Focus, Exhaustivity and the Syntax of *Wh*-interrogatives:
The case of Hungarian
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Abstract:
Hungarian *wh*-interrogatives are reexamined in light of Horvath's (2007) Exhaustivity operator (EI-Op) analysis for movements earlier (mis)construed as triggered by a syntactically active [Focus] feature. Taking a fresh look at the EI-Op proposal, the paper reexamines what drives obligatory *wh*-preposing in interrogatives, its potential landing sites and relation to preposed non-*wh*-phrases, and analyzes the role played by the syntactic EI-Op, a clausal EI^0 head, and the head of CP (Force^0) in *wh*-movement and interpretation. I motivate a variant of the cross-linguistically attested phrasal Q-particle, namely a [Q]-bearing EI-Op heading Hungarian "*wh*-phrases", and show the EI^0 clausal head to trigger overt "*wh*-movement", and the [Q]-feature of the head of CP to only undergo 'Agree' with the [Q]-bearing EI-Op phrase (alias *wh*-phrase).

1. Introduction

Wh-interrogatives, viewed in a pre-theoretical perspective, divide languages into three basic types: (i) *wh*-movement (of the English-type), (ii) *wh*-in-situ, and (iii) multiple *wh*-fronting languages. Although the proposed accounts vary, advancing different hypotheses regarding the structure of *wh*-phrases, the formal features that trigger their movements, and the mechanisms providing the relevant interpretations, they all share the assumption that if an interrogative *wh*-construction requires the movement of (at least) one *wh*-interrogative element, this movement targets the edge of CP (Spec, CP position) (see in particular Cheng's (1991) clause-typing hypothesis, and subsequent work such as Watanabe (1992), Tsai (1994), Richards (1997), Hagstrom (1998), Cable (2010)).

In the 1980s and '90s it was commonly assumed that if the *wh*-phrase of interrogative clauses does not move to Spec of CP (Spec, ForceP), overtly or covertly, then the particular language does not have "*wh*-movement", in the sense of movement triggered by a Q_{wh}-feature (a Q_{wh} probe in current terminology); instead, it was considered a "*wh*-in-situ" language. In such a language, when a *wh*-phrase still underwent movement, this was taken to be an instance of some other (non-*wh*-specific) movement that may be affecting *wh*-phrases just as it does non-wh-phrases in the particular language. Most often such movements were analyzed as manifestations of optional "scrambling", or more significantly – as was the case for Hungarian – as instances of an independently motivated "Focus-movement". In the present paper I investigate and elaborate this latter assumption, based on a reexamination of the (overt) preposing required in Hungarian *wh*-interrogatives. Specifically, the paper sets out to assess the movement and interpretation of *wh*-phrases in interrogatives, and their relation to the so-called "Focus-movement" operation and interaction with preposed non-*wh* "Focus" phrases in the language.

The movement of *wh*-interrogative phrases qua Focus-phrases in languages with a designated surface Focus position in their clause structure has been a widely accepted analysis in the literature, at least since the early 1980s (see especially Horvath 1981, 1986;

Culicover and Rochemont 1983; Rochemont 1986; Cheng 1991, and subsequent studies on a variety of individual languages, as e.g. in É. Kiss 1995). Hungarian has been considered as a canonical case of such a language. The language was known to exhibit *wh*-items (*mi* 'what', *ki* 'who', *melyik* 'which' *miért* 'why', *mikor* 'when', *hol* 'where', etc.) in a variety of constructions, and these underwent movements parallel to those of the familiar English-type languages, both in interrogative and relative clauses. But unlike wh-phrases in the latter language-type, Hungarian preposed interrogatives were shown to occupy an immediately pre-V position, hierarchically clearly lower than the Spec of CP (as will be shown in section 2 below); as such, they were also in obvious contrast with the moved *wh*-element of relatives within Hungarian (as observed in Horvath (1981, 1986), É. Kiss (1987)).

The proposed explanation for this prima facie unexpected behavior of "*wh*-movement" was based on the fact that Hungarian had an independently well-motivated (non-*wh*) movement operation, namely the so-called "Focus-movement". This, in conjunction with the further finding that the *wh*-phrase of interrogatives seems to move to the same syntactic position that has been recognized as the landing site of Focus movement (i.e., the designated Focus position in Hungarian clause structure), provided the key to an account for the contrast between *wh*-questions in the Hungarian versus the English-type languages, as well as for the *wh*-question versus *wh*-relative contrast within Hungarian. Specifically, Horvath (1981, 1986) argued that the interrogative *wh*-phrase should be assumed to move by Focus-movement, a movement that was attributed in this work to a syntactic feature [Focus]. The feature [Focus] as a formal feature active in the syntax was postulated in Horvath (1981, 1986) based on the properties and distribution of non-*wh* focus phrases (as those corresponding to the *wh*-phrase in answers to such questions); its need to be assigned/checked was what triggered overt movement of a focus phrase to the structural "Focus"-position. This syntactic [Focus] feature was subsequently taken to project a category F^0, heading a clausal functional projection FP and its Spec position serving as the landing site for the movement triggered by the [Focus] feature (Brody 1990, 1995, Rizzi 1997).

What is crucial for us in the present study are the pair of questions (both to be addressed in the subsequent sections): (i) Why would *wh*-movement in (single-wh) interrogatives (unlike *wh*-movement in relatives) obligatorily target the same structural position as non-*wh* "Focus" phrases do, and does it indeed? (ii) Why could interrogative *wh*-phrases fail to move to the position of the cross-linguistically well-established Spec of CP (i.e., Spec, ForceP) position driven by interrogative C (the Q_{wh} -probe), as is the case for other overt *wh*-movement languages?

An answer to question (i) has been put forward in Horvath (1986, 2.3): it was based on the postulation of *a universal requirement for the interrogative wh-operator to bear the feature [Focus]* – a requirement motivated by its discourse function being parallel to that of a Focus phrase: being the non-presupposed/discourse-new element of their sentence, and rendering the rest of the sentence *presupposed* (as discussed in sect. 2 below). This universal [Focus] feature requirement on the Wh-Q operator was in turn further supported by the systematic parallelism observed between the interrogative *wh*-phrase and the Focus constituent in a wide variety of individual languages in terms of syntactic distribution, and often also morphological marking.

In more recent work exploring further properties of "Focus-movement" within Hungarian and across languages however, I have been led to question and reassess the status of [Focus] as a syntactic feature. In a series of studies I argued, on various empirical and conceptual grounds, that contrary to widely held assumptions, the notion Focus is not encoded by a formal syntactic feature ([Focus]) that could be active within the computational system (in addition to being legible to the semantics and phonology); hence no FP projection can be the attractor, or serve as landing site, for any so-called Focus-movement (Horvath 1997a/2000, 2007, 2010).[1] In fact, based on a reexamination of Hungarian's (alleged) Focus-movement, I argued that instead, at least in this language, it is a syntactically realized (phonologically null) *exhaustivity operator* labeled EI-Op (EI standing for Exhaustive Identification), and a clausal functional head EI^0 projected by a formal feature [EI] that drives the overt preposing of the EI-Op phrase. The reason why this EI-Op preposing could be mistaken for "Focus movement" also becomes clear under the proposal: the EI-Op is shown to be a focus sensitive operator, which similarly to its overt counterpart *only*, must "associate" with Focus in its domain.

But if this reanalysis decomposing the alleged "Focus movement" is on the right track, then the basic issues regarding *wh*-Q movement (at least in the Hungarian-type case) obviously need to be reassessed. Whatever drives the movement of *wh*-interrogatives cannot be [Focus]. The following questions must be investigated with a fresh perspective: (a) What drives the obligatory preposing of the interrogative *wh*-phrase? (b) Where is/are its actual landing site(s)? and (c) What role (if any) does the EI-Op, the clausal EI^0 head, and the C^0 ($Force^0$) head of the CP layer play in the movement and interpretation of interrogatives?

Below we reexamine the nature and driving force of the movements attested in *wh*-interrogatives in light of the novel EI-Op analysis for what has earlier been (mis)construed to be movements triggered by a syntactically active [Focus] feature. Section 2 provides a brief review of the parallels between *wh*-interrogatives and Focus constructions, commonly noted within Hungarian and across languages, and sketches a widely assumed [Focus]-based account aimed at capturing the generalization. Section 3 outlines an alternative theory of "Focus movements" (based on Horvath 1997a/2000, 2007, 2010) that (a) eliminates the assumption of a syntactic feature [Focus] from the theory altogether, and (b) motivates the EI-Op (syntactic Exhaustivity operator-based) account for what formerly was construed as Focus movement in Hungarian. Given this background, section 4 turns to a systematic comparison between the preposing of *wh*-interrogatives and (non-*wh*) EI-Op movements (the former "Focus-movements"). Particular attention will be paid to the issue of the landing site(s) of the relevant preposing

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[1]Note that this does not mean that some post-syntactic annotation, introduced at the interface of syntax with the interpretive components (a version of "F-marking") is automatically excluded as a means of mediating between the phonology and corresponding semantic interpretation of focus. However a more restrictive and economical option proposed in the literature (see e.g. Cinque 1993, Reinhart 1995, Szendrői (2003)) is to assume main stress assignment itself, applying directly to the output of the syntactic derivation, to play this mediating role between the two interpretive components. But whether we adopt the latter, purely stress-based, treatment of focus or rely on F-marking introduced at the interface is orthogonal to my proposal to eliminate [F(ocus)] as a syntactic feature active in the computational system and adopt instead a non-Focus-driven treatment of the so-called Focus-movement operation. Importantly, even if F-marking turned out to be indispensable at the interface as a device for capturing the correspondence between focus-prosody and interpretation, its properties (distribution, projection) are distinct from those manifested by the feature that drives the syntactic movement under discussion (as argued in Horvath (2007) and related work). Hence [F]-marking could not be identified with the *syntactic* feature involved in the movement.

operations (comparing *wh* and non-*wh* cases), the role of particular functional heads, selection/clause-typing, a locality requirement, and intervention effects manifested in single-*wh* questions. In section 5, we explore clauses exhibiting multiple preposing to a "pre-verbal" landing site, with the aim of identifying what cooccurrences of preposed *wh*-interrogatives and non-*wh* EI-Op phrases (Focus phrases under former proposals) are possible/impossible, and what the distributional patterns observed entail regarding the analysis of the relevant movement operations.

