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FOCUS IN BULGARIAN AND RUSSIAN YES-NO QUESTIONS*

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1. Introduction

This paper examines the distribution of focused elements in Bulgarian (BL) and Russian (RS) yes-no questions formed with the question marker *li*. We propose that *li* is an interrogative ([+Q]) complementizer that can also check a [+F(ocus)] feature. Overt XP-movement for checking of the [+F] feature in a Spec-head configuration with *li* obligatorily results in a focus-presupposition construction (in the sense of Jackendoff 1972).¹ In the absence of [+F], the verb undergoes head-movement to *li*, and the result is a neutral question not partitioned into focus and presupposition. Thus, yes-no questions can either be neutral, in that they question the existence of an event/state of affairs, or contain a focused element, in which case the remainder of the clause is presupposed; the difference between these two types of questions is coded by the type of constituent that precedes *li*.

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¹ See also Kiefer 1980, Hajičová 1983, among others for discussion of presupposition and focus in questions. The presupposition associated with *li*-questions in which XP-movement has occurred is an open proposition whose semantic variable corresponds (in general) to the moved XP; the focus instantiates the variable in the open proposition.

In both Bulgarian and Russian, *li* occurs in two syntactic environments (Restan 1972, Rudin 1993, King 1994, Izvorski 1994): either a maximal projection or the verb can occur before *li*, as in (1) and (2).² Indirect questions conform to the same pattern; embedding (1) and (2) preserves their word order.

- (1) a. [Na Marija] *li* dadoxte nagradata?
to Maria Q gave the-prize
'Was it to Maria that you gave the prize?' (BL)
- b. [Dadoxte] *li* nagradata na Marija?
gave Q the-prize to Maria
'Did you give the prize to Maria?' (BL)
- (2) a. [Knigu] *li* Anna pročitata?
book Q Anna read
'Was it a book that Anna read?' (RS)
- b. [Pročitata] *li* Anna knigu?
read Q Anna book
'Did Anna read a book?' (RS)

We propose that these two word-order possibilities not only reflect different syntactic structures, but are also associated with different focus readings. The XP-*li* construction involves obligatory focusing of the initial maximal projection, with concurrent presupposition of the non-fronted portion of the clause. In contrast, the V-*li* construction has a neutral reading which questions the existence of the clausal event/state of affairs. For example, in (2a) the direct object *knigu* 'book' appears in initial position, followed by *li*. It is the focus of the question. The speaker is asking about the identity of what was read, and it is presupposed that Anna read something. The reading is similar to that which arises when 'book' is clefted in the English translation: 'Was it a book that Anna read'. In contrast, in (2b) the verb appears in initial position followed by *li*, and the entire clause is questioned. That is, the question is asking whether a reading of a book by Anna took place and carries no presupposition about the existence of this event. This reading is similar to the neutral reading of the corresponding English question 'Did Anna read a book?'.

In the next section we present evidence that the maximal projection preceding *li* is necessarily interpreted as the focus of the utterance. In section 3 we discuss the meanings associated with V-*li* structures. An analysis of the syntax of *li*-questions is offered in section 4. Our treatment of *li* as a focus particle invites comparison to the focus particles of other languages (see for instance König's 1991 work on focus particles in Japanese, Finnish, and Turkish). In the final section we briefly discuss the similarities between the syntax of *li* and the question/focus particles in Finnish and Turkish. The cross-linguistic pattern that emerges suggests that the correlation between the syntactic and the focus-presupposition partitioning of yes-no questions is not a Slavic idiosyncrasy.

² Throughout the paper we refer to these as the XP-*li* and the V-*li* construction, respectively. Bulgarian and Russian are alike unless explicitly stated otherwise.

2. XP-*li* Constructions

The maximal projection preceding *li* can be essentially of any category and is obligatorily focused. The obligatory focus on the pre-*li* maximal projection and the corresponding presupposition of the remainder of the clause can be seen by the appropriateness of the responses to the XP-*li*-question, the distribution of inherently unfocusable phrases and of contrastive foci, and the behavior of focus sensitive adverbs.

2.1. 'Natural' Answers

The relation between yes-no questions and their 'natural' answers is one of the standard tests for determining the focus-presupposition structure of questions (see Chomsky 1971, Jackendoff 1972, among many others). Thus the fact that (3a) is an appropriate answer to the clefted question and (3b) is not reveals that *John* is the focus and *Someone writes poetry* the presupposition of the question in (3).

