
not only John-ACC visit-POT-3SG PRT anyone
'It is not the case that it is only John that anyone can visit.'

[NegP nem [FocP CSAK JÁNOST [NNP látogathatja [PredP bárki [PredP meg...]]]]]

[NegP nem [FocP CSAK JÁNOST [NNP látogathatja [PredP meg...]]]]

Consider next a sentence where focus has the highest scope, over an FCI and negation, respectively. This configuration, as expected, displays negative concord and the negative universal *senki* 'nobody' emerges. The grammaticality of the sentence depends on the direction of adjunction concerning the FCI:

(71) *CSAK JÁNOST senki nem látogathatja meg.
 only John-ACC nobody not visit-POT-3SG PRT
 'It is only John whom anybody cannot visit.'
 [FocP CSAK JÁNOST [NegP senki bárki [NegP nem [NNP látogathatja [PredP meg...]]]]]

The ungrammaticality is due to the fact that the negative universal intervenes between the focus and the negated verb. As we have seen above, this violates an independently motivated phonological constraint which requires that Foc and the negated V must form one phonological word (É. Kiss 2010; cf. Kenesei 1994, 330). No such problem arises when the FCI is right-adjoined, and as expected, the sentence is grammatical:

(72) CSAK JÁNOST nem látogathatja meg senki.
only John-ACC not visit-POT-3SG PRT nobody
'It is only John whom anybody cannot visit.'

[FocP CSAK JÁNOST [NegP [NegP nem [NNP látogathatja [PredP meg...]]]] senki bárki]]

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Finally, consider the case where focus scopes over negation, which in turn scopes over an FCI. The FCI is within the scope of negation (and focus) and it is thus unstressed:

- (73) CSAK JÁNOST nem látogathatja meg bárki.
 only John-ACC not visit-POT-3SG PRT anyone
 'It is only John whom not anyone can visit.'

 [FocP CSAK JÁNOST [NegP nem [NNP látogathatja [PredP bárki [PredP meg...]]]]]
- (74) CSAK JÁNOST nem látogathatja meg bárki.
 only John-ACC not visit-POT-3SG PRT anyone
 'It is only John whom not anyone can visit.'

 [FocP CSAK JÁNOST [NegP nem [NNP látogathatja [PredP [PredP meg...] bárki]]]]

Concluding this section, note that FCIs and universals can be freely iterated by adjunction to the functional projections and the scope relations fall out naturally from the c-command relations:

(75) a. Bárki mindent ki próbálhat.
anyone everything-ACC PRT try-POT-3SG
'Anyone can try everything.'
[PredP bárki [PredP mindent [PredP ki próbálhat...]]]

b. Mindent bárki ki próbálhat.
everything-ACC anyone PRT try-POT-3SG
'For everything, anyone can try it.'
[PredP mindent [PredP bárki [PredP ki próbálhat...]]]

To provide an interim summary, I have shown in this section that a large part of the environments where FCIs occur (and fail to occur) can be modelled by assuming that FCIs occupy the same positions as universal quantifiers (left- or right-adjunction to PredP, FocP or NegP). In the next section, I will explore the quantificational force of FCIs in more detail.

7. The quantificational force of FCIs

As we have seen in the literature review above, the quantificational force of FCIs is a hotly contested question cross-linguistically. In my thesis, I followed Giannakidou (2001) in assuming that FCIs have a sort of dual nature in terms of quantification: while they are (dependent) indefinites and thus assumed to lack independent quantificational force as such, at

the same time, they also carry a universality implicature. Therefore, it is pertinent to examine how FCIs fare in light of the standards test for quantificational force (see Surányi 2006 for an application of the same set of tests to n-words in Hungarian).

 $B\acute{a}r$ - 'any' patterns with universals in the standard test of modification by adverbials (Dahl 1970; Horn 1972; Zanuttini 1991; Wouden & Zwarts 1993; Lee & Horn 1995):

(76) a. *szinte valaki² b. szinte mindenki c. szinte bárki almost somebody almost everybody almost anybody 'almost somebody' 'almost everybody' 'almost anybody'

Likewise, $b\acute{a}r$ - 'any' patterns with universals in the test of modification by an exceptive phrase:

- (77) a. *Meg hívhatsz valakit, kivéve Jánost.

 PRT invite-POSS-2SG someone-ACC except John-ACC

 'You can invite someone except John.'
 - b. Meg hívhatsz mindenkit, kivéve Jánost. PRT invite-POSS-2SG everyone-ACC except John-ACC 'You can invite everyone except John.'
 - c. Meg hívhatsz bárkit, kivéve Jánost.