2. Interrogative *wh*-phrases and the syntax of "Focus": previous accounts

2.1 *Wh*-questions: movements and landing sites

As is also well-known from the literature, a wide range of languages exhibit syntactic, and often also morphological, parallelism between their *wh*-interrogative and (non-*wh*) Focus constructions (e.g. Basque, Aghem, Old Japanese, Sinhala, Malayalam, Kikuyu, Kitharaka, Somali, just to mention a few). A question frequently raised with regard to such *wh*-interrogative constructions in cross-linguistic studies has been: Why is it that languages that have a dedicated surface "Focus" position in their clause structure seem to consistently exhibit the *wh*-phrase of their interrogatives in this particular surface position?

To capture this cross-linguistic correlation, I proposed in earlier work the following universal requirement regarding the Wh-Q (question) operator (Horvath 1981, 1986 p. 118 (43)):

The FOCUS Constraint on the Wh-Q Operator:
(1)   A non-echo question interpretation can be derived only if the Wh-Q operator bears the feature [Focus] at LF.

Addressing the rationale behind this generalization, and specifically, why *wh*-interrogative phrases would need to uniformly exhibit the feature [Focus], Horvath (1981, 1986 sect. 2.3) pointed to the fact that what interrogative *wh*-phrases and non-*wh* focus phrases have in common is the property of being *discourse-new*, while the rest of the sentence is *presupposed* (i.e., not discourse-new) information. Thus the [Focus]-marking and overt preposing of a *wh*-interrogative phrase, just like that of a non-*wh* phrase, was taken to serve the purpose of partitioning the presupposed part of the sentence from the non-presupposed (discourse-new) part. I noted that questions and their congruent answers have the same *presupposition* (in the sense of Jackendoff 1972), and the extraction of the interrogative *wh*-phrase in the question as well as a corresponding non-*wh* "Focus" phrase in its answer derived this shared presupposition, rendering it an open sentence. It was in this sense that I claimed the interrogative *wh*-phrase corresponded to a (non-*wh*) Focus phrase, and this was seen as the underlying reason why a *wh*-phrase in interrogatives needed to be marked as [Focus]. The [Focus] requirement (1) in turn meant that in "designated" Focus-position languages a *wh*-interrogative had to appear in the same surface position as a non-*wh* Focus phrase did .

A wide variety of subsequent studies (Culicover and Rochemont 1983; Rochemont 1986; Cheng 1991, 1997; Bošković 2002, and many others in accounts of particular languages) have assumed and built on this [Focus]-marking requirement for

wh-interrogatives. The observed parallels with Focus constructions in particular languages led to analyses of some cases of obligatory *wh*-fronting as not due to "*wh*-movement" at all, but to an independent operation of Focus-fronting (see e.g. Horvath 1986, Cheng 1991, Bošković 2002). Note here that the need normally assumed to drive movement in *wh*-interrogatives, namely marking interrogative Force (checking an interrogative feature) on the C head of the clause, was taken not to be satisfied by the overt movement of the *wh*-phrase in such cases. The question these proposals needed to address was: how do various languages of this type implement selection for interrogative Force, and typing of clauses as interrogatives? We return to the discussion of this issue in relation to the case of Hungarian in section 4.

2.2 *Syntactic parallels between "Focus" and* <u>*Wh*-interrogatives</u> *in Hungarian*

Hungarian has long been considered a representative of the above language-type as its interrogatives require overt movement of a *wh*-phrase, and its landing site is clearly not the Spec, CP position. The prevailing view in the literature has been that the interrogative *wh*-phrase moves to a pre-verbal position known as the designated structural "Focus position": a position left-adjacent to V in Hungarian clause structure.

That the landing site of the *wh*-interrogative phrase is hierarchically lower than the head of CP is most directly manifested in the well-known fact that it appears to the right of a number of different kinds of left-peripheral elements of CP. Specifically overt material that precedes the surface position of the preposed interrogative *wh*-phrase in Hungarian clauses includes the following elements (possibly several, cooccurring in the same clause): the C^0 head of CP (*hogy* 'that') or a relative pronoun (e.g. *a-ki* 'who (rel)' *a-melyik* 'which (rel)'), followed by one or more preposed topic phrase, as well as a variety of adverbials. As has commonly been observed, preposed (non-*wh*) "Focus" phrases occur in the position left-adjacent to V, and are also preceded by the same types of constituents. (The adjacency to V and the post-V position of normally pre-verbal particles is attributed by most analyses to V-raising.) That topicalized phrases, as well as the complementizer, precede the "Focus-moved" phrase and that the same is true for the *wh*-interrogative, is demonstrated in (2) and (3), respectively:

(2)   Tudják,   [hogy Pétert   [AZ UNOKAHÚGOMNAK] mutattam   be].
         know.3PL that   Péter.ACC   the niece.my.DAT   showed.1SG PRT
         'They know that Péter, I introduced TO MY NIECE.'

(3)   Tudják,   [hogy Pétert   [KINEK]   mutattad   be].
         know.3PL   that   Péter.ACC   who.DAT   showed.2SG PRT
         'They know to whom you introduced Péter.'

Beyond the above parallelism of surface position between Focus and *wh*-interrogative phrases shown in (2)-(3), the two constructions are known to exhibit a whole array of further parallels, as listed in (4a-h) below.

(4)   <u>Parallels between a "Focus-moved" (non-*wh*) phrase and the moved *wh*-phrase in (single-*wh*) interrogatives[2]</u>:

   a. Both obligatorily precede V
   b. Both can be preceded by (multiple) topicalized phrases
   c. Both are preceded by complementizers (e.g. overt *hogy* 'that' in finite embedded clauses)
   d. Both bear the main stress of the clause, and induce stress reduction on the rest
   e. Both induce *V – Prt* order, instead of the normal *Prt – V* order
   f. Both must be adjacent to the verb (no adverbs or parentheticals can intervene)
   g. Both undergo long, successive-cyclic, movement, and when they do, no *V – Prt* order is triggered in the intermediate clauses they pass through, only in the clause they occur in overtly; see (5a-b)

(5) a. **Kinek**   láttad   meg, [hogy {<u>be-mutatták/*mutatták   be</u>}
       who.DAT saw.2SG PRT   that   PRT-showed.3PL/showed.3PL PRT

   Jánost   *t*]?
   János.ACC
   'To whom did you notice that they introduced János?'

   b. **MARINAK** láttam   meg [hogy{<u>be-mutatták/*mutatták   be</u>}
      Mari.DAT saw.1SG PRT that PRT-showed.3PL/showed.3PL PRT

   Jánost   *t*].
   János.ACC
   'I noticed that they introduced János to MARI.' ('It's TO MARI that I observed they introduced János.')

(h) Both license a *csak* 'only'+Focus phrase in the post-V domain – otherwise a *csak*-phrase must occupy the immediately pre-V position; see (6a-b), in contrast to (6c-d).

(6) a. **Ki** látogatja   meg külföldön   csak A FIÁT?
      who visit.3SG   PRT abroad   only the son.3POSS.ACC
      'Who visits abroad only her son?'

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   b. **MARI**   látogatja   meg külföldön <u>csak A FIÁT</u>.
      Mari.NOM visit-3SG PRT abroad   only the son.3POSS.ACC
      'MARI visits abroad only her son.'

      <u>No Focus/*wh*-phrase to the left of V (see PRT-V order)</u>:
   c. *Mari   meg-látogatja   külföldön <u>csak A FIÁT</u>.
       Mari.NOM PRT-visit.3SG abroad   only the son.3POSS.ACC
      'Mari visits abroad only her son.'

      <u>'also'+Focus phrase but not in the "Focus" position (see PRT-V order)</u>:
   d. *MARI   is   meg-látogatja külföldön <u>csak A FIÁT</u> .
      Mari.NOM also PRT-visit.3SG abroad   only the son.3POSS.ACC
      'Also Mari visits abroad only her son.'

Noting robust parallelisms such as those summarized in (4) above, most analyses of Hungarian have agreed that the *wh*-phrase in interrogatives bears a [Focus] feature, the same feature that on the standard account drove the movement of non-*wh* phrases to the designated "Focus position" (Brody 1990; Horvath 1986, Lipták 2001). The consensus is reflected in the way the movement of the interrogative *wh*-phrase was implemented in the various earlier accounts. Let us consider here a relatively recent and elaborated representative of these, the account of Lipták (2001, ch. 2).

2.3   A [Focus]-feature based account of overt <u>wh</u>-movement: Lipták (2001)

        Hungarian *wh*-words are arguably variables, and can act in certain contexts as bare indefinites (for discussion, see Cheng, 1991, Lipták 2001). They can be bound by binders that attach to them at the word-level or binders that occupy higher structural positions (i.e., binding them at the phrasal or clausal level). At the word-level, a variety of quantificational elements such as the universal quantifier *minden-* and the existential *vala-* can attach to the wh-item, forming quantifiers (such as *minden-ki* 'everyone', *minden-hol* 'everywhere', *vala-ki* 'someone', *vala-mi vala-hol* 'somewhere'). A more complete paradigm of *wh*-morpheme-based words is given in (7) below:

(7)   Interrogative: **ki** 'who', **mi** 'what', **hol** 'where', …
       Relative: *a***ki** '**who (rel)', *a***mi** 'what/which (rel)', *a***hol** 'where (rel)'…
       Existential: *vala***ki** 'somebody', *vala***mi** 'something', *vala***hol** 'somewhere' …
       Universal: *minden***ki** 'everybody', *minden*(***mi**) 'everything', *minden***hol**
       '**everywhere'…
       Negative: *sen***ki** 'nobody', *sem***mi** 'nothing', *se***hol** 'nowhere'…

Lipták's (2001) hypothesis for the structure of interrogative *wh*-items in the language, based on the above observations, is that similarly to universal and existential quantifiers, they are also merged with an operator (binder) at the word level. This word-level interrogative operator Q_{wh} is crucially assumed to be phonologically null, thus giving "bare-looking" *wh*-question words with internal structure such as: $[Q_{wh}\ ki]$ 'who', $[Q_{wh}\ mi]$ 'what', $[Q_{wh}\ hol]$ 'where', etc.

Further, Lipták proposes that the overt movement of interrogative *wh*-phrases be implemented by the interrogative operator Q_{wh} in the *wh*-word bearing the syntactic feature [Focus], her <+f>.[3] Thus a *wh*-question phrase on this account would look like (8) below.