- (3) Is it John who writes poetry?
- a. No, it is Bill who writes poetry.
- b. #No, it is John who writes short stories.

The 'naturalness' of the responses to XP-*li* questions determines that the constituent preceding *li* is focused. A negative answer to a question like (4) will only deny that the prize was given to Maria, as opposed to, say, Susanna, and not that the event of giving the prize took place.

- (4) [Na Marija] *li* dadoxte nagradata?
to Maria Q gave the-prize
'Was it to Maria that you gave the prize?' (BL)
- a. Ne, dadoxme ja na Suzana.
no gave it to Susanna
'No, we gave it to Susanna.'
- b. #Ne, dadoxme i knigata.
no gave her the-book
'No, we gave her the book.'
- c. #Ne, vzexme i ja.
no took her it
'No, we took it away from her.'

The facts in (4) reveal that XP-*li* questions are necessarily divided into focus and presupposition parts: the constituent appearing before *li* is interpreted as the focus and the remainder of the clause becomes part of the presupposition.

2.2. Unfocusable Phrases

Existentially quantified NPs like *someone*, *something*, etc. are inherently unfocusable because they cannot instantiate the variable in the presupposition of questions. Although these phrases are possible in *li*-questions, they cannot appear followed by *li*, where they would have a focused interpretation forced on them. The behavior of existentially quantified NPs is illustrated in (5) and (6):

- (5) a. [Dojde] *li* njakoj na sreštata?
 came Q someone to the-meeting
 'Did someone/anyone come to the meeting?' (BL)
- b. *[Njakoj] *li* dojde na sreštata?
 someone Q came to the-meeting (BL)
- (6) a. Oni sprosili, [kupila] *li* ona čto-nibud'.
 they asked bought Q she something
 'They asked if she bought something.' (RS)
- b. *Oni sprosili, [čto-nibud'] *li* ona kupila.
 they asked something Q she bought (RS)

Both (5a) and (5b) have the phrase *njakoj* 'someone' as a subject. In (5a) the verb precedes *li* and the sentence is grammatical. However, if *njakoj* appears in the position before *li*, as in (5b), the sentence becomes ungrammatical because the existentially quantified NP is incompatible with a focus interpretation. The placement of a phrase like *njakoj* in focus position potentially denies the truth of the presupposition. For example, in (5b) it is presupposed that someone came to the meeting, but the focusing of *njakoj* potentially allows for a negative answer, which would contradict the presupposition:

- (7) Presupposition: Someone came to the meeting.
 Question: Did someone come to the meeting?

In sum, the distribution of existentially quantified NPs in *li*-questions provides evidence that the *XP-li* questions are necessarily associated with a focus-presupposition partitioning with the pre-*li* maximal projection being the focus of the question.

2.3. Contrastive Foci

As we just saw, the *XP-li* construction sets up a bipartite structure: the pre-*li* maximal projection is focused, while the rest of the clause is presupposed. Since the remainder of the clause is presupposed, focused material, as indicated by stress, cannot

appear there, as shown in (8).³ (Stress, and hence contrastive focus, is indicated by capitals.)

- (8) a. Oni sprosili, [Ivan] *li* ušel včera.
 they asked Ivan Q left yesterday
 'They asked if Ivan-FOC had left yesterday.' (RS)
- b. *Oni sprosili, [Ivan] *li* USEL včera.
 they asked Ivan Q left yesterday
- c. *Oni sprosili, [Ivan] *li* ušel VCERA.
 they asked Ivan Q left yesterday

In (8a) the subject *Ivan* appears before *li* and is the focus of the question. It is impossible to focus any other element of the sentence in this construction. So, (8b) in which the verb is stressed and thus must be interpreted as contrastively focused, is ungrammatical. The same holds for (8c) in which the adverb is focused. We can draw the conclusion that when a maximal projection precedes *li* no other constituent can be focused; such a conclusion supports our position that the pre-*li* maximal projection is the focus of the question and the rest of the clause is part of the presupposition.

2.4. Focus Sensitive Adverbs

Similarly, only the maximal projection appearing before *li* can be the associate of focus sensitive adverbs like *only* and *even*, as shown in (9) and (10). (See Jackendoff 1972, Rooth 1992, von Stechow 1994, among others, for discussion of the phenomenon of association with focus.)