 PRT invite-POSS-2SG anyone-ACC except John-ACC

 'You can invite anyone except John.'

Giannakidou (2001) used donkey anaphora to test the quantificational force of FCIs in English and Greek, as existentials are known to support anaphora across a sentence boundary, whereas universals are known not to support it:

This probably means that *szinte* and *majdnem* are not full synonyms after all. Further exploration of this topic is beyond our scope here.

² It has to be pointed out that this test gives a different result for a synonym of szinte: majdnem 'almost': a. *majdnem valaki 'almost somebody'; b. majdnem mindenki 'almost everbody'; c. *majdnem bárki 'almost anybody'. It is important to note, however, that szinte and majdnem do not completely behave the same way in other contexts either:

⁽i) Q: Kész vagy a házival? A: Majdnem.

Q: Kész vagy a házival? A: $^{\#}$ Szinte.

^{&#}x27;Are you finished with your homework? Almost.'

- (78) a. *The students who bought every book should show it to me immediately.
 - b. The students who bought a book should show it to me immediately.
 - c. The students who bought any book should show it to me immediately.

Consider:

- (79) a. *Akik meg vettek minden könyvet, mutassák meg nekem *pro*. who PRT buy-PAST-3PL every book-ACC show-IMP PRT me-DAT it 'Those who bought every book should show it to me.'
 - b. Akik meg vettek egy könyvet, mutassák meg nekem *pro*. who PRT buy-PAST-3PL a book-ACC show-IMP PRT me-DAT it 'Those who bought a book should show it to me.'
 - c. Akik meg vettek bármilyen könyvet, mutassák meg nekem *pro.* who PRT buy-PAST-3PL any book-ACC show-IMP PRT me-DAT it 'Those who bought any book should show it to me.'

The test of donkey anaphora thus indicates that FC-phrases can have an existential reading.

Predicative use is also a well-established test of quantificational force (Partee 2004), as cross-linguistically, universals cannot be used predicatively, whereas existentials can. Giannakidou (2001) and Quer (1999) show that in Greek and Spanish, FCIs can be used predicatively on the 'just any' reading:

- (80) a. Dhen ine enas opjosdhipote daskalos. (Ine o kaliteros!) not be-3sg a FCI teacher be-3sg the best 'He is not just any teacher. He is the best teacher!'
 - b. No está {una/ *la/ *toda/ *cada} revista cualquiera. not be-3sg a the all each magazine FCI 'This is not just any magazine.'

Interestingly, in such predicative uses, the FCI is preceded by the indefinite article in both Greek and Catalan. Together with the predicative use itself, this is taken by Giannakidou (2001) to argue against the universal status of FCIs. In Hungarian, similar predicative use of FCIs on the *just any* reading can be observed:

(81) János nem akárki. Ő egy híres író. John not anyone he a famous writer 'John is not just anyone. He is a famous writer.' In fact, while it sounds somewhat substandard, the use of the indefinite article in such constructions is quite widespread:

(82) János nem egy akárki. Ő egy híres író.

John not a anyone he a famous writer

"John is not just anyone. He is a famous writer."

Interestingly, such predicative use of the FCI *bárki* appears to be ungrammatical:

- (83) a. *János nem bárki. Ő egy híres író. John not anyone he a famous writer 'John is not just anyone. He is a famous writer.'
 - b. *János nem egy bárki. Ő egy híres író. John not a anyone he a famous writer 'John is not just anyone. He is a famous writer.'

We have seen earlier that while $b\acute{a}rki$ and $ak\acute{a}rki$ are mostly interchangeable, $ak\acute{a}rki$ is somewhat more archaic and its use is more limited and marked. Based on the sentences above, we might conjecture that the any/just~any distinction might be in the process of being lexicalized in Hungarian, with $ak\acute{a}rki$ starting to indicate just~any and $b\acute{a}rki~any$.

However, a closer look shows that this is only true in the predicative use:

- (84) a. Mari nem megy hozzá akárkihez. b. Mari nem megy hozzá egy akárkihez.

 Mary not go-3sg unto anyone-All Mary not go-3sg unto a anyone-All 'Mary won't marry just anyone.'
 - c. Mari nem megy hozzá bárkihez. d. **Mari nem megy hozzá egy bárkihez.

 Mary not go-3sg unto anyone-All Mary not go-3sg unto a anyone-All 'Mary won't marry just anyone.'

