

## WORD ORDER IN HUNGARIAN EXCLAMATIVES\*

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**Abstract:** This paper gives a syntactic overview and analysis of exclamative constructions in Hungarian. Its main purpose is to describe word order variation in exclamative clauses, in comparison with other sentence types. The formal properties of exclamatives that will be discussed here have important consequences for the theories of exclamatives and exclamation in general. The empirical findings will force one to reconsider the syntactic theory of exclamatives put forward by Portner and Zanuttini (2003). The key modification affects the role focus plays in exclamatives: it will be shown that languages can use available syntactic means of focusing in the expression of exclamatives.

**Keywords:** exclamatives, focus, *wh*-phrase, variable, speech act

### 1. Introduction to exclamatives

Exclamative sentences are a sentence type used to express surprise or astonishment about something that is unexpected or extraordinary. Unlike declaratives and interrogatives, exclamatives are considered a **minor**

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sentence type (Sadock–Zwicky 1985), because not all languages possess exclamative sentences that are formally distinguishable from other sentence types.

Exclamations in Hungarian can be expressed in various ways. The most standard of these are construction types in which there is an exclamative phrase that expresses the surprising thing or property.<sup>1</sup> This exclamative phrase (referred to as the “E-phrase” in the following) can be (i) a *wh*-phrase, (ii) a phrase with *de*, and (iii) a phrase formed by relativization. According to these, we can speak about *wh*-exclamatives, *de*-exclamatives and relativized exclamatives respectively. The following examples illustrate the three distinct types:<sup>2</sup>

- |     |   |                         |
|-----|---|-------------------------|
| (1) | [E Mennyi könyvet] elolvastál!<br>how.many book-acc pv-read-2sg<br>'You read so many books!'                    | <i>wh</i> -exclamative  |
| (2) | [E De sok könyvet] elolvastál!<br><i>de</i> many book-acc pv-read-2sg<br>'You read so many books!'              | <i>de</i> -exclamative  |
| (3) | [E Amennyi könyvet te elolvastál]!<br>rel-how.many books-acc you pv-read-2sg<br>'The number of books you read!' | relativized exclamative |

<sup>1</sup> In addition to this type there also exist exclamatives which express surprise about the polarity of a proposition, like *Is she cute!* in English. Such propositional exclamatives will not be discussed here, as Hungarian does not code these in a syntactically interesting way.

<sup>2</sup> The following glosses are used in this article: <sup>1</sup> = emphatic stress; acc = accusative case; Adj = adjective; Adv = adverb; dat = dative case; E = exclamative; N = noun; pl = plural; pv = preverb(al element); rel = relative morpheme. Nominative case is not glossed. Subject person and number morphemes are 1/2/3sg/pl; tense and definiteness agreement morphemes are not glossed. SMALL CAPS on lexical words indicate contrastive focus. Hungarian examples are translated into English using English exclamatives when possible. When this is not possible (English has a fewer range of acceptable E-phrases), the English translation will be given with a *so...* or *such a...* phrase or will be embedded under an exclamative predicate.

As their translations indicate, these three types do not differ in meaning: they all indicate the surprise of the speaker about something outstanding: the unexpectedly high number of books that the addressee read.<sup>3</sup>

The main focus of this study is on the word order properties of the above types of exclamatives, concerning the syntactic distribution of exclamative phrases in them, also in comparison with other sentence types (indicatives and interrogatives). It will be shown that the placement of exclamative phrases follows well-defined rules that are distinct from that of interrogative phrases. Interpretation-wise, all exclamative phrases are focused with a scalar focus reading, and accordingly, their placement is into one of the positions where focal constituents can appear. Which focal position is selected is determined by the lexical properties of the E-phrase itself. These findings provide new insights for theories of the exclamative sentence type cross-linguistically.

The structure of the paper is as follows. Section 2 presents the data of Hungarian exclamatives that will be analyzed in later sections. The discussion is confined to *wh*-exclamatives and *de*-exclamatives only. Section 3 spells out the syntactic properties of the observed data, sketching the syntactic position for all types of E-phrases in the language. Section 4 provides a semantic and syntactic analysis of the observed patterns, touching also on the syntax of the relativized exclamative type in example (3) above. Section 5 summarizes the findings of the paper and spells out the theoretical consequences of these for the theory of exclamatives recently put forward in Portner–Zanuttini (2003). It will be shown that Portner and Zanuttini's theory needs to be amended to allow for non-*wh*-exclamative phrases and unembeddable exclamatives.