- (9) a. Samo [cvetja]_F *li* dadoxte na Marija?
 only flowers Q gave to Maria
 'Did you give only flowers to Maria?' (BL)
- b. *[Cvetja] *li* dadoxte samo [na Marija]_F?
 flowers Q gave only to Maria
 'Was it flowers that you gave only to Maria?' (BL)
- (10) a. Dori [na Ivan]_F *li* ne kazaxa za slučiloto se?
 even to Ivan Q Neg said about the-happened refl
 'Didn't they tell even Ivan about what happened?' (BL)
- b. *[Na Ivan] *li* ne kazaxa dori [za slučiloto se]_F?
 to Ivan Q Neg said even about the-happened refl
 'Didn't they tell Ivan about even what happened?' (BL)

³ The observation that sentences like (8b) and (8c) are not acceptable is due to Chvany (1973). Multiple foci are possible in very limited situations, i.e., in corrections of previously uttered questions, and yield an echo reading.

In (9a), the maximal projection before *li*, *cvetja* 'flowers' is associated with the focus sensitive adverb *samo* 'only' and the question is well-formed. However, in (9b) a maximal projection *na Marija* 'to Maria' in the presupposed, i.e., post-*li*, portion of the question is the associate of *samo* and the question is ungrammatical. (10) demonstrates that the same pattern holds with the focus sensitive adverb *dori* 'even'. Thus, focus sensitive adverbs can only take the focused, pre-*li* maximal projection, as their associate; they cannot be interpreted with constituents elsewhere in the clause.

2.5. Left Dislocation

Left-dislocated constituents cannot appear immediately before *li* because their backgrounded interpretation is incompatible with the obligatory focus reading of the pre-*li* maximal projection. Left-dislocated constituents can appear in *li* questions, but only if another maximal projection or the verb appears before *li*. These facts are illustrated in (11):

- (11) a. *[Ivan]_{LD} *li*, toj *ti* kaza?
Ivan Q he you told
'Ivan, was he the one to tell you?' (BL)
- b. [Ivan]_{LD} [toj] *li* ti kaza?
Ivan he Q you told
'Ivan, was he the one to tell you?' (BL)
- c. [Ivan]_{LD} [kaza] *li* ti toj?
Ivan told Q you he
'Ivan, did he tell you?' (BL)

In (11a) the left-dislocated phrase *Ivan* appears immediately before *li* and the question is ungrammatical because of the conflicting requirements that *Ivan* be focused, due to its pre-*li* position, and interpreted as part of the background, due to its left dislocation. In contrast, (11b) is fine since the left-dislocated phrase, although coreferential with the focused pre-*li* constituent, is not itself focused.

2.6. The Domain of Focus

Interestingly, the pre-*li* position defines the domain of focus, but need not be focused entirely. This is similar to the observation in Chomsky (1971), Jackendoff (1972) that in English clefts, although the focus must be contained within the clefted portion of the sentence, it need not be the entire clefted portion. An example is provided by the question-answer pairs in (12)-(13) (from Chomsky 1971). Although (13a) is a possible answer to (12), so is (13b).

- (12) Was it [an ex-convict with a red shirt] that he was warned to look out for?
- (13) a. No, it was [an AUTOMOBILE salesman]_F that he was warned to look out for.
b. No, it was [an ex-convict with a red [TIE]_F] that he was warned to look out for.

The felicity of (13b) as a response to (12) shows that the focus may be just a subconstituent of the clefted phrase, in this case *tie*, and need not be the whole clefted phrase.

Similarly, in the XP-*li* construction if a complex maximal projection is in initial position, some subconstituent of it must be focused, but the remainder of it need not be. The focus intonation associated with the XP-*li* construction demarcates which portion of the initial maximal projection is the focus, as in (14), (similar to facts discussed in Selkirk 1984).

- (14) a. [[NOVATA]_F kola] *li* prodade (ili starata)?
the-new car Q sold or the-old
'Did you sell your [NEW]_F car (or the old one)?' (BL)
- b. [Novata KOLA]_F *li* prodade?
the-new car Q sold
'Did you sell your [new CAR]_F?' (BL)

In (14a) the NP *novata kola* 'the new car' is in the pre-*li* position. However, the focus of the question can be the adjective *novata* 'new', while the head noun *kola* 'car' may be presupposed along with the rest of the clause.⁴ As seen in (14b), it is also possible to focus the entire pre-*li* NP, although the stress pattern will be different. The same situation holds in Russian, although this is somewhat obscured by the prosodic restriction on Russian *li* that it appear after the first prosodic word (King 1994).