(84c) is a perfectly acceptable sentence on a just any reading. Egy bárki (as in (84d)) has a very degraded acceptability: it is sporadically attested in corpora but with much smaller frequency than egy akárki. These sentences show that bárki is in fact equally capable of expressing a just any meaning. The fact that (1) the indefinite article is perfectly sound with akárki but unacceptable/degraded with bárki and (2) (egy) akárki is acceptable as a predicate nominal but (egy) bárki is not suggest that what appears to be a predicate nominal use of the FCI akárki in (81) may in fact be a predicate nominal use of the lexeme akárki 'insignificant, nondescript person'. That is, I assume that in the course of the history of Hungarian, a common noun akárki has been derived from the FCI akárki, and it is this common noun

 $ak\acute{a}rki$ that we see in predicative uses. In fact, one might find utterances in corpora where these two $ak\acute{a}rki$ s are explicitly contrasted for rhetorical benefit:³

(85) Miniszterelnöknek sem alkalmas akárki, főleg nem egy akárki.

prime minister-DAT neither qualified anyone especially not a anyone

'It is not the case that anyone is qualified to become PM, especially not an anyone.'

Furthermore, a rather simple search engine query indicates that while adjective $+ak\acute{a}rki$ pairs can readily be found, adjective $+b\acute{a}rki$ (or adjective +valaki) pairs are extremely rare. The fact that (one version of) $ak\acute{a}rki$ can be modified by an AdjP whereas $b\acute{a}rki$ and valaki cannot clearly indicates a category difference between (one version of) $ak\acute{a}rki$ vs. $b\acute{a}rki$ and valaki:

		Frequency
kis akárki	'little anybody'	9.000 +
kis bárki	'little anybody'	< 10
kis valaki	'little somebody'	< 500
kis senki	'little nobody'	13.000 +

Note that such a category change for an indefinite/universal is by no means unique to Hungarian:

(86) a. He is nobody. b. He is a nobody.

On the balance of evidence, what at first sight seemed to be instances of a predicative use of FCIs in Hungarian are probably more properly classified as predicative uses of common nouns (which were historically derived from FCIs). This means that contra Giannakidou's (2001) findings concerning Greek and Spanish, FCIs in Hungarian pattern with universals in the test of predicative use.

Following Giannakidou (2001) and Tóth (1999), Surányi (2006) uses is-modification as a test of existential quantification, pointing out that whereas is 'too, also' can modify existentially interpreted weak NPIs, it cannot modify universals:

(87) a. Nem hiszem, hogy valaki is el jön.
not believe—1sG that someone too PRT come—3sG
'I do not think someone will come.'

 $^{^3}$ Source: http://tinyurl.com/joutdwg (date of access: October 10th, 2015).

b. *Nem hiszem, hogy mindenki is el jön. not believe-1sG that everyone too PRT come-3sG 'I do not think everyone will come.'

FCIs can readily be modified by is in weakly non-veridical contexts:

(88) Nem hiszem, hogy bárki is el jön. not believe–1sg that anyone too prt come–3sg 'I do not think anyone will come.'

For a more detailed discussion of FCIs in weakly non-veridical contexts and the relationship of FCIs and *is*, see chapter 3.5 of Halm (2016).

Bare singulars incorporated into the verb invariably have an existential reading (sentence from Surányi 2006):⁴

- (89) a. János valami híres embert alakít.

 John something famous person-ACC act-3sG

 'John plays the part of some famous person.'
 - a'. *János alakít valami híres embert.
 - b. *Egy színész minden híres embert alakít.
 An actor every famous person-ACC act-3SG
 'An actor plays the part of every famous person.'

Similarly to the n-words tested by Surányi (2006), FCIs can be (indeed, obligatorily are) incorporated in the infinitival clause under matrix negation below:

- (90) a. Nem szeretnék Pálnak semmi hülyeséget mondani holnap.

 not like-COND-1SG Paul-DAT nothing stupid-ACC tell-INF tomorrow

 'I do not want to say anything stupid to Paul tomorrow.'
 - a'. *Nem szeretnék Pálnak mondani semmi hülyeséget holnap.

 not like-COND-1SG Paul-DAT tell-INF nothing stupid-ACC tomorrow

 'I do not want to say anything stupid to Paul tomorrow.'
 - b. Nem szeretnék Pálnak bármi hülyeséget mondani holnap. not like-COND-1SG Paul-DAT anything stupid-ACC tell-INF tomorrow 'I do not want to say anything stupid to Paul tomorrow.'
 - b'. *Nem szeretnék Pálnak mondani bármi hülyeséget holnap.

 not like-COND-1SG Paul-DAT tell-INF anything stupid-ACC tomorrow

 'I do not want to say anything stupid to Paul tomorrow.'

⁴ Note that *valami* in (89a) may be more properly analyzed as a referentially vague item (RVI), cf. chapter 4.2 of Halm (2016).

