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A Late Insertion Approach to English Quantified Wh-Interrogatives in the Syntax First Framework[*]

0. Introduction

Certain Hungarian multiple wh-interrogatives, such as in (1), are analysed by É. Kiss (1993) as involving one wh-operator in the preverbal focus position (which we will refer to as FOC) and one or more wh-phrases, interpreted as universal quantifiers, in quantifier positions in front of FOC:

(1) a Mit kinek hozott János?
what-ACC who-DAT brought John
'what did John buy for who' =
∀(thing)x ?(person)y [John bough x for y]

b Ki kinek mit hozott?
who-NOM who-DAT what-ACC brought
'who bought what for who' =
∀(person)x ∀(person)y ?(thing)z [x bought z for y]

In the present paper we will refer to these constructions as 'quantified interrogatives[1]' (QIs) and distinguish them from cases of multiple interrogatives, in which every wh-phrase acts as an interrogative operator[2]. We will not be much concerned with the latter in this paper.

Instead, we will be investigating English QIs. These work in a similar

[*] I thank the reviewer for insightful comments which have helped improve this paper greatly. I also thank the audience of the Olomouc Linguistic Colloquium 2016 for their comments on predecessor to the present paper which also helped shape it.

[1] Despite the fact that quantified wh-interrogatives are the focus of the paper: I find QWhI too unwieldy a term in comparison to the shorter though less accurate QI.

[2] In Hungarian, QIs and multiple interrogatives are syntactically distinct in that the former involves the fronting all the wh-phrases whereas the latter fronts only one of them:
i) ki mit látott
who what saw for everyone, what did they see
ii) ki látott mit
who saw what tell me who it was that saw something and what it was that they saw

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way to Hungarian QIs, with multiple wh-constructions able to express interrogatives involving quantification:

(2) a Who saw what? = ∀(person)x ?(thing)y [x saw y]
b Who gave what to who? =
∀(person)x ∀(person)y ?(thing)z [x gave z to y]

There are, however, a number of differences between Hungarian and English QIs which are interesting because it shows that the grammatical system underlying the phenomenon is open to variation. The differences are apparent at both a syntactic level and at the level where underlying syntactic elements are realised by exponents. Some of the syntactic differences are apparent in the examples given so far: for example, English QIs have the same arrangement as English multiple interrogatives whereas Hungarian QIs have a unique arrangement (see footnote 1).

Another big difference, which will be the main focus of the present paper, is the ambiguity of the following type of English QI:

(3) What did everybody see?

In (3), the quantifier can be interpreted with either wide or narrow scope. In Hungarian, however, not only is there a difference in the syntactic arrangement associated with these interpretations, but also there is a lexical selection difference, with the wide scope quantifier appearing as a wh-element and the narrow scope quantifier appearing as a quantifier:

(4) a Ki mit látott?
who-NOM what-ACC saw
∀(person)x ?(thing)y [x saw y]
b Mit látott mindenki?
what-ACC saw everyone-NOM
?(thing)y ∀(person)x [x saw y]

Thus, while (4a) asks to identify the thing for each person that they saw, (4b) asks to identify the thing such that everybody saw it.

The rest of this paper will outline the approach to Hungarian QIs developed by Newson and Kucsera (2016) and attempt to extend this to English. We will examine the particular problem that the ambiguity of (3) presents, and finally set about adjusting the approach so that the analysis works equally well for English and Hungarian.

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1. Newson and Kucsera (2016) on Hungarian QIs

Newson and Kucsera (2016) provide a novel analysis of Hungarian QIs. Instead of viewing these as involving wh-elements which are interpreted as quantifiers, they argue that they involve quantifiers which are pronounced as wh-elements. This view radically simplifies the description of the distribution of wh-elements and universal quantifiers in the language. It is also argued that the approach stands on a much stronger theoretical footing.

To exemplify the difference between the two approaches, consider the following data:

(5) a Mit ki látott?
what-ACC who-NOM saw
'Who saw what? (= for everything, who saw it)'

b * Mindent ki látott?
everything-ACC who-NOM saw
'For everything, who saw it?'

c Mindent János látott
everything-ACC John saw
'For everything, it was John who saw it'

d * Mit János látott
what-ACC John saw
intended meaning: 'For everything, it was John who saw it'

It is standardly assumed that wh-operators and foci occupy the same pre-verbal position, FOC, which is supported by the fact that only one wh-operator or focussed phrase can appear pre-verbally. Under the assumption that certain wh-phrases are interpreted as quantifiers, (5b) shows that in an interrogative construction, a universal quantifier is excluded from the position in front of FOC, though it can occupy this position in non-interrogative contexts (5c). Instead, a wh-expression *with the interpretation of a quantifier* can appear in the pre-FOC position (5a), though wh-expressions are not normally allowed to occupy this position, even if they are interpreted as universal quantifiers (5d).

From the point of view of distribution, the situation as described is very complex. But if we take the stance that those wh-phrases which are interpreted as quantifiers are in fact quantifiers, the distribution of wh-operators and quantifiers becomes straightforward. A Wh-operator occupies FOC and never the pre-FOC position[3]. Universals, either pronounced as

[3] With multiple wh-operators only one can occupy FOC and the rest remain post verbally

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quantifiers or wh-expressions, can and do occupy the pre-FOC position. Thus there is nothing to be accounted for in terms of their distributions, which are very straightforward. What does have to be accounted for is why quantifiers in the pre-FOC position in QIs have to be pronounced as wh-phrases. This is an issue that Newson and Kuscera address separately.

A second argument against the 'reinterpretation' approach to QIs raised by Newson and Kucsera concerns the process of reinterpretation involved. The main objection is the lack of any theoretical underpinnings for such processes. Presumably, there is no existing theory of reinterpretation because the phenomenon is so rare – perhaps limited to this one case. This makes any proposal of such a process entirely *ad hoc* and lacking in any explanatory power. If, on the other hand, we assume that those wh-expressions that are interpreted as quantifiers are indeed quantifiers, then there is no need for a theory of reinterpretation. Instead, what we need is a theory that accounts for how an underlying quantifier can come to be pronounced as something else. Newson and Kucsera point out that such a theory does exist: late lexical insertion, such as is adopted in Distributed Morphology (Halle and Marantz 1993) and Nanosyntax (Starke 2009). In this, a pre-lexical element of the syntactic construction might be realised by an exponent which is also used to realise some other element. It assumes that exponents are selected to spell out underlying morphemes on the basis of competition and that, as the 'best exponent available' is chosen, it does not necessarily follow that there is an exact match between selected exponent and underlying morpheme. In principle, then, it would be possible for an exponent of a wh-expression, for example, to be selected to spell out an underlying universal quantifier. Thus the view that the wh-phrases in QIs which have quantifier interpretations are quantifiers stands on firmer ground than does the reinterpretation approach.