- (15) a. [[DOROGUJU]_F li knigu] ona kupila?
expensive Q book she bought
'Did she buy [an expensive]_F book?' (RS)
- b. [Doroguju li KNIGU]_F ona kupila?
expensive Q book she bought
'Did she buy [an expensive book]_F?' (RS)

To summarize the discussion in this section, in the XP-*li* construction the maximal projection appearing before *li* (or some subpart of that maximal projection) is obligatorily focused, while the rest of the clause is presupposed and hence cannot contain focused material.

⁴ *Li* is an enclitic and in Russian it exhibits strict second-word effects. In Bulgarian it is also possible for *li* to split constituents, i.e., just the adjective can appear before *li*, as in (i), even though adjectives cannot normally be extracted from NPs.

(i) [NOVATA]_F *li* kola prodade (ili starata)?
the-new Q car sold or the-old
'Did you sell your [NEW]_F car (or the old one)?' (BL)

This placement is a remnant of the second position effects in the placement of *li*. In Izvorski, King, and Rudin (1995) we discuss some of the issues concerning the interaction between the syntactic and phonological requirements on the placement of *li*.

3. V-*li* Constructions

Next consider the V-*li* construction, as in (16). Unlike the XP-*li* construction, here there is no obligatory focus. Although the verb appears before *li*, it need not be focused, unlike maximal projections that appear before *li*.⁵ Instead, the question is neutral and simply questions the existence of the event/state of affairs described by the clause. This neutral interpretation can be seen in the appropriateness of answers and in the distribution of contrastive foci and focus sensitive adverbs. As will be seen below, a focus-presupposition reading similar to that of the XP-*li* construction can be overlaid on the V-*li* construction. This occurs in the same way that focus can be overlaid on a simple declarative sentence.

3.1. 'Natural' Answers

Since the V-*li* construction does not contain an obligatory focus or corresponding presupposition, a negative answer negates the entire event/state of affairs. (For related discussion see Hajicová 1983; also see Kiefer 1980 on the felicity of responses to different types of yes-no questions.) The distinction between 'natural' and 'unnatural' answers illustrated in (16) holds in case the question has neutral intonation; if there is emphatic stress on the verb, then the answer in (16b) becomes felicitous.

(16) [Dadoxte] *li* nagradata na Marija?
gave Q the-prize to Maria
'Did you give the prize to Maria?' (BL)

- a. Ne, ne i ja dadoxme.
no not her it gave
'No, we didn't give it to her.'
- b. #Ne, prodadoxme i ja.
no sold her it
'No, we sold it to her.'

So, in (16), a negative answer denies that the addressees gave the prize to Maria. There is no focus reading on the verb in (16); if such were the case, someone's doing something to the prize would be presupposed and (16b) would be felicitous as it would instantiate the variable in the presupposition.

3.2. Contrastive Foci

We saw that in the XP-*li* construction the remainder of the clause was presupposed and hence no focus could appear in it. Since the V-*li* construction does not involve focus-presupposition partitioning, it is predicted that focused phrases can appear anywhere in the clause, as in (17) in which any constituent, including the initial verb, can be focused by emphatic stress.

⁵ The verb can be contrastively focused by emphatic stress in V-*li* questions.

- (17) a. Oni sprosili, [ušel] *li* Ivan včera.
they asked left Q Ivan yesterday
'They asked if Ivan had left yesterday.' (RS)
- b. Oni sprosili, [USEL]_F *li* Ivan včera.
they asked left Q Ivan yesterday
'They asked if Ivan had [left]_F yesterday.' (RS)
- c. Oni sprosili, [ušel] *li* [IVAN]_F včera.
they asked left Q Ivan yesterday
'They asked if [Ivan]_F had left yesterday.' (RS)
- d. Oni sprosili, [ušel] *li* Ivan [VCERA]_F.
they asked left Q Ivan yesterday
'They asked if Ivan had left [yesterday]_F.' (RS)

(17a) is the 'neutral' reading of the question and has no emphatic stress. However, if emphatic stress is placed on any constituent, that constituent is the focus of the question. This stress and corresponding focusing can fall on any item, even though it is the verb that appears before *li*. First, the verb itself can be contrastively focused, as in (17b). The stress on the verb forces a focused reading in which the implication of the question is that Ivan did something yesterday, but the speaker is not sure what, perhaps Ivan left. This contrasts with (17a) in which the question has no such implication and merely asks whether Ivan left yesterday or not. In (17c) the subject *Ivan* is contrastively focused, and in (17d) the adverb *včera* receives contrastive focus interpretation.