- (91) a. Nem szeretnék semmi különösnek látszani.
 not like-COND-1SG nothing special-DAT seem-INF
 'I do not want to seem anything special.'
 - a'. *Nem szeretnék látszani semmi különösnek.
 not like-COND-1SG seem-INF nothing special-DAT
 'I do not want to seem anything special.'
 - b. Nem szeretnék bármi különösnek látszani. not like-COND-1SG anything special-DAT seem-INF 'I do not want to seem anything special.'
 - b'.*Nem szeretnék látszani bármi különösnek.
 not like-COND-1SG seem-INF anything special-DAT
 'I do not want to seem anything special.'

Again, the test of incorporation indicates that FCIs in Hungarian can have existential quantificational force.

A further way to explore the quantificational properties of FCIs is to examine existential import: universal quantifiers are know to have a pragmatic implicature of existence cross-linguistically (Strawson 1952). It is shown in Halm (2013) and in chapter 3.6 of Halm (2016) that while FCIs in themselves do not have such an existential import, this can be elicited in combination with the focus construction (this quantificational plasticity is typical of Heimian indefinites).

The final test concerns so-called split readings with modal verbs (de Swart 1996; Giannakidou 2001; Surányi 2006). The sentence below has three possible readings due to different scope configurations:

(92) One is allowed to fire no nurses.

```
de re: \neg > \exists > MOD 'There are no nurses such that one is allowed to fire them.' de dicto: MOD > \neg > \exists 'One is allowed not to fire any nurses.' split: \neg > MOD > \exists 'One is not allowed to fire any nurses.'
```

As Surányi (2006) points out, the *de dicto* reading is unavailable in the relevant Hungarian sentence as negation has overt scope above the modal verb:

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(93) Nem lehet egy ápolónőt sem/ senkit sem el bocsátani. not may a nurse-ACC NEG nobody-ACC NEG PRT fire-INF de\ re: \ \neg > \exists > \texttt{MOD}\ '\text{There}\ are\ no\ nurses\ such\ that\ one\ is\ allowed\ to\ fire\ them.' * de\ dicto:\ \texttt{MOD} > \neg > \exists\ '\text{One}\ is\ allowed\ not\ to\ fire\ any\ nurses.'} split: \ \neg > \texttt{MOD} > \exists\ '\text{One}\ is\ not\ allowed\ to\ fire\ any\ nurses.'}
```

Looking at FCIs, it emerges that only the split reading is available:

```
(94) Nem lehet bárkit el bocsátani.
not may anybody-ACC PRT fire-INF
*de re: ¬ > FCI > MOD: 'There is not anyone such that one is allowed to fire them.'
*de dicto: MOD > ¬ > FCI: 'One is allowed not to fire anyone.'
split: ¬ > MOD > FCI: 'One is not allowed to fire anyone.'
```

The de dicto reading is ungrammatical due to the overt scope of negation over the modal operator. The de re reading is excluded since the FCI needs to be in the scope of the modal operator to be licensed (see chapter 2.2.2 of Halm 2016, cf. Hunyadi 2002). The fact that the split reading is available, though, indicates that FCIs can have an existential interpretation in Hungarian.

8. Conclusion

To summarize the results of this paper, I have first shown that the licensing environments where FCIs occur (and fail to occur) in Hungarian can be modelled by assuming that FCIs occupy the same positions as distributive quantifiers (left- or right-adjunction to PredP, FocP or NegP) in straight episodic sentences. Under this assumption I could readily derive all word order possibilities and stress patterns of FCIs, and also the very nuanced scope phenomena displayed by multiple FCIs and FCIs and other elements (universals, focus, negation). Beside this remarkable empirical coverage, the model also has considerable theoretical appeal, since under the dependent intensional analysis of FCIs (Giannakidou 2001), FCIs display a universality which is derived from their intensionality and exhaustive variation: the FCI variable is to be assigned a distinct value in each world or situation under consideration, that is, it ranges over denotation – possible world pairs $(\langle x, w \rangle)$.

I also investigated the quantificational force of FCIs using the following tests:

Test	Result	Test	Result
almost-modification modification by exceptive phrase donkey anaphora predicative use	universal	is-modification incorporation split reading with modals	existential existential existential

These results indicate that FCIs can have both universal and existential interpretation in Hungarian (note the similar findings of Surányi (2006) for n-words). This is in fact what we would expect under a dependent indefinite analysis. Heimian indefinites are known for quantificational plasticity (lacking quantificational force on their own), and as we have seen, FCIs as dependent indefinites, while not having quantificational force as such, carry a universality implicature due to their intensionality and exhaustive variation, as the FCI variable is to be assigned a distinct value in each world or situation under consideration (Giannakidou 2001).

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