(8) (adapted from Lipták's (2001, p. 75 (40))

    [… [Q_{wh} [wh] …]]
        <+wh>
        <+f>

Following earlier accounts (Brody 1990; Horvath 1986, and related work) outlined in the previous subsections, it is crucially the [Focus] feature assumed to be borne by the interrogative *wh*-element (the Q_w in (8)) that renders *wh*-movement obligatory in questions and determines its landing site (the pre-V "Focus-position" in Hungarian clause structure). Thus, for all analyses of the above type, the existence of a [Focus] feature active in the syntax (in addition to playing a role in the two interpretive components) seems essential. In the following section I sketch some recent research involving the status of Focus and the so-called "Focus-movement" phenomenon in particular that led to the conclusion that in fact the notion Focus is not encoded in the syntax, and the alleged "Focus movement" of Hungarian motivates an alternative analysis.

3. Eliminating [Focus] from the syntax: movement and an Exhaustivity operator

3.1   Separating "Focus-movement" from Focus

      A new direction of research that emerged in the past decade reassesses the status of Focus in the architecture of grammar and argues in favor of it not being a syntactically encoded element (not a syntactic category or a formal feature at all) but an *interface phenomenon*. Focus is claimed instead to be determined based on the output structures of syntax (along the lines of Cinque 1993); it cannot be active in any syntactic operation and plays a role only at Information Structure (see e.g. Reinhart 1995, 2006; Horvath 1997a/2000, 2010; Neeleman and Reinhart 1998; Zubizarreta 1998; Neeleman and van de Koot 2008). If this is on the right track, then no [Focus] feature can be taken to drive (apparent) "Focus movements", so all such movements need to be carefully reconsidered. Instances of such movements can be expected to turn out either to be directly interface-driven (i.e., non-feature-driven) movements or to be movements driven by a distinct well-motivated (non-*ad hoc*) syntactic feature. Crucially for our present discussion, this in turn necessitates a reexamination and possibly a revision of the proposals reviewed in section 2 that were aimed at capturing the curious syntax of the Hungarian-type *wh*-interrogatives and their apparent parallelism with what "Focus movement".

      In Horvath (2000, 2007) I put forward the hypothesis that prima facie Focus-related movements fall into the following two fundamentally distinct classes: (i) interface motivated ones, which I referred to as "Focus accommodating" movements,

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[3] The additional feature <wh> borne by the Q_{wh} operator is not relevant for the overt movement of the *wh*-phrase; what this feature aims to capture in Lipták's (2001) analysis will be addressed in section 4.

such as prosodically motivated local "scrambling" (see for instance Zubizarreta's (1998) p-movements; Ishihara (2001)) and (ii) A-bar movements driven by formal feature checking (i.e., movements associated with Agree). Importantly, based on Hungarian's alleged "Focus-movement", I argued that in fact the latter type of movement (ii) is not driven by Focus at all, but by a quantificational (syntactic) operator that interacts with Focus only indirectly. Specifically, this work advanced the alternative proposal that the A-bar movement instantiated in Hungarian is due to a syntactic Exhaustivity Operator, which associates with Focus in the same sense as familiar focus sensitive elements do. I labelled this operator EI-Op (where EI stands for "Exhaustive Identification"), and the movement (formerly considered "Focus-movement") is referred to as *EI-Op movement*.[4]

The empirical motivation for the proposed new analysis (Horvath 1997a/2000, 2007) came from two distinct directions. The first one was the fact that the movement actually does not depend on Focus per se, but rather correlates with *exhaustivity*, namely with the identification of the particular proper subset of the contextually relevant set of alternatives for which the predicate holds being *exhaustive*; it necessarily involves the exclusion of the rest of the alternatives. Relevant evidence in support of this includes: (a) the semantic observation, originating in Szabolcsi (1981), that Hungarian's preposed "Focus-phrases" necessarily entail the exhaustivity (exclusivity) of the identified set, a truth-conditional property, not shared by other cases of Focus across languages (e.g. in situ prosodic Focus in English); (b) systematic discrepancies of distribution between known instances of Focus and cases of preposing to the "pre-V" position. Such discrepancies noted were the absence of "Focus-movement" in case of phrases associated with the Focus sensitive operator EVEN versus preposing being (obligatory) for phrases associated with ONLY. Another discrepancy directly indicating the dependence of preposing on exhaustivity and not on Focus is that Focus-phrases, as in answers to *wh*-questions, do occur in post-verbal position (in-situ) just in case there is some indication (e.g. addition of the modifier 'for instance') that the designated set is non-exhaustive, in other words when the answer is, for some pragmatic reason, only partial.

The second domain of evidence that crucially contributed to the EI-Op proposal involves observations regarding the possible structural positions the Focus element can occupy within the pre-V (allegedly) "Focus-moved" phrase. If [Focus] indeed were the syntactic feature driving movement (attracted by a corresponding Probe), it would be expected to induce movement of the phrase in which it occurs in the same way, i.e., subject to the same structural constraints, as other feature-driven movements. Specifically, one would expect that various phrasal movements to some c-commanding head (Probe) induced by a feature-matching relation (Agree) will manifest uniform "pied-piping" behavior.[5] But when comparing the case of

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[4] The introduction of the EI-Op and the syntactic feature [EI] as the driving force of the movement under discussion has conceptual and empirical consequences that clearly distinguish it from proposals such as É. Kiss (1998) which incorporate the addition of a [+exhaustive] feature, or some equivalent diacritic, to the traditionally assumed F(ocus) feature and FP projection of earlier literature (as argued in detail in Horvath (2000, 2007). On some specific syntactic advantages of the EI-Op proposal over analyses not adopting a structural separation of Focus (and F-marking) from syntactically encoded Exhaustivity, see also sections 3.1 and 3.3).

[5] The term "pied-piping" is not meant literally here, as some mechanism of movement. It is not intended to imply that it is the feature that moves, and it "drags" along the rest of the phrase. Rather the

Hungarian "Focus-movement" with cases of familiar feature-driven movements with regard to where within the structure of the moved phrase the relevant feature-bearing element may be located, one finds a striking discrepancy.

Unlike in uncontroversial feature-driven phrasal movements, in "Focus movement" the actual Focus constituent (in terms of its prosody and interpretation) is not restricted as to the structural position it occupies within the moved phrase. This behavior contrasts with the commonly noted fact that for instance adjuncts and complements do not act as "pied-pipers" for their phrase (Webelhuth 1992; Horvath 2006).[6] To provide just one representative example for this type of evidence, consider the "pied-piping" contrast between cases of relative *wh*-movement (9) and the alleged "Focus movement" (10). The contrast provides evidence that the movement in the latter case (10) is not based on a feature-matching (Agree) relation targeting the alleged feature [Focus], borne by Focus constituent (marked by capitalization). If there were a feature [Focus] driving the movement, its particular position within the moved phrase in (10) would be expected not to permit movement any more than the position of the relative pronoun does in the structurally parallel relative *wh*-phrases in (9).

(9) *a filmszínésznő [[*néhány akiről*   írt   *könyvet*]   láttam   *t*
    the movie-actress   some   whom.about written book.ACC   saw.1SG

    a   polcon] ...
    the shelf.on
    ('the movie-star a few books written about whom I saw on the shelf ...')

(10) [*Néhány MARILYN MONROERÓL* írt   *könyvet*] láttam   *t*
    some   Marilyn Monroe.about   written book.ACC saw.1SG

    a   polcon.
    the shelf-on
    'It's a few books written about MARILYN MONROE that I saw on the shelf.'

The above type of contrasts (for a detailed discussion see Horvath 2007) lead to the conclusion that the alleged "Focus-movement" takes place irrespective of the structural position of the (semantic and prosodic) Focus within the moved phrase; this would make sense only if it were not the Focus constituent (bearing a [Focus] feature) that drives the movement.[7] Thus it must be some other element, which (when probed by a relevant head) would automatically induce movement of the whole phrase that is

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term is used merely as a shorthand to indicate the relation between the position of the feature targeted by Agree and the particular phrase containing the feature that can end up moving (thus satisfying the EPP feature of the Probe).

[6] For accounts of some apparent discrepancies in the pied-piping options found in English relatives, see Emonds (1976), Webelhuth (1992), Horvath (2006).

[7] The freedom of possible choices of (prosodic and semantic) Focus attested within the preposed phrase of Hungarian is a widely recognized fact (demonstrated in É. Kiss (1998), Horvath (2000), among others). As expected, for instance in (10) above, placing main stress on *könyvet* 'book-ACC' and interpreting it as the Focus element generating the set of alternatives (instead of *MARILYN MONROERÓL*) is equally possible.

in fact observed to move. The above-cited structural ("pied-piping") evidence moreover provides a clue as to where the semantically motivated EI-Op, driving the movement under our new analysis, must be located (merged) in the structure of the moving phrase.

3.2   A syntactic Exhaustivity operator: the EI-Op movement account

The semantic, distributional and structural evidence from earlier research sketched above shows that Focus is not what drives the movement under discussion, instead it must be driven by an Exhaustivity operator (EI-Op), encoded in the syntax by the corresponding formal feature [EI]. This operator is crucially distinct from the Focus constituent (i.e., any "focus-marked" element) of the clause, and appears in a position that induces movement of the phrasal projection it is merged with. The relation of Focus to the EI-Op is taken to be indirect (Horvath 1997a/2000, 2007): the EI-Op is assumed to involve association with Focus, in the sense proposed for known focus-sensitive adverbials (as e.g. *even, only*) by Jackendoff (1972) and elaborated based on quantificatonal domain selection in Rooth (1985) and subsequent work.[8] Thus a Focus constituent is expected to be able to occur with or without an EI-Op, just like it may or may not occur with any other focus-sensitive operator. In the absence of an EI-operator (or some other focus-sensitive operator) c-commanding Focus, the sentence is interpreted as involving (*in-situ*) so-called "information" Focus; when Focus occurs associating with (c-commanded by) an EI-Op, the result is exhaustivity interpretation and movement, i.e., what has commonly been labeled in earlier literature as "identificational" Focus.[9] The main ingredients of this alternative account of the syntactic A-bar movement traditionally construed as "Focus-movement" are summarized below in (11).