Newson and Kucsera argue that the notion of clause typing (Cheng, 1991) is central to an understanding of why Hungarian universal quantifiers can be realised as wh-elements. Cheng's proposal that fronted wh-phrases take the function of typing interrogative clauses is set in conflict with the fact that Hungarian operators overtly adopt positions which reflect their scope relations. Thus the requirements that a wide scope quantifier precede a narrow scope wh-phrase and that a wh-phrase be at the front of an interrogative clause in order to type it cannot be simultaneously adhered to. This gives rise to the phenomenon of realising quantifiers as wh-phrases, so that the quantifier can

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(see footnote 1). In this respect, they are exactly like other foci. Note also that this is a very common pattern of distribution for wh-operators.

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occupy its scope position and type the clause at the same time[4].

However, Newson and Kucsera point out that that there are reasons to believe that clause typing is not simply a matter of putting wh-elements at the front of a clause. Firstly, multiple quantifiers in QIs which have scope over the interrogative operator are all realised as wh-phrases, not just the first one (see (1b)). Secondly, a universal quantifier which has a contrastive topic reading is first in the clause, but is realised as a quantifier, not a wh-element:

(6) Mindenki mit látott?
everyone-NOM what-ACC saw
'What did everyone see?'

The fact that the quantifier here is interpreted as taking narrow scope indicates that it is scope rather than position that determines which element types the clause. Specifically, it is the widest scope operator which is selected to do this. In the case of (1b), where there are multiple quantifiers, note that they all have wide scope with respect to the interrogative operator, but as their scopes do not interact with each other, they are all the 'widest scope' taking operators. Thus they are jointly responsible for typing the clause and are all consequently realised as wh-expressions.

The final aspect of Newson and Kucsera's analysis concerns the process of selection of exponents. They argue in favour of 'targeted underspecification', developed in Newson (2014). This is an OT based system which evaluates competing exponents for spelling out the arrangement of underlying syntactic elements. Exponents are associated with features in the lexicon and these are compared for fitness to the features needing to be spelled out in terms of whether or not they match. Evaluation is done by a set of 'Match' conditions, which are violated if the exponent is not specified for the spell out features. The Match conditions are ranked, thus allowing lower ranked ones to be violated if this enables higher ranked ones to be satisfied. For example, supposing a syntactic object included features F1 and F2, an exponent specified for feature F1 but not F2 will satisfy Match F1 but violate Match F2. If Match F1 is ranked higher than Match F2, it may be that this exponent is still the best choice if there is no other exponent specified for F1.

The specific proposal put forward by Newson and Kucsera is that a general 'typing' condition, which is satisfied when the clause is typed by the widest scope operator(s), is more highly ranked than a Match ∀ condition,

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[4] Only wh-interrogatives are typed by a fronted wh-element in Hungarian. Yes-no questions can be typed by an interrogative particle.

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satisfied when the exponent is specified for universality. Therefore, in the relevant case, when a universal quantifier takes the widest scope in an interrogative clause, it is better to realise it as a wh-element, thus satisfying the typing condition, than it is to realise it as a quantifier:

(7)

		Typing	Match ∀
☞	$\underbrace{\text{Op}_{\forall}}_{\text{ki}}$ $\underbrace{\text{Op}_{?}}_{\text{mit}}$ $\underbrace{\text{saw}}_{\text{látott}}$		*
	$\underbrace{\text{Op}_{\forall}}_{\text{mindenki}}$ $\underbrace{\text{Op}_{?}}_{\text{mit}}$ $\underbrace{\text{saw}}_{\text{látott}}$	*!	

2. The English Problem

As would be expected, QIs appear in other languages, not just Hungarian. However, there are differences in the behaviour of these constructions cross linguistically, which is always interesting from a theoretical perspective as it offers an opportunity to test predictions made by a system developed to handle data from one language. In this section, we will investigate how the predictions of the system developed for Hungarian QIs by Newson and Kucsera pan out for English.

In the majority of cases, English appears to work similarly to Hungarian in its realisation of QI constructions. When a universal quantifier scopes under the interrogative operator, it is always realised as a quantifier and never as a wh-item:

(8)	a	Who saw everything?	a'	* Who saw *what*
	b	What did *everyone* see?	b'	* What did *who* see?
	c	Who did you give *everything* to?	c'	* Who did you give *what* to?
	d	What did you give to *everyone*?	d'	* What did you give to *who*?
	e	Where did you put *everything*?	e'	* Where did you put *what*?
	f	What did you put *everywhere*?	f'	* What did you put *where*?
	g	Who did you meet *every time*?	g'	* Who did you meet *when*?
	h	When did you meet *everyone*?	h'	* When did you meet *who*?

It is important to view the data presented in (8) for what it is: the different *realisations* of underlying grammatical expressions. For example, the ungrammaticality of (8b') has nothing to do with issues concerning 'superiority' effects; that is a syntactic issue, not one of realisation. That the primeless examples are all grammatical demonstrates that there is a perfectly

grammatical syntactic arrangement that underlies both possible realisations and the primed examples are not ones selected. Furthermore, this grammatical syntactic arrangement corresponds to the interpretation in which the quantifier scopes below the interrogative operator.

In cases where the quantifier has wide scope with respect to the interrogative operator, it *can* be realised as a wh-element, as predicted by Newson and Kucsera. Indeed, in one syntactic arrangement associated with this scope interpretation, it *must* be realised as a wh-element:

(9)	a	*Who* saw what ?	a'	* *Everyone* saw what?
	b	* *What* did who see?	b'	* *Everything* did who see?
	c	*What* did you give to who?	c'	* *Everything* did you give to who?
	d	*Who* did you give what to?	d'	* *Everyone* did you give what to?
	e	*What* did you put where?	e'	* *Everything* did you put where?
	f	*Where* did you put what?	f'	* *Everywhere* did you put what?
	g	*When* did you meet who?	g'	* *Every time* did you meet who?
	h	*Who* did you meet when?	h'	* *Everyone* did you meet when?

As with (8), it is important to see the examples in the two columns as *realisations* of the same underlying construction. This apparently involves the fronting of the quantifier, accompanied in many cases by auxiliary inversion, as with wh-fronting. We will have more to say on this a little later. In this case, however, one of the examples is ungrammatical in both forms, (9b/b'). Here, the issue is syntactic, not a matter of realisation, as there is no grammatical underlying construction to be realised.