## 2. Syntactic properties of Hungarian exclamatives

### 2.1. Some basic properties of *wh*- and *de*-exclamatives

*Wh*- and *de*-exclamatives contain an exclamative constituent formed with a *wh*-phrase or a *de*-phrase. Before turning to the distribution of these

<sup>3</sup> The three exclamative sentence types differ in their prosody. (1) and (2) have stress on the E-phrase and falling intonation following it (which might be sharper in the case of (2)). Sentence (3) has main stress on the verb and falling intonation characterizes only the very end of the sentence.

phrases, some discussion is in order about the general properties of *wh*- and *de*-exclamatives.

According to my small survey among 10 Hungarian speakers, *wh*-exclamatives can make use of any *wh*-word that can occur in Hungarian questions. Next to (1) above, an illustrative bunch of other examples is given in (4) below. As can be seen from the translations, the *wh*-phrases in such exclamatives do not refer to an individual variable that the speaker cannot identify, as in the case of questions, but to a degree expression, which is associated with a high scalar value (Elliott 1974). Note also that *wh*-exclamatives, even when they occur as root clauses can always be introduced by the regular finite complementizer *hogy* ‘that’. The presence of such a complementizer adds extra (emotional) emphasis to the exclamative utterance as a whole.

- (4) (a) (Hogy) ki jött el ebbe a faluba!  
 comp who came-3sg pv this-into the village-into  
 ‘What a person came to this village!’ (scale: properties of people)
- (b) (Hogy) mi esett meg ebben a faluban!  
 comp what happened-3sg pv this-in the village-in  
 ‘What a thing happened in this village!’ (scale: properties of events)
- (c) (Hogy) hova bújtak a gyerekek!  
 comp where hid-3pl the children  
 ‘In what strange places the children hid!’ (scale: properties of places)
- (d) (Hogy) mikor jöttél tegnap haza!  
 comp when came-2sg yesterday home  
 ‘At what strange time you came home yesterday!’ (scale: properties of times)
- (e) (Hogy) melyik könyvet vetted meg!  
 comp which book-acc bought-2sg pv  
 lit. ‘(I am surprised at) which book you bought!’ (scale: properties of books)
- (f) (Hogy) milyen ruhában mentél dolgozni!  
 comp what.kind cloth-IN went-2sg work-infe  
 ‘The kind of clothes you went to work in!’ (scale: properties of clothes)
- (g) (Hogy) hogy egyensúlyozott Béla a biciklin!  
 comp how balanced-3sg Béla the bike-on  
 ‘How Béla was balancing on the bike!’  
 (scale: properties of manners of balancing)

As Kálmán (2001) mentions,<sup>4</sup> *miért* ‘why’ is exceptional in that it cannot occur in exclamatives. According to my findings, this is subject to individual variation. Some speakers accept *miért* in exclamatives, others do not. Note that corresponding nominal phrases like *milyen furcsa okból* ‘for what a strange reason’ is perfectly fine for all speakers (5b):

- (5) (a) %*(Hogy) te miért hívtad fel Annát!*  
 comp you why called-2sg pv Anna-acc  
 (b) *(Hogy) te milyen furcsa okból hívtad fel Annát!*  
 comp you what.kind strange reason-from called-2sg pv Anna-acc  
 ‘For what a strange reason you called Anna!’

When it comes to possible and impossible *wh*-E-phrases, Kálmán (*ibid.*) notes that *wh*-phrases formed with *is* ‘also’, as well as aggressively non-D-linked expressions cannot be used in exclamatives (6a), (7a). These are of course perfectly fine in questions (6b), (7b):

- (6) (a) \**Ki is ment el!* exclamative  
 who also went pv  
 (b) *Ki is ment el?* question  
 who also went pv  
 ‘Who was it again who left?’  
 (7) (a) \**Ki a fene ment el!* exclamative  
 who the hell went pv  
 (b) *Ki a fene ment el?* question  
 who the hell went pv  
 ‘Who the hell left?’