(11) **The EI-Op movement proposal (adapted from Horvath 2007)**

a.   An Exhaustive Identification operator, EI-Op bears an interpretable syntactic feature [EI], and a clausal functional head EI^0 bears an uninterpretable instance of the [EI] feature. The clausal head EI^0 probes and enters into an 'Agree' relation (Chomsky 2000; 2001) with an interpretable [EI] feature-bearing EI-Op in its search domain; due to its EPP feature it triggers (overt) movement of the EI-Op phrase.[10]

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[8] Focus itself was assumed under my account to be determined based on main stress assignment at the end of the syntactic derivation, and to be an interface phenomenon (in the sense of Reinhart 1995). However, as pointed out in fn. 1 earlier, an implementation via [F]-marking, applied to the output of syntax, would also be fully compatible with the EI-Op proposal.

[9] Note that under this account, the syntactic and semantic distinctions that were taken by É. Kiss (1998) to motivate the postulation of two distinct types of Focus, "information Focus" vs. "identificational Focus", follow straightforwardly from a single, uniform notion of Focus (Horvath 2007): it can occur either independently, hence does not move and is non-exhaustive, or within an EI-Op phrase, hence undergoing A-bar movement with that phrase and receiving exhaustive identification interpretation.

[10] This scenario parallels the case of *wh*-movements, and more importantly, in Hungarian also the case of various quantifier phrases, such as e.g. distributives, which undergo overt A-bar movement as well (see Szabolcsi's (1994, 1997) checking-driven movement account for different types of QPs).

b.   The EI-Op itself is a (phonologically null) syntactic head that merges with DP (and possibly other maximal projections as well). Specifically, EI-Op takes the phrase as its *complement*, thus projecting an EI-Op phrase (EI-OpP). As a result, when EI-Op is attracted by the clausal head EI^0, the whole EI-OpP moves (i.e., the EI-Op necessarily pied-pipes its phrase).

c.   EI-Op requires the presence of (stress-based/"information") Focus within its c-command domain, namely within the phrase it attaches to, i.e., it manifests the property of association with Focus, as overt focus sensitive items do. (This is what has created the impression that it is a F(ocus) head and a formal feature [Focus] that drives the preposing.)

The EI operator-based account including the preposing of EI-OpP projected by the EI-Op is represented in structure (12) below: (I abstract away from the accompanying head movements V-to-T^0-to-EI^0; the asterisk indicates the position of main stress)

(12)
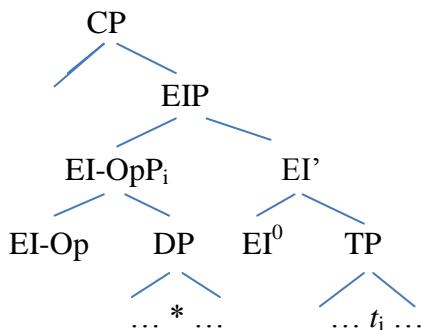
3.3   *Possible overt evidence for EI-Op and a clausal EI head: exclusive csak 'only'*

Horvath's (2007) account reviewed above postulates a syntactically active Exhaustivity operator and a corresponding EI^0 clausal functional head, both of which are phonologically null in the Hungarian cases under discussion. Thus a natural question one may raise here is: Is there any overt morphosyntactic evidence for the postulated EI^0 head in the clausal projection, or for the EI-Op (taking a DP complement in (12))?

Notice that the EI-Op we assumed is similar (a) to overt focus-sensitive items in requiring Focus in its domain, and (b) to ONLY in particular, in terms of its semantics (exhaustivity, with exclusion of a complement set). In view of this it seems worth exploring the hypothesis that in fact (exclusive) ONLY, specifically its Hungarian counterpart *csak*, may turn out to be an EI-morpheme too: namely, a lexical item bearing the feature [EI].[11] If this is indeed the case, *csak* is expected to be

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[11] This should not be taken to imply that the proposed phonologically null EI-Op is identical to ONLY. While *csak* 'only' is assumed here to have the same syntactic [EI] feature entailing exhaustivity that the proposed null EI-Op has, the former also introduces an extra scalar meaning. As argued by É. Kiss (1998, 2010), ONLY adds a negative scalar evaluation, namely it means that the focus it modifies represents a low (non-maximal) value on the particular scale of alternatives. This evaluative scalar interpretation is not

attested in the same structural positions as the phonologically null version of EI-Op and EI^0 that we made use of above. Thus the two relevant positions to check are (i) EI-Op, a head merging with a DP complement and the whole phrase moving to the pre-V position (to Spec of the clausal EIP projection), and (ii) the clausal head EI^0 located above TP but below CP.

Surprisingly, the surface distribution of *csak* in Hungarian clause structure provides strong initial indication that this is in fact the case.The two alternative surface positions that the *csak* morpheme is known to occupy in Hungarian clauses are: either at the left periphery of the pre-V phrase or in immediately post-V position (shown in (13) and (14), respectively). The existence and specific location of these two alternative surface positions fall in place naturally under the EI-based account of *csak*.

(13) Mari   **csak** KATINAK$_j$ mutatta   [be t_V Lacit t_j]].
      Mari.NOM only Kati.DAT showed.3SG PRT   Laci.ACC
      'Mari introduced Laci only TO KATI.'

(14) Mari   KATINAK$_j$ mutatta   **csak** [be t_V Lacit t_j]].
      Mari.NOM   Kati-DAT   showed.3SG   only PRT   Laci.ACC
      'Mari introduced Laci only TO KATI.'

Importantly, *csak*'s post-verbal occurrence (14) cannot be related to the pre-V-phrase version (13) via the assumption that *csak* could, optionally, get stranded by the preposing of the DP thus giving rise to (14). This stranding proposal for *csak* (suggested in É. Kiss (2002)) seems empirically untenable, in light of the unacceptability of data such as (15a,b), examples that exhibit *csak* in a position where it would be predicted to be possible under a stranding analysis.[12] Further, an even more striking case demonstrating the inadequacy of a stranding account for post-V *csak* is the long extraction case shown in (16).[13]

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exhibited by the null EI-Op. Moreover, as observed in the literature on the semantics of the "Focus movement" construction without *csak*, the exhaustivity conveyed is presupposed, not asserted (Kenesei 1986). Crucially however, this does not mean that the exhaustivity of the construction, captured by our null EI operator, is merely a pragmatic implicature and thus should be unencoded in the grammar (as argued recently by Wedgwood (2005)). For a critical discussion and rejection of Wedgwood's arguments and conclusions, and for further support of the grammatically encoded nature of the exhaustivity property of the Hungarian construction, see É. Kiss (2010).

[12] To avoid the interfering interpretion of *csak* as associated with the noun-phrase following it in (15)-(16), I use *valakit* 'someone.ACC' as a post-verbal argument, a noun phrase that is not felicitous with *csak*.

[13] Observe that the unacceptability in (15)-(16) cannot be attributed to a prosodic factor such as the "lightness" of *csak* relative to the post-V element it follows; the same judgments as in (15) are manifested also when the post-V argument is a monosyllabic unstressed pronoun (see (ib) vs. (ia)).
(i)   a.   KATINAK$_j$ mutattam   **csak** be   őt t_j.
             Kati.DAT   showed.1SG only PRT   him
         b. ??KATINAK$_j$ mutattam   be {őt **csak** t_j /**csak** t_j őt}.
             Kati.DAT   showed.1SG {PRT him only/only him}

(15) a. ??Mari   KATINAK$_j$ mutatott   be t_V **csak** t_j valakit .
         Mari.NOM Kati.DAT   showed   PRT only   someone.ACC
         'Mari introduced someone only TO KATI.'

   b. ??Mari   KATINAK   mutatott be   valakit   **csak** t_j.
        Mari.NOM Kati.DAT   showed PRT   someone.ACC only

(16) KATINAK$_j$ szeretném   [ha Mari   (***csak** t_j) be-mutatna   (***csak**) t_j
     Kati.DAT   like.COND.1SG if Mari.NOM only   PRT-show.COND.3SG only

     valakit].
     someone.ACC
     ('It's <u>TO KATI</u> that I would like if Mary (<u>only</u>) introduced someone.')
     Intended reading: *csak* 'only' associating with KATINAK; this can be rendered
     only when *csak* occurs in the matrix clause, either immediately preceding
     KATINAK or immediately following the matrix verb.

So let us consider now our hypothesis that *csak* is an [EI]-bearing lexical item that
projects a functional head: either an EI-Op or a clausal EI^0. This, in conjunction with our
structure (12) above, enables a straightforward account for the distributional patterns
(13)-(14) vs. (15)-16).

   The pre-V *csak* as in (13), can be accounted for by taking it to carry an
interpretable version of the [EI] feature, and thus to project the EI-Op, heading the EI-
OpP (see structure (12)). This would correctly derive (a) *csak*'s linear position
preceding the noun-phrase that itself appears preposed to the pre-V position, as well
as (b) its necessary adjacency to the noun-phrase (as they form a constituent, the
noun-phrase being EI-Op's complement (12)).

   The post-V occurrence of *csak* gets derived when *csak* carries an
uninterpretable instance of the [EI] feature, and thus appears as the clausal head EI^0
(which probes for the interpretable [EI] feature of EI-Op and triggers preposing of the
EI-OpP phrase in (12)). In addition, the (finite) verb moves up to this clausal head (a
general assumption adopted from earlier account) to capture the post-V position of
otherwise pre-verbal particles and the strictly V-adjacent position of the preposed
phrase. The raised (inflected) V left-adjoins to the overt item *csak* contained in the EI^0
head (see the schematic representation of ex. (14) in (17)). The raised verb and the
clausal head EI^0 *csak* form a complex head (indicated by boldface in (17)).[14] Thus the

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[14] Moreover the complex head [verb+*csak*] apparently must belong to a single phonological word. This
is suggested by the following observation: The coordination of *csak* with another exclusivity adverb
kizárólag 'exclusively', i.e., [*csak és kizárólag*] 'only and exclusively' can occur in EI-Op position
(within the pre-verbal EI-Op phrase) the same way as *csak* does in (13)), but it is impossible as the
clausal EI^0 head, i.e., cannot occur in the immediately post-V position, in contrast to *csak* in (14)).
Presumably what rules out the latter occurrence is a PF requirement for the (destressed) verb to raise
and phonologically incorporate into the EI^0-head, forming a single phonological word with its lexical
content, and in turn to phonologically incorporate into the Nuclear Stress-bearing EI-Op phrase to its
left (this captures the fact that the latter ends up forming a single phonological phrase with the
[verb+EI^0] head). This phonologically motivated raising and incorporation of the verb is what is made
impossible in the case of a coordinate structure being the EI^0 head (*csak és kizárólag*). These

immediately post-V position of *csak* seen in pattern (14) and the unacceptability of versions in (15)-(16) receive a direct account once we postulate that *csak* can be inserted as the overt realization of the clausal head EI^0 (as an alternative option to being in EI-Op).