Of course, as pointed out in the introduction, the grammatical cases in (9) are not the only way to realise (syntactically or lexically) an input interpretation which has the quantifier scoping over the interrogative operator. All of the grammatical examples in (8) can also do this. Generally then the situation appears to be as follows[5]:

[5] Here, X > Y means that X scopes over Y, X … Y means that X precedes Y and X } Y means that X is realised as Y. The realisation of the universal quantifier is italicised in the examples given.

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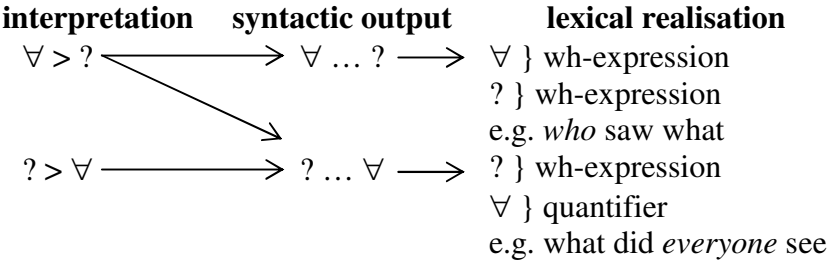
(10)



There are a number of problems for the Newson and Kucsera account that these observations raise. The most obvious is that, counter to prediction, a wide scope universal is not always realised as an interrogative in QI constructions. A second problem is that the situation in (10) seems to indicate that it is only when the quantifier is fronted that it is realised as a wh-element, and so Cheng's original account of clause typing is more accurate for English. A final, more general problem is the fact that apparently one input condition gives rise to two syntactic arrangements.

We will deal with this syntactic problem first, as its solution holds the key to the solution to the other problems too. Before this, however, there are a few issues to discuss concerning the general approach.

3. Quantifier Raising in English?

The Hungarian data on which Newson and Kucsera based their analysis was not particularly remarkable. Quantifiers in Hungarian are well known to display scope relations in terms of linear order and hence quantifier fronting is part of the normal syntax of the language. Moreover, as pointed out in the introduction, those quantifiers which are realised as wh-expressions occupy standard quantifier positions, in front of FOC.

When we view English, however, a very different picture emerges. English is not normally considered to be a language which reflects the scope relations of quantifiers in terms of surface word order and as such is usually claimed not to have overt quantifier raising. It may be that word order influences the preferred scope reading, and so the dominant reading of (11a) has the universal with wide scope and that of (11b) the universal takes narrow scope.

(11) a Every man loves a woman
b A woman is loved by every man

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Yet clearly this does not amount to quantifier raising and the fact that this dominant reading can be overcome supports the assumption that English is unlike Hungarian in its syntactic treatment of quantifiers.

But the claim that all the grammatical examples in (9) involve a universal quantifier in the initial position challenges this standard assumption. It is clear that the standard assumption has gone unchallenged until now exactly because the fronted quantifiers look like wh-expressions and not universal quantifiers. Nonetheless, if the Newson and Kucsera perspective is reasonable for Hungarian, which it does seem to be, then either we must accept it for English as well, and allow for the non-standard claim that English has quantifier fronting, or assume that English and Hungarian QIs are constructed on the basis of very different mechanisms, which is perhaps even less attractive.

If English does have quantifier fronting, why do we not see it in context other than interrogative ones? The situation must be that English quantifiers adopt a scope position with respect to wh-operators which they have scope over, but they maintain their argument positions rather than scope positions with respect to non-interrogative operators. This situation would not be difficult to account for in a competition based framework, such as a Syntax First Alignment system (Newson 2010). Constraints which position universals specifically with respect to wh-operators which they scope over must outrank constraints which place them in their argument positions, and these in turn out rank constraints which position them with respect to non-interrogatives which they take scope over.

While this analysis predicts interesting possibilities for linguistic variation, to explore this fully would take us too far from our present purposes. Suffice it to say that Hungarian differs from English in the ranking of these constraints by having both scope based constraints out ranking the argument based ones. I leave it to future investigation to establish whether other types of languages the analysis predicts are extant or not[6].

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[6] If the scope based alignment constraints have specific hosts, including existential, then languages, opposite to English, which front universals scoping over existentials but not those that scope over wh-operators would be predicted. The facts that German has scope driven middle field scrambling of non-wh-operators (Wurmbrand 2008) and that Italian does not front quantifiers in QIs, as it has no multiple wh-constructions (Rizzi 1987), suggests that such a language would not be impossible. On the other hand, if there were only a general scope based alignment constraint to accompany the specific one which fronts wide scope universals with respect to wh-operators, then such a language would not be predicted and all languages would either be like English or Hungarian or would have no fronting of universals at all.

4. The Syntax of English QIs

When one adopts a competition based approach, cases of optionality are always problematic. Optionality means that both options must be evaluated equally with respect to the same input. But unless the options differ on some minor aspect, which the syntactic system does not control, achieving this is very difficult. The optionality involved in English QIs, represented in (10) is particularly disturbing as it involves a difference in argument order, which is hardly a minor aspect of English syntax. Indeed, in the analysis of Newson (2013), the ordering of arguments is one of the fundamental bases of sentence organisation. The fact that one of the orderings is canonical (*who saw what* = SVO) and the other is not (*what did everyone see* = OSV), means that it is incredible that these are equally grammatical ways of rendering a single input.

A standard solution to this problem is to claim that the two 'options' are in fact grammatical renditions of two distinct inputs and thus they are not options at all. In the present case, there is good reason to believe that this is so. While it is true that the two orderings involved may express the same scope relation between the universal and the wh-operator, it is not true that they mean exactly the same thing. The two in fact differ on another aspect of meaning, which can be elicited by providing detailed contexts in which one is more appropriate:

(12) A team of police investigators come together after eye witnesses have been interviewed. The chief investigator wants a summary of what information has been gathered. He asks the team of interviewers: "From the interviewed eyewitnesses …
  a who saw what"
  b # what did everyone see"

(13) The report of a crime which took place in a busy shopping centre has just been phoned in to the station and the police sergeant tells a group of police officers to go and talk to all eye witnesses about what happened. He tells them: "Go and round up as many people as you can and find out …
  a what everyone saw"
  b ?# who saw what"

As can be seen, the ordering involving quantifier fronting is more appropriate in the case where there is an identified set of individuals referred to. In (12), the set of eyewitnesses has already been established, but in (13) it is yet to be formed.