The ungrammaticality of the exclamative examples (6a), (7a) derives from the fact that exclamatives are **factive** (Grimshaw 1979, see also section 4 below): their propositional content is presupposed. The content of (6b) and (7b) cannot be presupposed, as is shown by the fact that the questions in (6b), (7b) cannot be embedded under factive predicates.

- (8) (a) \**Tudom, hogy ki is ment el.*  
 know-sg that who also went pv  
 ‘I know who it was again who left.’

<sup>4</sup> The section on exclamatives in Kálmán (2001) was authored by Viktor Trón.

- (b) \*Tudom, hogy ki a fene ment el.  
 know-sg that who the hell went pv  
 ‘I know who the hell left.’

It is therefore not surprising that such *wh*-expressions cannot occur in exclamatives, either.

Just as there exist *wh*-phrases that cannot occur in exclamatives, there are also *wh*-phrases which can only occur in exclamatives. *Wh*-phrases involving strong evaluative adjectives or adverbs like *rohadtul* ‘rottenly’ for example can occur in E-phrases (Kálmán *ibid.*):<sup>5</sup>

- (9) (a) Milyen rohadtul megfáztam!  
 how rottenly pv-cold.caught-1sg  
 ‘What an awful cold I got!’
- (b) \*Milyen rohadtul fáztál meg?  
 how rottenly cold.caught-2sg pv  
 ‘How very badly did you catch a cold?’

This is due to the presence of the evaluative adverb, which is used to express the speaker’s strong judgement about the cold he got. In the case of (9b), where the *wh*-constituent denotes a variable unknown to the speaker, the same evaluative judgement cannot be cast.

Another property of *wh*-exclamatives is that they can be embedded under exclamative predicates:

<sup>5</sup> Some *wh*-items modified by *minden* ‘all’ and *-csoda* ‘wonder’ affixed *wh*-items are also typical of exclamatives only:

- (i) (a) Hol mindenhol kiöntött a Tisza!  
 where everywhere pv-flooded the Tisza  
 ‘The Tisza flooded at so many places!’
- (b) <sup>???</sup>\*Hol mindenhol öntött ki a Tisza?  
 where everywhere flooded pv the Tisza  
 ‘Which were all the places where the Tisza flooded?’
- (ii) (a) Micsoda képek vannak a múzeumban!  
 what-wonder pictures are the museum-in  
 ‘What beautiful pictures there are in the museum!’
- (b) %Micsoda képek vannak a múzeumban?  
 what-wonder pictures are the museum-in  
 ‘What (kind of) pictures are there in the museum?’

- (10) (a) Elképesztő, hogy milyen rohadt hideg van.  
 astonishing that how rotten cold is  
 ‘It’s astonishing how awfully cold it is.’
- (b) Meglep, hogy milyen rohadt hideg van.  
 surprise-3sg that how rotten cold is  
 ‘It surprises me how awfully cold it is.’

Turning now to the other type of exclamatives, *de*-exclamatives, the first thing to be mentioned is that they, too, are associated with a high scalar value, just like *wh*-exclamatives. *De*-exclamatives are formed with the word *de*, which is homophonous with the adversative coordinator *de* ‘but’. Categorically, *de* distributes as *milyen* ‘what kind’, modifying an adjective or an adverb (11a, b, c). In another distribution *de* is a VP-adverb, indicating degree or intensity of the event (11d):

- (11) (a) {De / Milyen} piszkos ruhában mentél dolgozni!  
*de* how filthy cloth-in went-2sg work-inf  
 ‘You went to work in such filthy clothes!’
- (b) {De / Milyen} ügyesen egyensúlyozott Béla a biciklin!  
*de* how skillfully balanced-3sg Béla the bike-on  
 ‘How skilfully Béla was balancing on the bike!’
- (c) {De / Milyen} sok könyvet elolvastál!  
*de* how many book-acc pv-read-2sg  
 ‘You read so many books!’
- (d) De becsaptad az ajtót!  
*de* pv-slammed-2sg the door-acc  
 ‘How strongly you slammed the door!’

*De*-phrases cannot contain a *wh*-word. In other words, we cannot find an exclamative that is both a *de*-exclamative and a *wh*-exclamative at the same time:

- (12)\*De piszkos miben mentél dolgozni!  
*de* filthy what-in went-2sg work-inf  
 ‘The filthy things you went to work in!’