<u>Schematic representation of deriving the pattern (14):</u>

(17) …[$_{EIP}$ [$_{SPEC,EIP}$ <u>EI-Op KATINAK$_j$</u>] [$_{EI'}$ [V+Tense [$_{EI}$ csak]] [$_{TP}$ …t$_V$ … t$_j$ …]]]

One may wonder what the relation of the post-V *csak* (the EI^0 clausal head) is to the null EI-Op heading the preposed EI-OpP, specifically, how come they get interpreted as a single instance of exhaustive identification. We may attribute this to EI-OpP and the EI^0 clausal head being in a Spec-head relation (see the structure of the EIP represented in (12)), and sharing only one interpretable instance of [EI], namely the one borne by the EI-Op. Such a relation forms a single interpretive unit, as indicated for instance by the widely-known negative concord phenomenon (also occurring in Hungarian among many other cases): a Neg morpheme heading a clausal projection and a negative XP in its Spec position are interpreted as a single instance of negation.[15]

4. The role of C^0 vs. EI^0 in *wh*-questions: movement and interpretation

Given the above findings, we can now resume the discussion of *wh*-movement in interrogatives and examine what our EI-Op movement proposal replacing what formerly had been considered "Focus" driven movement entails with regard to the syntax of *wh*-questions.

To start with, recall that we have listed in (4) a robust set of known parallelisms discussed in section 2.2. In light of these, it is reasonable to retain the assumption from earlier analyses that the *wh*-phrase in Hungarian interrogatives moves not to Spec, CP (Spec, ForceP) but to the hierarchically lower position left-adjacent to V, the same position targeted by EI-Op movement (what in earlier

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observations suggest that the driving force of V-raising to EI^0 may be a PF-property, namely a requirement for the destressed V to phonologically incorporate. V-raising being a PF-operation would also provide a possible solution for an issue noted by an anomymous referee regarding the legitimacy of a head adjoining to a (non-affixal) head.

[15] A further question one may raise here is: why there seem not to be two occurrences of *csak* in the same clause when one is in the EI-Op heading the pre-V phrase and another in immediately post-V (EI^0 head) position, an expected option under the above proposal given that our analysis assumes a null EI-Op cooccurring with a null EI^0 clausal head? (Observe that there is no problem having multiple occurrences of *csak* in a clause when each associates with a different phrase.) We may suggest an account based on the rather plausible assumption that two instances of *csak* cannot associate with the same single Focus constituent because *csak*, in contrast to the plain (null) EI-Op, has extra evaluative scalar semantics (see fn. 11), due to which each occurrence of *csak* needs to have its own Focus associate, generating a set of scaled alternatives for it to operate on (otherwise its evaluative contribution would be redundant). In the case of an EI-Op *csak* cooccurring with an EI^0 head *csak*, there is usually only one associate available, namely the Focus phrase in the complement of the EI-Op.

analyses was taken to be Focus movement). The following three questions arise immediately for the new EI-Op analysis (see (11)-(12)):

(18)   (i) How to capture the fact that no *wh*-interrogative clause exists without a *wh*-phrase occupying the surface position of EI-Op-movement?

(ii) How is interrogative clause-typing achieved in the language, and how is selection for interrogatives (vs. declaratives) implemented given that it is only the head of the top projection, namely the C^0 (aka Force) head, of the embedded clause that is accessible to matrix predicates?

(iii) Empirically, are there any syntactic/distributional discrepancies (lack of parallelism) observed for EI-Op moved non-*wh* versus *wh*-interrogative phrases (in addition to the extensive set of parallels), and if there are, how can these be accounted for within the uniform EI-Op-movement proposal?

The rest of this paper is devoted to the exploration of answers to the above set of questions.

Lipták (2001), aware of the relevance of the issues in (18i-ii), presents an answer, but it is based on the assumption of a syntactic feature [Focus], and a Q operator bearing it that occurs as part of the *wh*-word in interrogatives. Her account involves the representation of a *wh*-interrogative phrase given in (8) above (reproduced as (19)); this however is clearly incompatible with the EI-Op-based account of the relevant movement and thus cannot provide a viable answer to either question (i) or (ii).

(19)   […   [Q_{wh} [wh] …]]
            <+wh>
            <+f>

To force (one) *wh*-interrogative to always move to the same position as EI-OP phrases (i.e., to the Spec of EIP), let us capture this apparent need of interrogative clauses by making the most direct hypothesis. The crucial feature for interrogative interpretation being [Q] (assumed across languages to occur on the interrogative *wh*-phrase and to check/valuate the [Q] feature of the head of CP), let us assume that in Hungarian the [Q] feature is not realized by an independent particle of its own – like e.g. the Q particles widely assumed following analyses of Japanese, Sinhala (Hagstrom 1998) or Tlingit (Cable 2010). Instead it is amalgamated into the functional element EI-Op, and thus can enter the syntactic computation forming a "*wh*-phrase" only as a feature on this item. So while EI-Op always bears the feature [EI] it projects, it also has an instance which in addition carries the feature [Q] (these are represented in (20a) and (20b) respectively).

(20) a.   EI-Op   b.   EI-Op
            [EI]   [EI]
                                             [Q]

It is the item in (20b) that I claim gives rise to interrogative *wh*-phrases. As argued above, EI-Op is a head that merges with a phrasal (DP) projection and projects an EI-OpP. This is what gets probed by the EI^0 head of the clause and undergoes Agree and

preposing to the "pre-V" position (see (12)). All this is the same also for the instance of the EI-Op in (20b). This head will merge with a phrase that contains a *wh*-word (recall from sect. 2.3 that Hungarian *wh*-words are variables and require some external binder). The [Q]-bearing EI-Op thus will act as binder for the bare *wh*-word in its complement. I claim it is the phrase headed by the [Q]-bearing EI-Op, with a *wh*-word within its complement, that constitutes the "interrogative *wh*-phrase" in Hungarian. Crucially, this proposal correctly captures the fact that movement of an interrogative *wh*-phrase to the clausal EI projection in Hungarian *wh*-questions can and will take place, providing an answer to (18i).

Given that the [Q] feature is necessary for checking the (uninterpretable) force feature [Q] of the head of CP, the above proposal makes sure that no [Q]-checking can take place in the absence of an EI-Op phrase, and thus that the *wh*-phrase of the interrogative is forced to move to the Spec of EIP position.[16]

Turning next to the issue of the potential relation of the preposed interrogative EI-Op phrase to C^0 (question (18ii)), one needs to consider whether there is evidence for any (covert) movement relation. Specifically, this may in principle be (a) covert movement of the interrogative phrase (the whole EI-OpP) from the "pre-V" position to Spec of CP, or (b) movement of its [Q]-bearing head ((20b), phonologically null in Hungarian), in a way parallel to movement of the Q-particle to C^0 argued to take place overtly in Japanese and covertly in Sinhala questions by Hagstrom (1998)).[17]

The possibility of (covert) movement from the pre-V position to the CP edge however can be discarded for Hungarian interrogatives. In well-established cases of clause-typing of questions by (covert) movement of an interrogative element, whether phrasal or a Q head, the movement can be successive cyclic: it can cross over from an embedded clause to type a higher clause. Moreover, Hungarian *wh*-elements (both interrogatives and relatives) do undergo long (successive cyclic) extraction from CP. Given these facts, if Hungarian interrogatives involved covert phrasal or head movement from the surface pre-V position to clause-type CP, one would expect this movement to also cross clause boundaries. Yet it turns out that in Hungarian no higher clause but only the *minimal* CP dominating the pre-V interrogative phrase can

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[16] On the semantics corresponding to the EI-Op proposal for "Focus-movement" construction, see Bende-Farkas (2006). proposing a covert maximality operator. As for the interpretation of the EI-Op (20b) occurring with a *wh*-interrogative phrase, the question can be raised whether this would mean that the Hungarian interrogative demands an exhaustive answer. Given that Hungarian questions can have a "mention some" interpretation, this would seem to pose a problem—a point made explicitly by Cable (2008). The issue obviously deserves serious further examination, which is beyond the scope of the present paper (it is taken up in work in progress). However it can be noted here that in view of analyses of the semantics of interrogatives such as Groenendijk and Stokhof's (1984) partition semantics, it is not an a priori implausible scenario that some language would have grammaticalized the semantic exhaustivity property as part of its interrogative syntax, by amalgamating the interrogative [Q] feature with a syntactically encoded exhaustivity operator. A comprehensive semantic analysis developing an explicit account of the relation between (exhaustive) Focus and *wh*-interrogatives is provided by Haida (2007).

[17] Note here that a potential non-movement alternative for typing the head of CP and taking care of selection by matrix predicates (proposed for true *wh*-in-situ languages) can be a base generated, i.e., externally merged, interrogative complementizer that types the clause as a question and acts as an unselective binder for in-situ wh-variables (see Cheng (1991); Tsai 1994 for Mandarin Chinese).

be interpreted as a question. This strict clause-mate limitation on the interrogative phrase and the C^0 head is attested by the failure of interrogative clause-typing and selection in (21a-b); compare them with their contrasting counterparts (22a-b), which underwent overt extraction of the interrogative (to the higher CP's pre-V position).

(21) a. *Mari   akarta [hogy <u>mit</u>   olvass   fel   <u>t</u>]?[18]
      Mari.NOM   wanted that what.ACC read.SUB.2SG PRT

   b. *Meg-kérdezték [hogy akarom   [hogy <u>kit</u>   hívjanak meg <u>t</u>]].
     PRT-asked.3PL that   want.1SG   that who.ACC invite.SUB.3PL PRT

(22) a. Mari   <u>mit</u>   akart [hogy fel-olvass   <u>t</u>]?
      Mari.NOM what.ACC wanted that PRT-read.SUB.2SG
      'What did Mari want that you read aloud?'

   b. Meg-kérdezték [hogy <u>kit</u>   akarom/akarok
     PRT-asked.3PL that who.ACC   want.1SG.DEF/want.1SG

    [hogy meg-hívjanak <u>t</u>].
    that   PRT-invite.SUB.3PL
    'They asked who I want that they invite.'