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The difference in these cases having to do with pre-established references brings to mind Enç's (1991) account of specificity. In this, a specific indefinite is one whose reference is linked by way of a subset relation to an already familiar set, i.e. one that has already been introduced into the discourse and so conforms to Heim's (1982) Familiarity Condition. However, we cannot simply say that the distinction between the two cases in (12) and (13) is one of specificity, with the quantifier being fronted when it is specific, as it follows from Enç's approach that universal quantifiers are always specific. This is because quantifiers quantify over discourse relevant sets rather than sets with unrestricted reference. (14), for example, means that she confessed to all things relevant to the situation and not to every crime that has ever been committed:

(14) She confessed to everything

The use of a quantifier is not always dependent on there being a pre-established set that has already been introduced in the discourse, though. Often the set that it quantifies over is one that is simply establishable in context. So (15) could be a perfectly good opening line in a conversation between film directors:

(15) Everyone hates actors that don't do what they're told

It is clear that the universal quantifier here does not quantify over the set of all human beings, but is limited to the set of film directors, possibly even to only those who are present. But that set had not previously been introduced and so is not 'familiar' in the technical sense, though it is clearly very accessible given the context. For quantifiers, then, it seems that the notion of accessibility rather than familiarity is what is relevant in determining the set that they quantify over. Accessibility is more flexible a notion than that of familiarity as the relevant sets can be more or less accessible in a given context, as demonstrated in (12) and (13), whereas familiarity is to do with whether or not the set has previously been introduced in the discourse.

There are a number of directions we might take in attempting to account for the variable treatment that English gives to quantifiers, following the above discussion. One possibility would be to claim that universals are fronted in interrogative contexts only when they are specific, otherwise they do not front. This, of course would mean arguing against Enç's claim that quantifiers are always specific and countering that they are only specific when they quantify over an easily accessible set. This claim would be difficult to square, however, with Enç's observation that in Turkish quantifier objects

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require accusative case marking, something that is associated with specific nominal expressions in this language. If quantifiers could be non-specific, we would expect them to be able to appear without case marking in object position, like other non-specific nominals.

A better solution would be to introduce a feature [±accessible] to distinguish between universals that quantify over accessible sets and those that do not. We would then need to claim that in interrogative contexts, [+accessible] universals are fronted while [−accessible] ones are not. This would allow us to maintain Enç's claim that quantifiers are [+specific], though this feature would be inconsequential for their syntactic treatment in English.

A comment is necessary here on why English [+accessible] universals front in interrogative contexts, but not otherwise:

(16) a Which book did John write when?
b When did John write every book?
c John wrote every book between 1996 and 2009

In accordance with what we have just discussed, (16a) is compatible with a situation in which there is an easily establishable set of books that is being inquired about. Indeed, out of context, it is difficult to determine the exact nature of the set of books under discussion in (16b): it is even compatible with the rather unlikely interpretation in which John is supposed to have written every book in existence. In (16c), the quantifier is compatible with both interpretations as the preceding discourse may or may not have established the set being quantified over. Yet in this last case, there is no quantifier fronting regardless of whether the quantifier is [+accessible] or not.

In Alignment Syntax the way to account for the variable behaviour of elements in different contexts is through the use of domain based constraints. Thus we might claim that a [+accessible] universal has to precede an interrogative domain, defined as the set of elements which are dependent on a predicate associated with a [+wh] feature. In (16b) there is no [+accessible] universal and in (16c) there is no interrogative domain. Hence the constraint responsible for the fronting of the quantifier in (16a) is inactive in the latter two cases.

Examination of further data will help us to refine this a little more. We have seen that in cases where there is more than one universal quantifier in an English QI, only one of them is fronted and the others remain in situ:

(17) a Who gave what to who? ∀(person)x ∀(person)y ?(thing)z [x gave z to y]

b What did you post to who when? ∀(thing)x ∀(time)y ?(person)z [you posted x to z at y]

Thus, in English, fronted quantifiers behave like wh-expressions: only one wh-operator fronts in multiple questions. This is not a necessary situation, however, as multiple universals in Hungarian QIs behave syntactically more like quantifiers than wh-operators with all of them fronting to the pre-FOC position:

(18) Ki kinek mit hozott?
who-NOM who-DAT what-ACC brought
'Who bought what for who?' =
∀(person)x ∀(person)y ?(thing)z [x bought z for y]

As Hungarian multiple wh-questions involve the movement of only one wh-operator to the FOC position, similar to English wh-movement, we can see that it is not necessary that quantifiers realised as wh-expressions have to behave like wh-operators. It is therefore a fact about English that in this language those quantifiers which happen to look like wh-expressions behave like them too.

What is behind this syntactic behaviour? We can contrast languages which require one of a set of elements to behave differently from the rest of the set to those languages where the whole set is required to behave the same. A classic example of this is in patterns of wh-fronting. Some languages require only one wh-expression to front whereas other languages front them all. We can capture this distinction generally in Alignment syntax with domain based constraints through the selection of whether the domain is the target or the host of the alignment. If the domain is the host, then the target element must be positioned with respect to the members of the domain. If there is more than one element that the constraint is applicable to as targets, then all of them will be positioned with respect to the domain. Thus, with a constraint of the form in (19), all elements of type X will have to precede every member of domain Y[7]:

(19) xPD_y

[7] As is standard in Alignment Syntax, constraint names identify targets, alignment relations and hosts. In (19) the target is '*X*', the alignment relation is '*Precedes*' and the host is '*Domain Y*'. Targets and host are usually represented by lower case letters to distinguish them from the alignment relation. Domains, however, are represented by a capital D with the domain identification indicated by a lower case subscript.

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This would be the case for languages with multiple wh-fronting. On the other hand, constraints of the form (20) behave differently:

(20) D_yFx

This constraint requires that all members of domain Y be preceded by an element of type X. But if there is more than one element of type X, the constraint will be no better satisfied if they all precede the domain than if only one of them does. Other constraints will therefore determine the position of the other X-type elements and only one will be subject to the one in (20). Obviously, it is this kind of constraint which is relevant for single wh-movement.

Returning to the issue of the fronting of English [+accessible] universals, clearly they are subject to a constraint of the type shown in (20). Specifically the constraint is:

(21) $D_{int}F$[+accessible]

The constraint in (21) is violated whenever a member of the interrogative domain is not preceded by a [+accessible] universal, which can be achieved by fronting just one such quantifier. Hence all other universals will remain in situ. The same sort of constraint is applicable for both English and Hungarian wh-operators:

(22) $D_{int}F$[+wh]

Thus only one wh-operator will front in both languages. For English (21) outranks (22). Thus in QIs it will be more important to front a [+accessible] quantifier than a wh-operator. As (22) will therefore be violated in situations where there is at least on [+accessible] quantifier, the wh-operator will not be affected by this constraint and therefore will remain in situ.