3.3. Focus Sensitive Adverbs

Similarly, in the V-*li* construction adverbs associated with focus can appear anywhere in the clause, in contrast to the XP-*li* construction where such adverbs can only be associated with the pre-*li* constituent.

- (18) a. Dade *li* samo [Ivan]_F cvetja na Marija?
gave Q only Ivan flowersto Maria
'Did only [Ivan]_F give flowers to Maria?' (BL)
- b. Dade *li* Ivan samo [cvetja]_F na Marija?
gave Q Ivan only flowersto Maria
'Was it only [flowers]_F that Ivan gave to Maria?' (BL)
- c. Dade *li* Ivan cvetja samo [na Marija]_F?
gave Q Ivan flowersonly to Maria
'Was it only [to Maria]_F that Ivan gave flowers?' (BL)

So in (18) the focus sensitive adverb *samo* 'only' can be associated with any constituent in the clause.

The above discussion reveals that there is an asymmetry in the behavior of maximal projections and verbs in *li*-questions. While the XPs preceding *li* are obligatorily interpreted as focused, when the verb precedes *li* it is not necessarily interpreted as focused. A similar asymmetry in the behavior of maximal projections and verbs with respect to focus is noted in Selkirk (1984) who observes that "a non-focused NP is necessarily interpreted as old information, but a non-focused verb is not".

Analysis

Examples (19) and (20) show that *li* cannot appear sentence-initially without a fronted constituent (a maximal projection or the verb) and also that *li* cannot follow maximal projections in their base-generated position.

(19) a. **Li* dadoxte nagradata na Marija?
Q gave the-prize to Maria
'Was it the prize that you gave to Maria?' (BL)

b. *Dadoxte [nagradata] *li* na Marija?
gave the-prize Q to Maria
'Was it the prize that you gave to Maria?' (BL)

(20) a. **Li* Anna pročitala knigu?
Q Anna read book
'Was it a book that Anna read?' (RS)

b. *Anna pročitala [knigu] *li*?
Anna read book Q
'Was it a book that Anna read?' (RS)

The ungrammaticality of (19a) and (20a) can be attributed to the fact that *li* in Russian and Bulgarian is an enclitic and requires a phonological host on its left. The fronting of maximal projections to *li* and their obligatory focused interpretation, however, cannot be due to the enclitic nature of *li* (leaving aside the question of whether syntactic movement can be triggered by phonological requirements). If fronting was solely for the purposes of providing *li* with a host, we would expect it to be possible for some constituent, let's say the subject, to appear before *li* while another constituent is interpreted as focused. This, however, is never an option. The maximal projection that serves as a host for *li* is always interpreted as focused. Maximal projections in-situ never be the focus in *li*-questions.

The ungrammaticality of (19b) and (20b) further suggests that *li*'s position in the clause structure is fixed and thus provides additional evidence that the variation in word order in *li*-questions (XP-*li* vs. V-*li*) is the result of XP- or verb-movement.

We analyze this interaction of focus readings and distribution of the pre-*li* constituent as follows. *Li* is located in C⁰ and is the lexical realization of the [+Q]

feature and, optionally, of a [+F] feature.⁶ The satisfaction of these features' requirements accounts both for the focus reading found in the XP-*li* construction and for the distribution of pre-*li* constituents. Our proposal differs from previous analyses of *li*, such as that of Penčev (1993), in which *li* in Bulgarian is said to be adjoined to the constituent it questions and thus is given an adverbial status. Rivero (1993) analyzes *li* as a complementizer but she does not address the question of focus.

To explicate our proposal, first consider what happens when the [+F] feature is present. When *li* has the [+F] feature, it attracts a maximal projection to its Spec position where the [+F] feature is checked. As a result, the maximal projection is obligatorily interpreted as focused and the rest of the clause is presupposed. The [+Q] feature is also checked via Spec-head agreement between *li* and the fronted XP. This configuration is shown in (21).