      In the absence of movement to the CP edge, is there reason to suspect that the interrogative phrase (the *wh*-phrase headed by a [Q]-marked EI-Op) in Hungarian still bears a syntactic relation to the C^0 position?

4.1 An Agree relation between C^0 and the preposed <u>wh</u>-phrase

      As observed originally by Lipták (2001), there appear to be some "intervention" effects manifested in Hungarian *wh*-interrogatives. This phenomenon is shown in (23a)-(24a); importantly, the same effects are not attested in the case of corresponding preposed non-*wh* EI-Op phrases (23b)-(24b) (suspected interveners are in italics):

(23)   a. *_Mindenki_   kit   hívott fel?
        everyone.NOM who.ACC called PRT

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[18] An anonymous referee raised the possibility that the unavailability of matrix question interpretation in (21), based on local preposing of the embedded wh-phrase, might be due to the example having an intensional verb (an intervener) in the matrix. However the same locality limitation seen in (21) is found across the board, irrespective of the type of matrix verbs, as exemplified by the impossibility of questions such as (i):

  (i) *Mari   mondta/tudta, hogy mit   olvastál   fel?
      Mari.NOM said/knew   that what.ACC read.2SG PRT
     'What did Mari say/know that you read aloud?' (with the matrix verb *tud* 'know', the
      sentence is possible as a declarative with an embedded interrogative clause)

'Who did everyone call up?'

b. Mindenki   EGY OSZTÁLYTÁRSÁT   hívta fel
everyone.NOM a   class-mate.3POSS.ACC called PRT
'Everyone called up A CLASS-MATE OF HIS.'

(24)   a. *Nem mitől   ijedtél   meg?
not   what.from frightened.2SG PRT
('What is it not that you got frightened from?')

b. Nem A ROBBANÁSTÓL ijedtem   meg.
not   the explosion.from   frightened.1SG   PRT
'What I got frightened from was not THE EXPLOSION.'

This intervention effect is taken by Lipták (2001) as evidence for the necessity of LF-movement of a feature [Q] from her Q_{wh} operator (in her account within the wh-word as shown in (8) above) to the clause-initial head C^0.[19] Pesetsky (2000), studying intervention phenomena in multiple wh cases in English and other instances across languages, argues that this universal intervention effect arises when a semantic restriction on a quantifier is "separated from that quantifier by a scope-bearing element" (p. 67 (124)). He assumes wh feature-movement in the case of a wh-phrase to be a relevant instance of a quantifier and its restriction.

I propose that the intervention effects attested in Hungarian single-wh questions shown in (23)-(24) can be accounted for along the lines of Pesetsky's independently motivated characterization of the phenomenon if we postulate that the C^0 head of the clause must establish a (feature-matching) relation with the [Q] feature of the EI-Op head of the pre-V wh-phrase. When scope-bearing elements (e.g. the quantifier $mindenki$ in (23a) and the negative morpheme nem in (24a)) intervene, they in some sense interfere with the necessary association between the operator feature [Q] of the C^0 head (the clause-typing feature) and the wh-interrogative itself located in the pre-V (Spec of EIP) position.[20]

In sum, what is important for us in the present context is the conclusion that the observed intervention effects indicate the existence of a necessary relation between the [Q] bearing EI-Op heading the preposed interrogative wh-phrase and the C^0 head at the left periphery of the clause. Notice that we argued above based on (21)-(22) that there is no movement (i.e., no 'internal merge' operation) establishing a relation with the "pre-V" wh-phrase and C^0, yet there does appear to be a relation, as indicated by the data with structurally intervening quantificational elements (23)-(24).

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[19] To establish her feature-movement-based account of the intervention phenomenon, she also argues that it is not some universal constraint on relative scope that creates the observed effect.

[20] This of course is not an explanation, and is not intended to be one. I am using the intervention phenomenon in the present context merely as a diagnostic for the type of relation that holds between two positions. An actual account for the existence of the intervention effect in the particular cases where it is attested is likely to turn out to be semantic, as has been claimed by a number of recent studies advancing different semantic analyses (such as Beck 2006, Haida 2007, among others).

This relation then must be 'Agree' (without accompanying movement), namely, a [Q] feature-matching/valuation relation between the EI-Op head of the interrogative *wh*-phrase and the head of the clause C^0. Notice that under this assumption, the clause-boundedness observed above ((21) vs. (22)) follows straightforwardly, from Agree being subject to Chomsky's (2001) Phase Impenetrability Condition (PIC). The schematic representation of a *wh*-interrogative (with potential intervention effect) under our proposal is shown in (25) below.[21]

(25) $[C^0$ ('everyone'/Neg) … $[_{EIP}$ $[EI\text{-}Op$ $[wh\text{-}phrase]]$ EI^0 … t …$]$ $]$
         [Q]   [EI]   [EI]
                                          [Q]   EPP
         ⌊_____↑
              Agree (Probe for [Q])
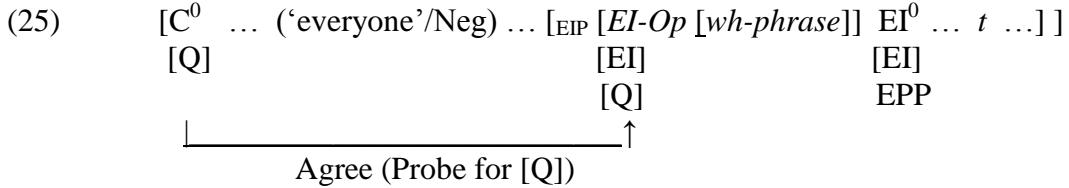
Consider again our proposal, incorporated into (25), regarding the occurrence of the [Q] feature on the EI-Op, head of the preposed EI-OpP phrase (see (12) and (19b)). The reader may wonder whether it might not be a viable alternative to assume that the [Q] feature is in fact borne by the *wh*-word itself (the standard claim of previous accounts, including Lipták (2001)). But observe that this assumption would run into severe problems. How would under this account the necessary occurrence of the EI-Op head be forced for the interrogative *wh*-phrase? There would be clauses generated with [Q]-bearing *wh*-DPs but with no EI-Op phrase; thus one would lose the obligatoriness of the movement of a *wh*-phrase to the designated "pre-V" position in *wh*-questions, the central fact we set out to account for in the first place. Moreover, if the [Q] feature were borne by the *wh*-word, i.e., located in a position within the complement of the EI-OpP, then the EI-Op head of the phrase would presumably act as an intervener, blocking its Agree relation with C^0.

In sum, the above discussion leads us to the conclusion that there apparently are two different clausal functional heads at work in Hungarian *wh*-interrogatives, each acting as probe for a different formal feature, [EI] and [Q]: (i) the EI^0 head, probing for the feature [EI], and in addition to Agree (feature-matching) it also induces movement of the EI-Op-headed phrase; (ii) the C^0 head, probing for the feature [Q], and entering into an Agree relation with an (interpretable) instance of [Q] occurring on EI-Op, but without triggering movement. The key assumption in the account is the (interpretable) [Q] feature appearing in Hungarian as a feature of the

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[21] Due to space limitations I abstract away here from providing more of the technical implementation of the Agree process (involving "activation" of the interpretable feature on the Goal of Agree by a purely uninterpretable feature (like [wh]), or by the postulation of unvalued/valued interpretable and uninterpretable features along the lines of Pesetsky and Torrego (2007)). Implementation is surely feasible on either assumption, but due to the rather unconstrained nature of these devices, their discussion would not contribute a deeper insight at the present stage of our investigation. One important *empirical* consequence of the "activation" assumption itself (whatever version of execution one chooses) is that this can make sure that there will not be overgeneration where clauses with an EI-Op phrase (the Goal of Agree) happen to have no matching Probe, i.e., no functional head bearing the relevant feature, and thus ending up wrongly permitting the derivation of clauses with their EI-Op phrase in situ, or of a declarative clause having in its "pre-V" position a *wh*-phrase.

EI-Op particle, rather than on its own, i.e., [Q] not projecting a separate "Q-particle" (on unique Q-particles, see e.g. Cable 2010). It is worth noting here that a choice between independent versus joint (amalgamated) realization of two syntactic features by functional elements is a plausible and in fact independently attested type of cross-linguistic difference. Variation in the realization of some universally available formal feature on a particular functional head is precisely the kind of parametric difference most commonly identified as the source of cross-linguistic variation.

4.2   Divergence between interrogative _wh_ versus non-_wh_ phrases moved to "pre-V" position

Our proposal advanced in the previous sections incorporated the traditional insight (based on an extensive set of parallels summarized in (4)) that interrogative _wh_-phrases and preposed non-_wh_ EI-Op phrases in Hungarian target the same syntactic position. We captured the observed parallelism by the claim that "interrogative _wh_-phrases" in Hungarian are actually [Q]-feature bearing EI-Op phrases (containing a _wh_ variable). Given this, the fact that an interrogative _wh_-phrase had to move to the same structural position and triggered the same effects as non-_wh_ EI-Op phrases (formerly analyzed as Focus-marked phrases) followed straightforwardly. But to further validate this claim, one also needs to explore any apparent discrepancies, namely, any suspected syntactic/distributional divergence between _wh_ and non-_wh_ phrases preposed to the "pre-V" position (see question (18iii)).

One such discrepancy often noted in the literature involves the possibility of fronting multiple interrogative _wh_-phrases to the "pre-V" position of the same clause (resulting in pair-list interpretation) , which contrasts with the impossibility of multiple non-_wh_ phrases fronted to the same position (see (26a) vs. (26b)):

(26)   a. … (hogy) Mari   kinek   kit   mutatott be?
              that   Mari.NOM who.DAT   who.ACC showed PRT
            '…who Mari introduce to whom?'   (pair-list reading)

      b. *… (hogy) Mari   (csak) A LÁNYÁNAK   PÉTERT mutatta be.
            that Mari.NOM only the daughter.3SG.DAT Péter.ACC showed PRT
            '… (that) Mary introduced (only) PÉTER TO HER DAUGHTER'

Surányi (2007) shows that multiple "focus" interpretations are possible, both the so-called complex focus (Krifka 1991) and the true multiple focus varieties, but neither construction involves more than one phrase _overtly_ preposed in the same clause to the "pre-V" position (which he takes, in line with traditional assumptions, to be the Spec of F(ocus)P). His proposal for the different options for _wh_-phrases vs. non-_wh_ [Focus] phrases stipulates that multiple checking by the F head (triggering overt movement) is available only for [wh] features. While this type of account for the contrast in (26a-b) seems readily transposable to our EI^0 clausal head and [Q]-bearing EI-Op analysis of _wh_-questions, a more interesting question to explore would be whether this is a simple morphosyntactic difference between the checking options of the two distinct features (multiple for "wh" vs. single for "Focus"), or there is some underlying reason this difference derives from.