For completeness sake we should consider what ranking is relevant for Hungarian. First it should be pointed out that Hungarian does not distinguish between [±accessible] quantifiers and so the constraint relevant for the positioning of its universals in QIs is not the one in (21). Rather, as established in Newson and Kucsera (2016), it is wide scope universals that are affected. Moreover, as all wide scope universals precede the wh-operator (see (18)) the relevant constraint must be:

(23) [+wide]PD_{int}

However, there is more to be said in the case of Hungarian. The facts are that in Hungarian QIs both wide scope universals and wh-operators front: the quantifiers front to a position before the wh-operator, but the wh-operator still fronts to a position before the verb and cannot remain in situ as it does in English:

(24) * Ki hozott mit?
who-NOM bought what-ACC
intended meaning: For every person, tell me what they bought?

This situation cannot be brought about by a simple ranking of (22) and (23). If (22) were ranked highest, the wh-operator would be fronted and the wide scope quantifiers would remain in situ and if (23) were ranked higher, the quantifiers would front and the wh-operator would remain behind the verb. In order to capture the data, we need to introduce another type of constraint. This is based on ideas first proposed in Newson (2013). In this it is proposed that members of domains are marked as such so as to be visible to the relevant domain based constraints. These domain markers are subject to deletion processes and the result of this is that elements become invisible for the relevant constraint. As it is only domain members which are visible for domain based constraints, the effect of deleting an element's domain marker is to effectively remove that element from the domain. Obviously whether or not a domain marker can be grammatically deleted depends on the ranking of the relevant faithfulness constraint. A highly ranked faithfulness constraint will prevent domain markers from being deleted, but a lower ranked faithfulness constraint opens up the possibility that the domain marker can be deleted, if doing so is of benefit to the satisfaction of higher ranked constraints. To get the Hungarian word order facts correct, it must be claimed that the wide scope universal quantifiers have their interrogative domain markers deleted, and so are taken to be non-domain members. This will have the effect that the wh-operator will front to what remains of the interrogative domain once the quantifiers have been excluded and yet the quantifiers will be able to satisfy (23) by preceding the interrogative domain, including the wh-operator. This situation is represented below. As can be seen, no element marked as a member of the interrogative domain precedes the wh-element, and no member of this domain precedes the quantifier either:

(25) $\forall_{\text{INT}}$ WH_{INT} V_{INT} (= ki mit hozott)

The above state of affairs can be achieved if the relevant faithfulness

constraint is ranked below both (22) and (23). If it were ranked above either, it would be better to violate the outranked alignments than it would be to delete the domain markers of the quantifiers. With faithfulness ranked low, it is better to satisfy the alignments which can only be done simultaneously if we delete the domain markers of the quantifiers. Under these conditions, the ranking of the alignment constraints becomes unimportant as both can be fully satisfied simultaneously.

5. Realising Universals in English QIs

Let us now turn to the problems brought up at the end of section 2: that not every wide scope universal quantifier in an English QI is realised as a wh-expression and only those that are fronted are so realised, suggesting that it is syntactic position not scope that determines how a universal is realised.

The first thing to point out is that the statement made in the previous paragraph is not exactly true: it is not only fronted universals that are realised as wh-expressions in English QIs. Recall that in cases where there are more than two wh-expressions in a QI, only one of these is a wh-operator and the others are universal quantifiers:

(26) Who gave what to who?
∀x ∀y ?z [x gave z to y]

As only one wh-expression is located at the front of an English interrogative, it follows that in cases such as (26) at least one quantifier is not fronted, and yet all quantifiers in these sentences are realised as wh-expressions. Therefore it cannot simply be said that it is syntactic position that determines when a quantifier will be realised as a wh-expression.

It is instructive to compare an example such as (26) with one in which the non-fronted universal is realised as a quantifier:

(27) Who gave what to everyone

Ignoring the irrelevant fact that (27) is ambiguous, while (26) is not, and concentrating only on the interpretation in which *everyone* has wide scope, we can see that the difference between the two sentences is exactly that between those discussed in section 4, i.e. (26) works with a previously established set as the goal argument whereas the goal in (27) refers to a less accessible set. It can be concluded therefore that the determining factor for whether the universal is pronounced as a wh-expression or a quantifier is the same as that which determines whether it is fronted with respect to a wh-operator or not. A

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[+accessible] quantifier is fronted and realised as a wh-expression and a [−accessible] quantifier is not fronted and realised as a quantifier.

The difference between the syntax and the process of lexical selection is that only one [+accessible] quantifier is fronted whereas all [+accessible] quantifiers are realised as wh-expressions.

5.1. Tweaking the Newson-Kucsera system to fit English

The question that needs to be addressed at this point is how do we account for the English realisation of quantifiers in QIs? It is clear that because English works in a way which is largely like Hungarian it would be best to adapt the system proposed by Newson and Kucsera for the purpose. Therefore it can be claimed that clausal typing is responsible for the realisation of certain universal quantifiers as wh-expressions. Moreover, as narrow scope quantifiers are never realised as wh-expressions, the Typing condition proposed by Newson and Kucsera, where wide scope operators are selected to type clauses, is unaffected in its basic statement. But the fact that wide scope [−accessible] quantifiers are not realised as wh-expressions may seem to indicate that the Typing condition is not exactly the same in the two languages. Instead, in English QIs where there is a wide scope [−accessible] universal quantifiers it seems that the role of the typer falls to the narrow scope wh-operator, as depicted below with the typing element italicised:

(28) *What* did everyone see? interpretation: ∀ > ?

Yet, this would be unsatisfactory. The approach assumes that languages can differ with respect to the grammatical conditions that they operate with as well as in terms of the ranking of these conditions. It is generally accepted in OT that this move is unwarranted and that language variation should be accounted for in terms of constraint ranking alone. Therefore we are obliged to assume that the typing condition that operates in English is the same as that which operates in Hungarian and another solution to the English problem must be found.

A theoretically consistent, though somewhat more radical approach, would be to assume that the same typing condition applies in all languages, but that it is active to a greater or lesser extent cross linguistically. Thus, cases such as (28) would be claimed to be instances in which the typing condition is simply not met and as such the narrow scope wh-operator does not type the

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clause. Indeed, nothing does and the typing condition is simply violated[8].

This proposal is not as radical as it may sound, if one takes the view of clausal typing, which is the appropriate one in my opinion, that it is a phonological condition rather than a semantic one. Thus an interrogative clause which fails to be typed is still interrogative, but merely fails to be phonologically marked as such. Moreover, the approach we have been developing here disassociates clausal typing from any syntactic process, placing it squarely in the realm of lexical realisation, which is essentially a phonological concern. Within this system, wh-operators are not fronted in order to type interrogative clauses. Indeed, in many cases, wh-operators are not fronted at all and other elements are used to type the clause, not all of which are fronted themselves. Failing to type a clause is therefore no more radical than failing to pronounce something, a common enough occurrence in natural languages.