(21) [_{CP} XP_i [_C *li*] [_{IP} t_i]]
 [+F]
 [+Q]

The [+F] feature is optional. However, whenever it is realized, a maximal projection obligatorily appears in the Spec position, attracted by the feature. Why then does the verb appear before *li* in neutral questions? This is because the verb satisfies *li*'s [+Q] feature, resulting in the neutral question interpretation of the clause. This structure is shown in (22):

(22) [_{CP} [_C [V-*li*] *li*] [_{IP} [t t_i]]]
 [+Q]

In compound tenses, the auxiliary raises, as seen in (23), and as expected under the proposal that verb-movement to *li* is not triggered by the need for checking of a [+F] feature.

(23) a. Maria beše *li* napisala statijata?
Maria was Q written the-article
'Had Maria written the article?' (BL)

b. Bixte *li* mi pomognali?
would Q me helped
'Would you help me?' (BL)

c. Budet *li* on žit' v Moskve?
will Q he livein Moscow
'Will he live in Moscow?' (RS)

For example, in (23a) the auxiliary *beše* moves from I⁰ to *li* where it hosts *li* and supports *li*'s [+Q] feature. There is no [+F] feature; this is why no constituent is focused and no maximal projection is attracted to Spec, CP.

⁶ There are some reasons to believe that *li* in Bulgarian may be located in a functional projection between CP and IP (see Izvorski 1994). Since such details are beyond the scope of the discussion in this paper, we will consider *li* to be a complementizer in both languages.

5. The Range of Uses of *li*

We presented so far an uniform analysis of the distribution of focus in Bulgarian and Russian *li*-questions. We next turn to some differences between the two languages that are of interest to our present discussion of focus and the nature of *li*.⁷ While in Russian *li* is mostly restricted to yes-no questions, Bulgarian allows its use in a wider range of environments. That in Bulgarian *li* does not necessarily type the clause as a yes-no question is evident from the fact that *li* is permitted in *wh*-questions (both root and embedded), while in Russian *li* cannot cooccur with *wh*-phrases:

- (24) a. [Kakvo]_F *li* nameri?
 what Q found
 'What on earth did s/he find?' (BL)
- b. *[Čto] *li* ona delaet?
 what Q she do
 'What is she doing?' (RS)

In the Bulgarian (24a) *li* follows the *wh*-phrase *kakvo* and the result is similar to an XP-*li* construction in that *kakvo* is focused. In contrast, in (24b) *li* cannot occur with a *wh*-phrase in Russian, regardless of whether the *wh*-phrase is focused.⁸

A consideration of a wider range of data reveals that *li* can also occur in non-interrogative environments. These are primarily exemplified by conditionals and related adjunct clauses, like the ones introduced by Bulgarian *kato če li* 'as if'. In Bulgarian *li*

⁷ The distribution of topics in *li*-questions in the two languages also deserves to be mentioned in the context of our current discussion. Although *li* appears in the same basic configurations in both Bulgarian and Russian, and the distribution of focused elements is the same in the two languages, topicalized constituents behave differently. Topics precede the XP-*li* group in Bulgarian, but follow it in Russian. So, in Russian the focused elements appear in SpecCP in initial position, to the left of any topicalized constituents, as in (i).

- (i) [Ivan]_F *li* [čtu poëmu]_T čital?
 Ivan Q this poem read
 'Did [Ivan]_F read [this poem]_T?' (RS)

In (i) the object *čtu poëmu* 'this poem' is topicalized and appears before the verb, following the focused subject *Ivan* and *li* in C'. In Bulgarian topicalized constituents appear before the focused maximal projection, as in (ii). Note that the lack of clitic doubling indicates that the topicalized constituent is part of the clause, i.e., it is not dislocated.

- (ii) a. [Na Marija]_T [cvetja]_F *li* podari Ivan?
 to Maria flowers Q gave Ivan
 'Was it flowers that Ivan gave to Maria?' (BL)
- b. *[Cvetja]_F *li* [na Marija]_T podari Ivan?
 flowers Q to Maria gave Ivan

The same distinction obtains in the case of *wh*-questions: topicalized phrases follow the *wh*-phrase in Russian but precede it in Bulgarian. Here we will not address the question of the proper analysis of this distinction.