The question one would need to address first is whether the unacceptability of (26b) can be due to the well-known "strict V-adjacency" requirement that preposed EI-Op ("Focus") phrases are subject to. But if this were the answer, one would need to explain why the same strict adjacency requirement applying also to interrogative *wh*-phrases (see this shared property on our list (4)) is still not blocking multiple *wh*-fronting (26a). Data such as (27) can raise further doubt about the adjacency violation hypothesis for the unacceptability of (26b). (27) is fully acceptable even though it exhibits an embedded clause with the schematic structure (28). (I henceforth will use the theory-neutral descriptive terms "non-*wh* phrase" and "*wh*-phrase", so that I do not prejudge the EI-Op or Focus phrase status of the preposed constituents under investigation)

(27) Azt   kérdezték [hogy <u>KATIT</u>   <u>kinek</u>   mutattad   be] (nem azt
        it.ACC asked.3PL that   Kati.ACC who.DAT showed.2SG PRT (not it.ACC

        hogy LACIT…).
        that Laci.ACC)
        ('They asked to whom you had introduced KATI (not to whom you had
          introduced LACI).')

(28)   [C⁰… <u>*non-wh phrase*</u>   <u>*wh-phrase*</u> V …]

Observe that (27) has a preposed non-*wh* phrase in pre-V position preceding a preposed *wh*-interrogative (both indicated by underlining). If the unacceptability of multiple non-*wh* phrases preposed to the "pre-V" position (26b) were simply a matter of only one of them being able to satisfy the V-adjacency requirement, the non-*wh* phrase in (27) should also result in unacceptability, contrary to fact. We will turn to an exploration of "mixed" multiple (*wh* and non-*wh*) preposing cases such as (27) in section 5 below.

Note here that (27) also seems to make it less plausible to attribute the case of (26b) simply to having no attracting feature (as in Surányi's account), or no proper landing site available for the overt preposing of an additional non-*wh* phrase to "pre-V" position.

In (26a)-(26b) we have seen the pattern of overtly preposed phrases in the "pre-V" position represented in (29a) and (29b), respectively. What is it that drives multiple preposing, i.e., enables overt preposing of the additional *wh*-phrase(s) in pattern (29b) (instantiated by (26a), and what is it that rules out a parallel overt movement in the case of non-*wh* phrases?

(29) a. *… <u>non-*wh* phrase</u>   <u>non-*wh phrase*</u> V…
       b. … <u>*wh*-Q phrase</u>   <u>*wh*-Q phrase</u>   V…

A plausible direction to explore may be: the movement of the additional *wh*-phrase(s) is driven by the need of deriving a pair-list interpretation (not [EI] (or [Q]) feature-checking); this interpretation is commonly claimed to be possible only when all *wh*-phrases involved are adjacent (at LF), namely, they come to occupy Spec positions of the same functional head (at LF) (see Surányi 2007 and references therein). It would account for the fact that single-pair answers are inappropriate for questions with multiple *wh*-preposing.

This still leaves open the question of why the same overt preposing option should not be available for multiple preposing of non-*wh* phrases, when deriving the "complex focus" interpretation. A promising direction towards an answer seems to be to attribute the unacceptability of overt preposing in the latter case (such as (26b)) – in contrast to the availability of covert preposing (shown e.g., in Surányi 2007) – to a conflict involving the prosodic prominence requirement of Focus and the output of overt multiple non-*wh* preposing. As is widely assumed, non-*wh* Focus constituents must be marked by the highest prosodic prominance (Nuclear Stress/pitch accent); if the assignment of such prosodic prominance to two adjacent constituents is excluded by principles of prosody, this would account for "complex focus" being derived only by *covert* preposing. In fact, Hungarian is known to assigns Nuclear Stress to the leftmost phonological phrase of an Intonational Phrase, thus the preposing of any additional non-*wh* phrase, would lead to the non-leftmost one to fail to receive the required prosodic prominence by the Nuclear Stress Rule.[22]

Next, observe that beyond multiple-fronting *wh*-questions that receive a pair-list interpretation discussed above, multiple fronting to "pre-V" position seems to be attested also when clearly no pair-list interpretation is involved. Thus, consider for instance (30a-b) below; see also a parallel case of *wh*-preposing in an embedded yes/no question in (30c), where a pair-list reading would be impossible to begin with. The "extra" preposed *wh*-phrase in (30a-c) bears emphatic stress (and is marked by capitalization). These examples indicate that inducing pair-list interpretation cannot be the driving force behind all instances of the multiple preposing schematized in (29b) above.

(30) a. Mit   kérdeztek [hogy <u>KIT</u>   *kinek*   mutatott be Mari]?
         what.ACC asked.3PL that who.ACC who.DAT showed PRT Mari.NOM
         ('Who did they ask to whom Mari had introduced?' = for which person x,
           they asked for which person y, Mari introduced x to y)

      b. Mit   árult   el Mari   [hogy <u>KITŐL</u>   *mit*
         what.ACC revealed PRT Mari.NOM that   who.from what.ACC

         vett   el]?
         took.3SG   PRT

---

[22] Given the above hypothesis regarding the absence of pattern (29a), an investigation of the prosodic properties of preposed multiple interrogative *wh*-phrases (pattern (29b)) is obviously called for. What is clear with regard to this issue is that each of the non-rightmost preposed *wh*-interrogative phrases forms a separate phonological phrase, while the rightmost *wh*-phrase forms a phonological phrase with the (inflected) verb.

('From whom did Mari reveal what she had taken away?' = for which
person x, Mari revealed for which thing y, she had taken away y from x)

c. Mit   kérdeztek [hogy <u>KIT</u>   hívott-*e*   fel Mari?
what.ACC asked.3PL that   who.ACC called-y/nQ PRT Mari.NOM
('Who did they ask whether Mari had called up?')

Importantly, the type of multiple preposing of *wh*-phrases appearing in (30a-b), the type where no pair-list interpretation arises, can only be found in the so-called *wh-scope marker* construction (Horvath 1997b, 1998), and moreover, only when the matrix verb of this construction selects an interrogative clause as its complement.

Given the contrasts observed above between the various cases of multiple preposing (such as (26a) vs. (26b) and (26b) vs. (27), (30a-b)), let us consider more systematically the cooccurrance patterns of preposed non-*wh* and *wh*-interrogative phrases in "pre-V" position, beyond just the pattern (29a-b).

5.   EI-Op phrase and *wh*-interrogative preposing in the same clause?

Let us examine the case of the (potential) "mixed" options, involving cooccurrences of a non-*wh* and a *wh*-Q phrase in "pre-V" position, namely patterns (31a) and (31b), exemplified in (32a) and (32b), respectively.

(31) a. … non-*wh* phrase *wh*-Q phrase   V …

     b. … *wh*-Q phrase   non-*wh* phrase   V …

(32) a. *PÉTERT   kinek   mutattad   be?[23]
      Péter.ACC who.DAT   showed.2SG PRT

   b. *Kinek   PÉTERT mutattad   be?
      who.DAT Péter.ACC showed.2SG PRT

The case of (32b), pattern (31b), can arguably be accounted for on semantic, namely scope, grounds. As preposed phrases in the pre-verbal field of Hungarian clause structure are known to exhibit scope rigidity, the moved (non-*wh*) EI-Op phrase takes scope in its surface position in (32b), and the interrogative *wh*-phrase preceding it necessarily scopes over it. Thus, given the identificational meaning of the EI-Op phrase (PÉTERT in (32b)), the [Q]-phrase (*kinek* 'to whom') taking the identificational clause as its scope is semantically infelicitous. Supporting evidence that this is indeed on the right track is provided by the full acceptability of a structurally parallel example (33), also instantiating (31b). Notice crucially that the only difference between the case in (33) and other instances of (31b) (the latter all

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[23] The star next to (32a) reflects judgments (unacceptability) assigned by speakers when the sentence is presented in isolation. The actual status of this type of example will be elaborated below based on the discussion of examples (39a) and (42).

unacceptable) is that in (33) the preposed *wh*-phrase is WHY (*miért).* WHY, in contrast to other *wh*-elements, is semantically compatible with taking the identificational clause as its scope, and thus the acceptability of the WHY example (33) and its contrast with the unacceptable (32b) are correctly predicted under our scope-based account. This conclusion is confirmed by the fact that *miért* 'why' in (33) cannot be interpreted with narrow scope (just like the other *wh*-items in pattern (31b)): (33) does not have a reading where it is a question about why you introduced someone to Mary, it can only be a question about why it was Péter that you introduced.[24]

(33)   Miért PÉTERT   mutattad   be   Marinak?
        why Péter.ACC showed.2SG PRT   Mari.DAT
         'Why was it PÉTER that you introduced to Mari?' *wh* > non *wh* EI-Op
                                                           (cf. *non-*wh* EI-Op > *wh*)

Let us turn now to the other type of "mixed" pattern, exemplified in (32)a. What can be the source of the unacceptability of a preposed non-*wh* phrase followed by the interrogative *wh*-phrase in the "pre-V" position of (32a), i.e., pattern (31a))?

As shown by (27) cited in section 4.2, the infelicity of examples such as (32a) does not seem to be attributable to either (i) required adjacency to V at PF, or (ii) absence of an appropriate landing site or of driving force for the preposing of the non-*wh* phrase. As an alternative line of investigation, one may wonder whether the unacceptability of cases such as (32a), i.e., pattern (31a), can perhaps be due to an intervention effect (parallel to the one discussed in relation to (23)-(24) in sect. 4.1). Specifically, one may suspect that the intervention of the EI-Op (or "Focus") phrase PÉTERT between the preposed *wh*-Q phrase and the position of its [Q] probe C^0 is what causes the unacceptability of (32a).

Consider again the observed acceptability contrast between (32a) on the one hand and (27) on the other (repeated below), both exhibiting a clause with pattern (31a).