Adopting this perspective allows us to assume that examples such as (28) involve the satisfaction of a condition on lexical selection, the satisfaction of which is what directly causes the typing condition to be violated. Within the system developed here, this is not too difficult to achieve. What is needed is a matching condition which outranks the typing condition and forces a [−accessible] universal operator to be realised as a quantifiers.

To achieve this, first let us propose a matching condition, Match [−ak][9], which for English is ranked above Typing:

(29) Match [−ak] > Typing > Match ∀

It must also be assumed that universal operators are marked for [−accessible] in their lexical entries and that interrogative operators are not. Given their

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[8] The reviewer raises the question of embedded wh-interrogatives, suggesting that typing is necessary in such cases to satisfy selectional properties. Thus in a example such as i), with a wide scope interpretation given to the quantifier, we should expect that the interrogative still types the clause:

i) I wonder what everyone saw

However, it is not necessarily the case that the typing condition and the selectional restriction are one and the same thing. For example, the selection restriction might be satisfied in cases such as i) by the mere fact that there is a fronted wh-expression. Indeed, the fact that there can be no intervening element between the verb selecting an interrogative complement and the wh-expression which fronts it indicates that this restriction is an adjacency condition rather than a mere typing one:

ii) * I wonder yesterday who he met

[9] I will use ‘ak’ as an abbreviation for ‘accessible’ instead of ‘acc’ to avoid confusion with ‘acc’ as an abbreviation for ‘accusative’.

behaviour in English QIs, this is not an unreasonable claim. However, this assumption does not commit us to the belief that English universal quantifiers are never used in [+accessible] contexts nor wh-operators in [−accessible] ones. This is because matching conditions, similar to the Superset Principle of Nanosyntax, are not violated by overspecification. Matching conditions require that the spell-out features be matched by those specified for the selected exponent, subject to violation conditions, but not that all the features specified for the exponent match those being spelled out. Thus, it would be possible for a universal quantifier specified for [−accessible] to spell out something marked for [+accessible] if it were the best choice of exponent in that context. We shall give an example of this in a little while.

First let us demonstrate how exponents are selected in English QIs. We will assume the same conditions as proposed by Newson and Kucsera, which can be defined as follows[10]:

(30) Match ∀ violated when the underlying /∀/ feature is not matched by the relevant feature specified on the selected lexical item
Typing violated if the widest scope operator in an interrogative is not realised by an exponent marked for [?]

To these we also add the matching condition relevant to the [−accessible] feature:

(31) Match [−ak] violated when the underlying /−accessible/ feature is not matched by the relevant feature specified on the selected lexical item

The lexical entries we will assume are:

(32) everyone ↔ [Op, ∀, −accessible]
who ↔ [Op, ?]

For the sake of simplicity, we will ignore other features associated with these lexical elements, such as phi-features, [+animate], etc., which are irrelevant to our discussion[11]. Also note that the wh-expression is not assumed to be

[10] In the following I distinguish between an underlying feature which is part of the syntactic object and a feature associated with a lexical item and is therefore part of the lexicon by representing the former in slanted brackets (e.g. /X/) and the latter in square brackets ([X]).

[11] Ignoring these features will be harmless given that the matching conditions are not

specified for [+accessible], even though it is used to express [+accessible] universal quantifiers in QIs. This turns out to be an unnecessary specification and one which would be hard to justify in any case, given that there seems to be no indication that interrogatives are otherwise predisposed to realise this feature.

One might wonder whether the lexical wh-expression has to be specified for the interrogative feature ? given that it is very common for such elements to be used to express parts of, or even the whole of non-interrogative operators, e.g. quantifiers (*everywhere*, etc.) or relative pronouns (*who*, etc.). Cheng (1991) suggested that Hungarian wh-expressions are not specified for interrogativeness but are accompanied by a zero determiner which adds the relevant feature in the same way that *minden* (every) adds universality to *mindenki* (everyone – literally every+who). However, as a general approach this is rather *ad hoc*, as it would have to be assumed that the interrogative determiner that adds the interrogative feature to wh-expressions is null in all languages and this is something that would itself require explanation. In a late insertion approach, there is nothing against assuming that wh-expressions are marked for interrogativeness even though they are used to spell out non-interrogative operators, as long as one does not adopt the Subset Principle as a condition on lexical selection. This rules out overspecification and would therefore block a lexical element specified for an interrogative feature being used to spell out a non-interrogative one. The system we are using here, however, is more akin to the Superset Principle, in that it does allow for overspecification. This, of course, by itself does not amount to an explanation for why wh-expressions are used to spell out non-interrogative operators so frequently. For this we would need a way to claim that interrogative operators are less specified overall than any other operator and hence their frequent use in other contexts would fall out from this. I will not attempt to work out the details of this here.

The first case to consider is the one in which an interrogative operator scopes over a universal. In this case the syntax will deliver an expression in which the interrogative is fronted and the universal is *in situ* (*who does everyone know*). What is to be decided is how to realise the universal – as a quantifier or as a wh-expression. There are two conditions to consider within this case: where the universal is marked for [±accessible].

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violated by over-specification. Therefore whatever else the lexical items are specified for will not count against their selection in the present contexts.

(33)

? > ∀-ak	Match –ak	Typing	Match ∀
☞ … everyone …			
… who …	*!		*

(34)

? > ∀+ak	Match –ak	Typing	Match ∀
☞ … everyone …			
… who …			*!

In both of these cases, the typing condition is met because the widest scope operator is the interrogative, which of course will be realised as a wh-expression. When the universal is specified for [–accessible], its realisation as a wh-expression is doubly out as the lexical wh-expression is neither marked for non-accessibility nor universality. When the universal is specified for [+accessible], then Match –ak is irrelevant as the feature [–accessible] is not part of the spell out string. In this case then the lexical wh-expression is inappropriate as it is not marked for universality. In both cases, the quantifier is therefore selected as the optimal spell out for the underlying universal. Of course, the quantifier *everyone* is not marked for [+accessibility] and so it presumably violates a matching condition for this feature. But this condition can be assumed to be ranked below Match ∀ and so it will fail to have any role in determining the selected exponent. If the language had a dedicated lexical element for spelling out accessible universals, the condition would play a role in selecting this element over the one specified for non-accessibility. But English makes no such distinction and hence one lexical item is used to spell out both sets of features.