*De*-exclamatives sharply differ from *wh*-exclamatives when it comes to compatibility with an overt complementizer and an embedding predicate. Unlike *wh*-exclamatives, *de*-exclamatives cannot be introduced by a finite complementizer in root contexts and cannot be embedded under a matrix

exclamative predicate. Compare the following examples with examples (4) and (10) above:

- (13) (a) (\*Hogy) *de* rohadt hideg van!  
 comp *de* rotten cold is  
 ‘How awfully cold it is!’
- (b) \*Elképesztő, hogy *de* rohadt hideg van.  
 astonishing that *de* rotten cold is  
 ‘It’s astonishing how awfully cold it is.’
- (c) \*Meglep, hogy *de* rohadt hideg van.  
 surprise-3sg that *de* rotten cold is  
 ‘It surprises me how awfully cold it is.’

These facts will be further commented on in section 4.

## 2.2. The distribution of exclamative phrases in *wh*- and *de*-exclamatives

As the careful reader presumably has noticed already, in all examples with *wh*- or *de*-exclamatives above, the E-phrase appears in a preverbal position. Postverbal occurrences of exclamative phrases are ungrammatical:

- (14) \*Eloolvastál mennyi könyvet / *de* sok könyvet!  
 pv-read-2sg how.many book-acc *de* many book-acc  
 ‘You read so many books!’

The preverbal position in which E-phrases can be found is furthermore not just any preverbal position. E-phrases in this position must always be adjacent to the verb and are obligatorily marked with heavy stress:

- (15) (a) (Hogy) melyik könyvet (\*tegnap) vetted meg!  
 comp which book-acc yesterday bought-2sg pv  
 lit. ‘(I am surprised at) which of the books you bought yesterday!’
- (b) *De* sok könyvet (\*tavaly) elolvastál!  
*de* many book-acc last year pv-read-2sg  
 ‘You read so many books last year!’

The adjacent preverbal position that E-phrases occupy can be of two types, depending on the presence or absence of inversion between the verb and the preverbal particle, if the verb has the latter. In one pattern,



the E-phrase is accompanied by preverb-verb inversion (16a), in the other pattern preverb and verb show the straight (uninverted) order (16b):

- (16) (a) (Hogy) mi esett meg éppen a faluban!  
 comp what happened-3sg pv this-in the village-in  
 ‘What a thing happened in this village!’
- (b) (Hogy) mennyi könyvet elolvastál!  
 comp how.many book-acc pv-read-2sg  
 ‘You read so many books!’

Presence or absence of inversion is not an arbitrary property of exclamative sentences. As section 3 below will show, the two word order patterns correspond to a clear difference in meaning, and, accordingly, they are selective of the kind of E-phrases they can occur with. In my findings, Hungarian differentiates between three types of E-phrases according to their behaviour in exclamatives. Some E-phrases can:

- (i) only occur with the straight order (without inversion)  
 (ii) occur both with and without inversion  
 (iii) only occur with inversion

The following subsections give an illustrative characterization of each type in turn. It is important to stress that the classification to be provided is by no means exhaustive, when it comes to each and every possible E-phrase. The goal is rather to show the basic patterns, which will serve as the basis of the theoretical discussion in section 3.

### 2.2.1. E-phrases that only occur with the straight order

The group of E-phrases that under all circumstances have to occur with straight pv-V order involve the *wh*-phrases *mennyire* ‘to what extent/how much’, and *hogy* lit. ‘how’, in the meaning ‘to what extent/how much’:

- (17) (a) (Hogy) mennyire {megnőtt / \*nőtt meg} Éva!  
 comp how.much pv-grew-3sg grew-3sg pv Éva  
 ‘How much Éva has grown!’
- (b) (Hogy) hogy {megnőtt / \*nőtt meg} Éva!  
 comp how.much pv-grew-3sg grew-3sg pv Éva  
 ‘How much Éva has grown!’