⁸ Fixed expressions like *čto li* (literally 'what if') can still appear in some emphatic, tag-like contexts in Russian:

- (i) Čto ty nad nami smecš'ja, čto *li*?
 what you over us laugh what
 'Why are you laughing at us?'

is productively used in conditionals, although it is less common than the *ako* 'if' complementizer (see (25 a, b)). In Russian, conditionals are formed with *esli, esli by* 'if' (indicative/counterfactual) and *li* is mostly restricted to concessive adjuncts (see (25 a, b)):

- (25) a. Zavali *li* dūžd, šte si ostanem vkušti.
 start-fall rain willrefl remain at-home
 'If it starts raining we'll stay at home.' (BL)
- b. Razvalena *li* e jabūlkata, trjabva da ja hvūrliš.
 rotten is the-apple must to it throw
 'If the apple is rotten, you must throw it away.' (BL)
- (26) a. Idet *li* dožd' ili svetit solnce, vse ravno oni guljajut po
 comes rain or shine sun all equal they walk for
 času v den'
 hour in day
 'Whether it rains or it's sunny they still go for a walk for an hour every day.' (RS)
- b. Rano *li* pozdno *li* no pridu.
 early late but will-come
 'Whether sooner or later I will come.' (RS)

Both the verb and fronted maximal projections can precede *li* in these cases, just like in sentences where *li* is used interrogatively. Thus it appears that the syntax of *li* is the same in all constructions and what is changing is *li*'s featural composition. A promising extension of our analysis is the position that *li* is signaling non-assertion, and its feature content, rather than being strictly [+Q] is more along the lines of *indefinite truth value*.⁹ Such an approach would unify the interrogative and conditional uses of *li* and would account for the fact that *li* does not appear in declarative clauses.¹⁰

The link between conditionals and questions is common crosslinguistically (e.g. English *if/whether*), therefore *li*'s behavior is not surprising. What is perhaps more interesting is the diachronic relationship between the conditional and the interrogative uses of *li* in the two languages. As pointed out above, *li* is no longer productively used in Russian conditionals. Its use in matrix interrogative clauses is also becoming more restricted in this language, at least in the absence of focused maximal projections;

⁹ We thank Barbara Partee for this suggestion.

¹⁰ In both languages *li* also appears in the fixed phrase *edva li* which is used in declaratives but which contributes to them the meaning 'It's doubtful that' (cf. (i) from Bulgarian):

- (i) Ivan edva *li* šte dojde.
 Ivan hardly will come
 'It's doubtful that Ivan will come.'

Since the use of *li* in this case results in irrealis interpretation, the 'declarative' *edva li* sentences, rather than being a counterexample to our proposal that *li* is a non-assertion complementizer, actually support it.

instead sentences with declarative word order and interrogative intonation are mostly used as root questions. In fact the most usual way to form a main clause yes-no question is with no interrogative particle at all. In (27a), for example, question intonation is the only formal mark of interrogation. *Li* in Russian is used primarily for embedded questions and questions with a focused element. In Bulgarian, in contrast, (27b) with no *li* is ungrammatical.

- (27) a. Anna pročitała knigu? (cf. (2b))
 Anna read book
 'Did Anna read a book?' (RS)
- b. *Dadoxte nagradata na Marija? (cf. (1b))
 gave the-prize to Maria
 'Did you give the prize to Maria?' (BL)

So, unlike in Russian, in Bulgarian, *li* is fully productive in both root and embedded interrogative clauses as well as in conditionals. Thus it appears to be the case that what is being lost in Russian is the ability of *li* to function as an unselected complementizer. This loss directly affects root and adjunct environments, leaving intact only embedded interrogatives.

If the idea just suggested is on the right track, then it also would provide a way of accounting for the fact that *li* is disallowed in *wh*-questions in Russian, but is permitted in Bulgarian. A development that would make the use of *li* in conditionals obsolete would also affect its feature content and would narrow down *non-assertion* to [+Q]. The contents of the complementizer could then be even further restricted from a general interrogative to just a yes-no complementizer. This would prevent *li* from occurring in *wh*-questions in Russian since the requirement that the clause be a yes-no question will conflict with the requirements of the *wh*-phrase.

The synchronic effect of the changes discussed above can be summarized in the following way. We started the discussion in this paper proposing that *li* is a lexical realization of the features [+Q] and [+F]; we saw that the presence of [+F] was optional (i.e. absent in the V-*li* construction), and now we see that *li* is not necessarily [+Q] either. So, for Bulgarian we may conclude that the featural content of *li* is *non-assertion* (i.e. subsuming both the interrogative, [+Q], and the conditional uses). In the productively used Russian constructions, *li*, which was originally a *non-assertion* complementizer, is now restricted to a *yes-no* complementizer. Thus it seems that in Russian the *li* construction is becoming more restricted, with not only the non-interrogative uses but also the root occurrences that do not involve focusing tending to become archaic or marginal, while in Bulgarian a broader range of uses remains robust.