Let us now consider the cases which are central to this paper, in which the universal scopes over the interrogative. Again, there are two sub-cases, where the universal has either an accessible reference set or it does not. In the [–accessible] case, the wh-operator will be fronted and the universal will remain in situ (*what did everyone see*). Furthermore, in this case the universal will be realised as a quantifier:

(35)

∀–ak > ?	Match –ak	Typing	Match ∀
☞ … everyone …		*	
… who …	*!		*

In this case, the higher ranking Match –ak condition prevents the spelling out of the universal as a wh-expression despite the fact that this is the situation which would satisfy the Typing condition. The latter is therefore violated and the wide scope universal is realised as a quantifier. When the universal has an

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accessible reference set, it will be this element that is fronted and the wh-operator will remain *in situ*. This time, as the Match –ak condition is not in operation, the Typing condition will work to ensure that the universal is realised as a wh-expression rather than a quantifier:

(36)

∀+ak > ?	Match –ak	Typing	Match ∀
… everyone …		*!	
☞ … who …			*

5.2. More complex cases

Before moving on to consider the realisation of wh-operators, we should consider some more complex cases where there is more than one universal in a QI. As we discussed above, in such cases only one of the quantifiers can be fronted and the others, like the wh-operator, remain *in situ*. The fronted universal always has a wide scope interpretation with respect to the wh-operator, has an accessible reference set and is realised as a wh-expression. The non-fronted ones may or may not take wide scope with respect to the interrogative operator, but when they do not they are realised as quantifiers[12]. The non-fronted wide scope universals are realised as wh-expressions when they have a [+accessible] reference set and as quantifiers when [–accessible]:

(37)
a Who gave what to everyone? ∀x[+ak] ?y ∀z [x gave y to z]
b Who gave what to who? ∀x[+ak] ∀z[+ak] ?y [x gave y to z]
c Who gave what to everyone? ∀x[+ak] ∀z[–ak] ?y [x gave y to z]

The treatment of the fronted universal in these cases will be identical to that shown in (36): Match –ak will be irrelevant for them and the Typing condition will therefore ensure that they are realised as wh-expressions as opposed to quantifiers. The in situ quantifiers are slightly different from those discussed above, as in this case it is possible to have a non-fronted wide scope [+accessible] universal. The following tables demonstrate how the realisation of the non-fronted universals is determined:

[12] Obviously when both universal quantifiers take wide scope with respect to the interrogative their scopes do not interact. It is only when one takes wide scope and the other narrow with respect to the interrogative that we can say that one has scope over the other.

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(38)

∀x[+acc] > ?y > ∀z	Match –ak	Typing	Match ∀
☞ … everyone(z) …			
… who(z) …			*!

(39)

∀x[+acc] ∀z[+acc] > ?y	Match –ak	Typing	Match ∀
… everyone(z) …		*!	
☞ … who(z) …			*

(40)

∀x[+acc] ∀z[–acc] > ?y	Match –ak	Typing	Match ∀
☞ … everyone(z) …		*	
… who(z) …	*!		*

(38) corresponds to (37a) in which the goal argument *z* takes narrow scope. In this case it makes no difference if this universal has an accessible reference set or not as the quantifier will either satisfy Match –ak or this condition will be irrelevant. Either way, the wh-expression is not going to be selected. (39) corresponds to (41b) and concerns a non-fronted wide scope universal. Regardless of whether it is fronted or not, the Typing condition still requires it to type the clause as it takes the widest scope, along with the other universal. Match –ak will be irrelevant as the goal universal has an accessible reference set, therefore the interrogative expression is selected. Finally, (40), corresponding to (41c), involves a non-fronted, inaccessible, wide scope universal. In this case the presence of [–accessible] makes the Match –ak condition active and this selects the quantifier over the wh-expression.

If there is no wide scope universal or only ones with inaccessible reference sets, then all universals remain in situ and the wh-operator fronts:

(41) What did everyone give to everyone?

The intuitions are rather difficult to muster, but it is my impression that it is possible to give each of the quantifiers a wide or a narrow scope reading independently. When either takes wide scope, it must have an inaccessible reading, otherwise it would have been fronted and realised as a wh-expression[13]. Thus we have the following possible interpretations:

[13] Clearly there is far more to be said about the syntax of these complex QIs concerning which universal can be fronted or not. It is not my intention to develop a complete account of such observations here and so I will put these issues aside.

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(42) a ?y > ∀x ∀z
b ∀x[−acc] > ?y > ∀z
c ∀z[−acc] > ?y > ∀x
d ∀x[−ak] ∀z[−ak] > ?y

As discussed above, for the narrow scope universals, it does not matter whether they are accessible or not as the typing condition will never have the opportunity to force them to be realised as a wh-expression. For all of the wide scope universals, the Match –ak condition, being active in all cases, will force them to be realised as quantifiers:

(43)

	(42b)	Match –ak	Typing	Match ∀
☞	… everyone(x) …			
	… who(x) …	*!		*

(44)

	(42c)	Match –ak	Typing	Match ∀
☞	… everyone(z) …			
	… who(x) …	*!		*

(45)

	(42d)	Match –ak	Typing	Match ∀
☞	… everyone(x) … everyone(z)			
	… who(x) … who(z)	**!		**

5.3. Universals in non-interrogative contexts

It should be clear from what has been said so far that in non-interrogative contexts, where the Typing condition is inactive, there is no pressure to realise a universal operator as anything other than a quantifier. However, it may be of concern that we have proposed that universal quantifiers are specified for [−accessible] in their lexical entries and yet they may be used in [+accessible] contexts.

In fact we have already seen cases where a universal with an accessible reference set is realised as a quantifier in QIs (see (34)). For completeness sake however, here we will present cases where such quantifiers are used in non-interrogative contexts.

It is possible to restrict the reference set of a quantifier with extra modification:

(46) Everyone in the room was in agreement

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Clearly in these cases it would be ungrammatical to realise the universal as a wh-expression, even though it has an accessible interpretation. The reason for this is demonstrated by the following table:

(47)

∀+ak	Match –ak	Typing	Match ∀
☞ … everyone …			
… who …			*!

The two higher conditions are both inactive due to the absence of [–accessible] and an interrogative clause. This leaves the lower ranked Match ∀ to decide on the issue and as the quantifier is specified for universality and the wh-expression is not, the selection of the former is straightforward.

5.4. Wh-operators

We have claimed that wh-expressions are not specified for the feature [±accessible], but this is not to say that the notion of accessible reference sets is not applicable for wh-operators. Indeed, the fact that, as in the case of quantifiers, the set of possible referents can be limited by further restriction indicates that it is:

(48) Who out of all your friends do you trust the most?