(32) a. *PÉTERT   kinek   mutattad   be?
   Péter.ACC who.DAT showed.2SG PRT

(27) Azt   kérdezték [hogy KATIT   kinek   mutattad   be] (nem azt
     it.ACC asked.3PL that   Kati.ACC who.DAT showed.2SG PRT (not it.ACC

---

[24] This proposal offers a solution for the puzzle frequently noted in work on Hungarian regarding the behavior of *miért* 'why'. It has long been known to be different from all other *wh*-words in precisely the above respect: namely, even though it needs to prepose to an immediately pre-V position like other *wh*-interrogatives, it is the only *wh*-interrogative that can also occur immediately preceding a preposed (non-*wh*) "Focus" phrase. A parallel kind of contrast holds also for the English (cleft) translation of (33) versus other *wh*-phrases instead of *why* (as in **Where was it Peter that you introduced to Mari).* But the English structure being clearly biclausal, in this case there is a straightforward syntactic explanation available for the unacceptability of embedded scope.

hogy LACIT…).
that Laci.ACC)
('They asked to whom you had introduced KATI (not to whom you had
introduced LACI).')

It might appear at this point that the forbidden cooccurrence in pattern (31a) –
possibly due to the suspected intervention effect induced by the Focus/EI-Op in (32a)
– gets resolved in (27) via scope extension, by a so-called scope-marking strategy
well-known from *wh*-interrogatives, and shown to extend scope for the "extra" *wh*-
phrases in (30) above. Specifically, one may suspect that there exists a **non-*wh*** scope-
marking strategy, involving the anticipatory pronoun *azt* 'it-ACC' in (27), that in
effect extends the scope of the preposed non-*wh* Focus/EI-Op phrase thus providing
matrix scope for it, which in turn eliminates it as the offending intervener; this
potential scenario, is represented in (34) below.

Though it may seem plausible at first glance, this scope-marking-based
account turns out to be untenable, for a variety of reasons presented in (35A-C)
below. (Note also the robust evidence in Horvath (1997b, 1998) against a direct
dependency approach to the Hungarian-type scope-marking construction, specifically,
against the existence of a chain between the *wh*-scope-marker and the preposed *wh*-
phrase of the embedded clause).

$$\text{chain?}$$

(34) … "scope-marker" (*azt*) V … [[$_\text{C}^0$ Q] … EI-Op/Focus phrase   *wh*-phrase   V …]
(potential "intervener")

Agree (Probe for [Q])
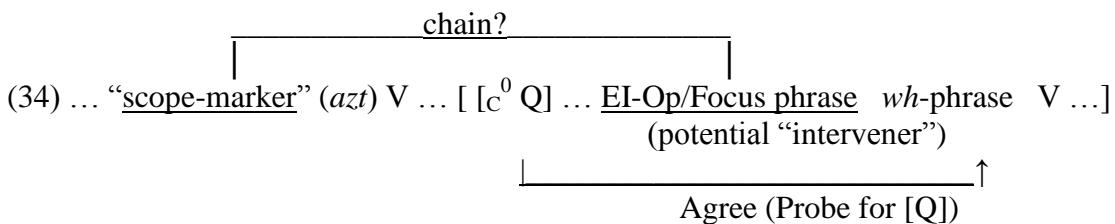
(35)   A. The suspected intervention effect seems not to be eliminated, only replaced
by another one: as seen in (34), the scope-marker strategy itself, if it were indeed
raising of the EI-Op/Focus feature from the embedded pre-V position to the scope-
marker's (*azt* 'it-ACC') position in the matrix, would involve intervention of the Q
operator in C^0 in these cases. If so this scenario could not provide an account for (27)
vs. the unacceptability of (32a).

B. It is at least doubful that the non-*wh*-phrase preceding the pre-V *wh*-
interrogative in examples like (27) gets preposed by the same operation, namely
driven by the same trigger, as the immediately pre-V EI-Op/Focus phrases we have
discussed up to now: observe that the (27)-type example has an alternative acceptable
version (36) – exhibiting the same interpretation – in which the non-*wh*-phrase is in
post-V position (cf. (27)).

(36) Azt   kérdezték   [hogy kinek   mutattad   be   KATIT].
       it.ACC asked.3PL.DEF that   who.DAT showed.2SG PRT KATI.ACC
       ('They asked to whom you had introduced KATI.')

Nor is the driving force behind the preposing of the non-*wh* phrase in the (27)-type case the same as the one behind the preposing of the "extra" *wh*-phrases we saw earlier in the interrogative *wh*-scope-marking constructions (30a-b). This becomes clear when we compare (36) above with the corresponding interrogative *wh*-scope marker example (37). The unacceptability of (37) (intended with matrix construal for the *wh*-phrase KIT) shows that no scope-marking strategy is available for a post-V phrase. Hence a scope-marking-based proposal for the parallel non-*wh* examples (27) and (36) is not tenable.

(37)   *Mit   kérdeztek [hogy kinek   mutattál   be   KIT].
         what.ACC asked.3PL   that who.DAT showed.2SG PRT who.ACC
         ('Who did they ask to whom you had introduced?'= for which person x, they
            asked for which person y, you had introduced x to y)

        C. On closer examination it turns out that the preposed non-*wh* phrase in the (27)-type cases in fact need not be adjacent to the pre-V *wh*-phrase. There could be other (non-*wh*, non-Focus) constituents intervening, as in (38), in clear contrast with the familiar case of preposed EI-Op (alias identificational Focus) phrases.

(38) Azt   kérdezték   [hogy PÉTERT szerintünk   ki   verte meg].
      it.ACC asked.3PL   that Péter.ACC according.to.us who.NOM beat PRT
      'They asked who according to us beat up PÉTER.'

        In sum, the observations presented in (35A-C) above lead to the conclusion that it is not an intervening EI-Op/Focus phrase and a "scope marking" strategy eliminating its intervention effect that account for the data falling under pattern (31a), namely, for the unacceptability of (32a) and its contrast with the acceptable (27). Preposing of the non-*wh* phrase in (27) is not an instance of our EI-Op movement. Rather, I suggest, it is an instance of (non-EI) contrastive focus, which gets preposed only optionally, by what is argued in Horvath 2010 to be a non-feature-driven movement to the left periphery, and is not subject to the strict V-adjacency requirement (see (36) and (38)).

        Adopting the above proposal that discards the scope-marking-based scenario for cases like (27), we still need to account for the presence of the (suspected "scope-marker") *azt* 'it-ACC' in the matrix clause of such examples (see (39a) parallel to (27)), and for the fact that in its absence, the same pattern (namely, (31a)) in the embedded clause results in unacceptability, as shown by (39b).

(39) a. *Azt*   kérdezték meg [hogy PÉTERT kinek   mutattad   be].
         it.ACC asked.3PL PRT that   Péter.ACC who.DAT showed.2SG PRT
         ('They asked to whom you had introduced PÉTER.')

     b *Meg-kérdezték   [hogy PÉTERT   kinek   mutattad   be].
        PRT-asked.3PL that Péter.ACC   who.DAT showed.2SG PRT

It is important to note here that the need for *azt* seen in (39a-b) is not attested in the case of an embedded yes/no questions: in the latter, a preposed non-*wh* (EI-Op/Focus)

phrase gives fully acceptable results both with and without *azt* occurring in the matrix (as shown in (40a-b)).

(40) a. *Azt*   kérdezték meg [hogy (csak) <u>PÉTERT</u>   mutattad-<u>e</u>   be
          it.ACC asked.3PL PRT that   (only) Péter.ACC showed.3PL-y/nQ   PRT

  Marinak.
  Mari.DAT

    b. Meg-kérdezték [hogy (csak) <u>PÉTERT</u>   mutattad-<u>e</u>   be   Marinak].
       PRT-asked.3PL   that (only) Péter.ACC showed.3PL-y/nQ   PRT Mari.DAT
       'They have asked whether it was (only) PÉTER that you introduced to Mari.'

The questions raised by the above observations about the distribution of *azt* in (39)-(40) for our analysis of the "mixed" pattern (31a) are: (i) Why is *azt* needed in (39) and (ii) why is *azt* not necessary in (40)?

I can offer the following (tentative) answers for these questions. As for (i), *azt* is needed in cases like (39) because contrastive Focus, where the contrast is with something external (contextually given), cannot occur within an embedded clause. The presence of the anticipatory pronoun *azt* is crucial in that it can render the whole embedded clause the exhaustive or contrastive focus of the matrix; the set of alternatives is generated by a variable in the embedded clause replacing the contrastive phrase (PÉTERT). This scenario is supported by the possible continuation for (39a): *nem azt hogy LACIT* 'not it-ACC that LACI-ACC' (see the original version of the example (27), which includes this elliptical continuation, in section 4.2).

As for question (ii), notice that the preposed non-*wh*-phrase (PÉTERT) in (40), unlike in (39), can clearly be an EI-Op phrase, as shown by the option of the occurrence of *csak* 'only' with it. No surpise here. Yes/no questions, unlike *wh*-questions, permit preposing of EI-Op phrases, they are independently known to exhibit EI-Op movement, whether embedded (40b) or matrix (41):

(41) (Csak) PÉTERT   mutattad   be   Marinak?
        only Péter.ACC showed.2SG PRT   Mari.DAT
        'Was it (only) PÉTER that you introduced to Mari?'

Finally, one should wonder about the status of (32a), a main clause with pattern (31a), judged above to be unacceptable. If, as claimed here, it indeed is not some covert raising to an (alleged) scope-marker in a matrix clause that saves cases like (27) and (39a), shouldn't then the same preposing pattern (31a) we claimed to involve contrastive focus, namely […[contrastive non-*wh*] [*wh*-Q] V …] be able to occur in (at least certain) main clauses too? In fact it does occur, but as expected on our proposal, only when a discourse context is available that can induce *contrast* for the pre-*wh*-Q contrastive focus phrase, as shown in (42).

(42)   Speaker A: Be-mutattam   Lacit   Marinak.
                  PRT-showed.1SG Laci.ACC Mari.DAT

'I've introduced Laci to Mari.'

Speaker B: Rendben. De <u>PÉTERT</u> <u>kinek</u>   mutattad   be?
            Okay.   But Péter.ACC who.DAT showed.2sg PRT
            'Okay. But to whom did you introduce PÉTER?'

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