Apart from these *wh*-expressions, *de/milyen*-phrases formed with **grade**, **completion** or **intensity adverbs** (adverbs expressing high or maximal

degree) show the same behaviour. Grade, completion and intensity adverbials (group C adverbs in Kiefer 1967) are for example *nagyon* ‘very’, *egészen* ‘entirely’, *alaposan* ‘thoroughly’, *túlzottan* ‘excessively’, *gyökere-sen* ‘radically’, *mérhetetlenül* ‘immensely’, *kereken* ‘in plain terms’, *réme-sen* ‘dreadfully’. Combined with *milyen* or *de* they form E-phrases which can only occur without inversion:

(18) De/milyen nagyon {megnőtt / \*nőtt meg} Éva!  
*de* how much pv-grew-3sg grew-3sg pv Éva  
 ‘How much Éva has grown!’

(19) De/milyen alaposan {megfázott / \*fázott meg} Ágnes!  
*de* how thoroughly pv-cold.caught-3sg cold.caught-3sg pv Ágnes  
 ‘What a thorough cold Ágnes got!’

Grade, completion and intensity adverbs show the same syntactic behaviour in neutral indicative clauses as well: they do not trigger inversion. At the same time, they are always adjacent to the verb and they receive the main stress of the sentence:<sup>6</sup>

(20) (a) Éva nagyon {megnőtt / \*nőtt meg}.  
 Éva much pv-grew-3sg grew-3sg pv  
 ‘Éva has grown a lot.’

(b) Ágnes alaposan {megfázott / \*fázott meg}.  
 Ágnes thoroughly pv-cold.caught-3sg cold.caught-3sg pv  
 ‘Ágnes caught a thorough cold.’

### 2.2.2. E-phrases with optional inversion

E-phrases with optional inversion constitute a varied class, some of whose members are quite marked. Prototypical E-phrases with optional inversion are *wh*-phrases formed with *hány* ‘how many’, and *mennyi* ‘how much/many’ (and their derivatives, like *hányszor/mennyiszer* ‘how often’, but not *hanyadik*, the ordinal form of ‘how many’). In a similar

<sup>6</sup> This is not the case in non-neutral indicative clauses. When the sentence contains a lexical focus, the adverbial phrase can be postverbal:

(i) ÁGNES fázott meg alaposan.  
 Ágnes cold.caught-3sg pv thoroughly  
 ‘It was Ágnes who caught a thorough cold.’

fashion, E-phrases containing the quantifier *sok* ‘much/many’ show optional inversion (21b), similarly to its behaviour in declarative clauses (21c):

- (21) (a) (Hogy) hány könyvet {megvettél / vettél meg}!  
 comp how.many book-acc pv-bought-2sg bought-2sg pv  
 ‘You bought so many books!’
- (b) {De /milyen} sok könyvet {megvettél / vettél meg}!  
*de* how many book-acc pv-bought-2sg bought-2sg pv  
 ‘You bought so many books!’
- (c) Sok könyvet {megvettél / vettél meg}.  
 many book-acc pv-bought-2sg bought-2sg pv  
 ‘You bought many books.’

A somewhat more marked case involves phrases with the universal quantifier *minden(ki)*. These are judged less than perfect when they occur with inversion:

- (22) (a) (Hogy) ki mindenki {eljött / ?jött el} az ünnepségre!  
 comp who everyone pv-came-3sg came-3sg pv the celebration-to  
 ‘The (different) kinds of people/the number of people who came to the celebration!’
- (b) (Hogy) mi mindent {megettél / ?ettél meg}!  
 comp what everything-acc pv-ate-2sg ate-2sg pv  
 ‘The number of things you have eaten!’

Finally, plural noun phrases like *kik* ‘who-pl’, *mik* ‘what-pl’, as well as plural marked *milyen (N)* ‘what.kind N’ phrases also occur both with and without inversion. In the case of these elements, the straight order is more marked. Half of my speakers judged these ungrammatical.

- (23) (a) (Hogy) kik {%eljöttek / jöttek el} az ünnepségre!  
 comp who-pl pv-came-3pl came-3pl pv the celebration-to  
 ‘The kind of people who came to the celebration!’
- (b) (Hogy) miket {%megettél / ettél meg}!  
 comp what-pl-acc pv-ate-2sg ate-2sg pv  
 ‘The things you have eaten!’
- (c) (Hogy) milyen nagy házakat {%megvettetek / vettetek meg}!  
 comp what.kind big house-pl-acc pv-bought-2pl bought-2pl pv  
 ‘You have bought such big houses!’