As we have ranked Match –ak higher than the typing condition to account for the realisation facts concerning universal operators, there is a possibility that this constraint might play an unwanted role in determining the realisation of wh-operators in non-quantified contexts. Consider a question in which the wh-operator might potentially pick out any referent in its answer:

(49) Who has a mole on their left elbow?

As the answer to (49) could in principle be anybody, I assume that the wh-operator involved is more likely than not to be interpreted as [–accessible]. If this is true, then the system we have detailed so far predicts wrongly that the underlying wh-operator should not surface as a wh-expression, but possibly as a quantifier, assuming that there is no more appropriate lexical elements which is also specified as [–accessible]:

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(50)

?–acc	Match –ak	Typing	Match ∀
☞ … everyone …		*	
… who …	*!		

This is a curious result, as it seems very unlikely that a wh-operator is ever realised by anything other than a wh-expression. Certainly, I know of no cases in any language where this might happen. This suggests that wh-operators are different to universal operators in this specific way, as many otherwise totally unconnected languages seem to demonstrate QIs in which quantifiers are realised as wh-operators[14].

To capture this fact we will have to assume that the Match ? condition is universally ranked high and is not subject to re-ranking.

With this assumption in place, we can more accurately capture the lexical selection in sentences such as (49):

(51)

? –acc	Match ?	Match –ak	Typing	Match ∀
… everyone …	*!		*	
☞ … who …		*		

The addition of this extra condition will make no difference to the previous analyses as they did not involve the spelling out of a wh-operator as anything other than a wh-expression. The condition is irrelevant for the issue of spelling out underlying universals.

6. Conclusion

Hungarian is a very well behaved language with respect to its QIs. Apart from being pronounced as wh-expressions, quantifiers is interrogative environments behave very much like quantifiers syntactically. It is not really surprising therefore that it was for Hungarian that multiple wh-constructions were first

[14] The reviewer suggests that the use of a QI such as i) may function similar to a wh-question such as ii) in that both request a show of hands:
i) does everyone have a handout?
ii) who has a handout?
However, it is not likely that i) involves an underlying wh-operator realised as a quantifier. As a yes-no question, i) but not ii) is answered by either an affirmation or a denial depending on the truth of the statement *everyone has a handout* which clearly involves an underlying universal. The show of hands that such a question may elicit may be interpreted as the audience attempting to be helpful in enabling the asker of the question to determine its answer.

proposed to be analysed as involving quantification. In contrast, English QIs are not so transparent syntactically. At first blush, it is not so obvious that they involve quantifiers as the relevant elements not only look like wh-expressions but they behave like wh-expressions as well. The fact that wide scope interpretations, which in Hungarian uniformly lead to wh-realisation, display variable realisation patterns in English does not provide overwhelming support for the idea that English QIs involve underlying quantifiers.

Yet, at the same time, it is not a particular attractive proposition that languages would differ in their syntactic and semantic treatment of these structures, with Hungarian making use of underlying quantifiers and English using wh-operators. Looking beyond the differences, it is also apparent that much similarity can be found in the two unrelated languages. This is reason enough to look for ways to analyse the two as sharing a similar system which is open to minimal variation, such as the one proposed in this paper. Here we have forwarded the idea that the two languages differ with respect to one condition which affects the lexical choice for realising underlying quantifiers in interrogative contexts. The difference between the two languages boils down to their treatment of a single feature [±accessible]. From a syntactic point of view, English fronts a single [+accessible] quantifier in interrogative contexts, making their behaviour similar to that of wh-operators, while in Hungarian this feature plays no role and quantifiers behave uniformly in interrogative and non-interrogative contexts. In English it is important for a selected lexical item to match the [−accessible] feature, when present, whereas in Hungarian it is not. These two claims are sufficient to account for the apparent differences between the two languages whilst maintaining an otherwise identical approach.

Interesting questions arise from this programme concerning the range of variation we might expect to find in other languages, most of which is in need of further investigation. It is extremely interesting that there are languages which do not have multiple wh-constructions, such as Italian, which suggest that not all languages realise quantifiers in interrogative contexts as wh-expressions. Preliminary investigations suggest that the issue is complex and in need of more careful analysis. However, the success of the present analysis is encouraging. The rest of the field is unfortunately rather blank for the simple reason that the idea that quantifiers can be realised as wh-expressions in interrogative contexts is too fresh to have made much of an impact elsewhere. There is clearly much to be done.

References

Cheng, Lisa. 1991. “On the Typology of Wh-Questions.” PhD diss., MIT.

É. Kiss, Katalin. 1993. "WH-movement and specificity." Natural Language & Linguistic Theory 11 (1): 85-120.
Enç, Mürvet. 1991. "The semantics of specificity." Linguistic Inquiry 22:1-25.
Halle, Morris. and Alec Marantz. 1993. "Distributed Morphology and the pieces of inflection." In The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger, edited by Kenneth Hale and Samuel Jay Keyser, 111-176.Cambridge, MA: MIT Press.
Heim, I. (1982) The Semantics of Definite and Indefinite Noun Phrases, Doctoral dissertation, University of Massachusetts, Amherst.
Newson, Mark. 2010. 'Syntax First, Words After: a possible consequence of doing Alignment Syntax without a lexicon' in Varga László (ed.) The Even Year Book 9, ELTE, pp. 1-46, available at http://seas3.elte.hu/delg/publications/even/2010/10ne.pdf.
Newson, Mark. 2013. 'What you can do with a domain and why they are not phrases', in Szigetvári Péter (ed), {VL}lxx: Papers presented to {L}ászló {V}arga on his 70th birthday, Department of English Linguistics, Eötvös Loránd University, pp. 211-238.
Rizzi, L. 1978. "Violations of the Wh-Island Constraint in Italian and the Subjacency Condition." In C. Dubuisson, D. Lightfoot and Y. C. Morin (eds) Montreal Working Papers in Linguistics 11, 155-190. Montreal: L'association linguistique de Montreal. [Reprinted in Rizzi (1982), Italian Syntax. Dordrecht: Foris, 49-76.]
Starke, Michal. 2009. "Nanosyntax − A Short Primer to a New Approach to Language." In Nordlyd 36 (1) edited by Peter Svenonius, Gillian Ramchand, Michal Starke, and Knut Tarald Taraldsen, 1–6. Tromsø: CASTL. Accessed May 27, 2016. http://septentrio.uit.no/index.php/nordlyd/article/view/213/205.
Wurmbrand, Susi. 2008. Word order and scope in German. In Groninger Arbeiten zur germanistischen Linguistik 46, 89-110.

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