6 Conclusion and Cross-Linguistic Application

In conclusion, we have seen that both Bulgarian and Russian yes-no questions can be formed with the interrogative head *li*. There are two types of *li* constructions: one in which a maximal projection appears before *li* and one in which the verb does. These

two syntactic structures correspond to different interpretations. In the XP-*li* construction, the [+F] feature of *li* attracts a maximal projection to the Specifier position of *li*, where the fronted XP is obligatorily focused and the remainder of the clause is correspondingly presupposed. The V-*li* construction results when *li* has no [+F] feature. The verb moves to the head where *li* is (namely, C⁰) to check the [+Q] feature of *li*. There is no obligatory focusing since there is no [+F] feature to be checked and the result is a neutral yes-no question.

Thus, a division of yes-no questions into neutral and focus-containing types is supported by syntactic evidence in Bulgarian and Russian questions with the interrogative head *li*. The basic analysis proposed for Bulgarian and Russian yes-no questions formed with *li* can be extended to other languages with question particles. In particular, the Finnish particle *ko* and the Turkish particle *mi* pattern similarly to the *li* constructions.¹¹ First consider Finnish. As seen in (28), the question particle can follow the verb, resulting in neutral yes-no question interpretation as with the V-*li* construction in Bulgarian and Russian. The neutral interpretation is indicated by the natural answers in (28 a, b).

- (28) Juo-tt-i-ko Jussi Marja-lle vodka-a?
 drink-caus-past-Q John Mary-alla vodka-part
 'Did John make Mary drink vodka?'
- a. Juott-i.
 drink-PAST
 '(Yes), he made her drink.'
- b. Ei juotta-nut.
 not drink-PAST.NEG
 '(No), he didn't make her drink.'

As with the *li* construction, a maximal projection can precede the question marker *ko* and the resulting interpretation is necessarily that of focusing the pre-*ko* phrase. This is demonstrated in (29)–(31).

- (29) [Jussi]-ko Marja-lle vodka-a juotti?
 John-Q Mary-alla vodka-part drink-caus-past
 'Did [John]_F make Mary drink vodka?'
- Ei, vaan Pekka.
 No, but Peter.
 'No, Peter did.'
- (30) [Marja-lle]-ko Jussi vodka-a juotti?
 Mary-alla-Q John vodka-part drink-caus-past
 'Did John make [Mary]_F drink vodka?'

¹¹ For discussion of the Finnish question/focus particle see Vainikka (1991); the Turkish question/focus particle is discussed in Kuno (1980).

Ei, vaan Liisa-lle.
No, but Lisa-alla
'No, Lisa was made to.'

- (31) [Vodka-a-ko] Jussi Marja-lle juotti?
vodka-part-Q John Mary-alla drink-caus-past
'Did John make Mary drink [vodka]?'⁷

Ei, vaan viini-ä
No, but wine-ptv.
'No, wine.'

Next consider the Turkish data. The yes-no question marker in Turkish is *mi*, which has four vowel harmony variants. When *mi* is affixed to the verb, the result is a neutral yes-no question, as seen by the question-answer sequence in (32).

- (32) Azize kapamayı pişirdi *mi*?
Azize kapama cook Q
'Did Azize cook the kapama?'

Hayır, pişirmedi.
no cook-Neg
'No, she didn't cook it.'

However, when *mi* appears after a constituent other than the verb,¹² that constituent is focused, as in (33) and (34).

- (33) [Azize] *mi* kapamayı pişirdi?
Azize Q kapama cook
'Was it Azize who cooked the kapama?'

Hayır, Durdugül pişirdi.
No Durdugul cooked
'No, Durdugul cooked it.'

- (34) Azize [kapama] *mi* pişirdi?
Azize kapama Q cook
'Was it kapama that Azize cooked?'

Hayır, baklava.
No, (she cooked) baklava.

¹² The word order in (33) is relatively free in that the focused subject *Azize* and the question particle *mi* can also appear in the canonical focus position, immediately preceding the verb.

Thus, the Finnish and Turkish constructions demonstrate that the distinction between XP-*li* type constructions which encode obligatory focus on the maximal projection and V-*li* type constructions which encode neutral yes-no questions is necessary for the analysis of yes-no questions in a number of unrelated languages.

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