Some adverbial phrases expressing manner, time and frequency (group A in Kiefer 1967) also occur with optional inversion. These are adverbs like *durván* ‘in a rough manner’, *gyorsan* ‘quickly’, *szépen* ‘nicely’, *bátran* ‘bravely’, *boldogan* ‘happily’, *okosan* ‘wisely’, *sűrűn* ‘often’, *korán* ‘early’, *hamar* ‘soon’, *gyakran* ‘often’.

- (24) {De/ milyen} durván {odaszólt / szólt oda} Ákos Ildikónak!  
*de* how roughly pv-called-3sg called-2sg pv Ákos Ildikó-dat  
 ‘Ákos addressed Ildikó in such a rough manner!’

Such adverbials can also occur with both orders in neutral indicative contexts. With both word orders they are adjacent to the verb and can carry stress:

- (25) <sup>1</sup>Durván {odaszólt / szólt oda} Ákos Ildikónak.  
 roughly pv-called-3sg called-3sg pv Ákos Ildikó-dat  
 ‘Ákos addressed Ildikó in a rough manner.’

### 2.2.3. E-phrases with obligatory inversion

E-phrases that occur with inversion comprise all *wh*- and *de*-phrases that were not listed above in the other two types. The following *wh*- and *de*-phrases and their derivatives belong here: singular *ki(csoda)* ‘who’ and *mi(csoda)* ‘what’, *mikor* ‘when’, *hol/merre* ‘where’, *hogy(an)* ‘how’, *miért* ‘why’, *melyik (N)* ‘which (N)’, *milyen (N)* ‘what kind of (N)’, *milyen (Adj N)/ de (Adj N)* ‘how (Adj N)’:

- (26) (a) (Hogy) ki {ment el / \*elment} moziba Annával!  
 comp who went-3sg pv pv-went-3sg cinema-to Anna-with  
 ‘The person who went to the cinema with Anna!’
- (b) (Hogy) hova {mentél el / \*elmentél}!  
 comp where went-2sg pv pv-went-2sg  
 ‘The place you went to!’
- (c) (Hogy) milyen drága könyvet {vettél meg / \*megvettél}!  
 comp how expensive book-acc bought-2sg pv pv-bought-2sg  
 ‘How expensive a book you bought’
- (d) De drága könyvet {vettél meg / \*megvettél}!  
*de* expensive book-acc bought-2sg pv pv-bought-2sg  
 ‘How expensive a book you bought!’

E-phrases containing the quantifier *kevés* 'little/few' also show obligatory inversion (27a), just like phrases with *kevés* in neutral indicative sentences (27b):<sup>7</sup>

- (27) (a) {De / milyen} kevés könyvet {olvastál el / \*elolvastál}!  
*de* how few book-acc read-2sg pv pv-read-2sg  
 'How few books you read!'

 (b) Kevés könyvet {olvastál el / \*elolvastál}.  
 few book-acc read-2sg pv pv-read-2sg  
 'You read few books.'

Among adverbial phrases, there are two types of lexical items that obligatorily occur with inversion in exclamatives. One are adverbials headed by **exclusive** adverbs (group B in Kiefer 1967), for example, *későn* 'late', *bonyolultan* 'in a complicated manner', *hibásan* 'with mistake', *hasztalan* 'in vain', *rendetlenül* 'in a disorderly way', *nehezen* 'with difficulty', *ízléstelenül* 'tastelessly'. As (28b) indicates, such adverbial phrases occur with the same word order in indicative sentences as well. They carry stress and occur adjacent to the verbal head in neutral indicatives:

- (28) (a) {De / milyen} későn {feküdtél le / \*lefeküdtél}!  
*de* how late went.to.bed-2sg pv pv-went.to.bed-2sg  
 'How late you went to bed!'

 (b) <sup>1</sup>Későn {feküdtél le / \*lefeküdtél}.  
 late went.to.bed-2sg pv pv-went.to.bed-2sg  
 'You went to bed late.'

The other class of adverbials that force inversion in exclamatives are some manner, temporal and frequency adverbs, like *lassan* 'slowly' or *barátságosan* 'in a friendly way':

- (29) {De / milyen} lassan {érett meg / \*megérett} a szilva!  
*de* how slowly ripened-3sg pv pv-ripened-3sg the plum  
 'The plums got ripe so slowly!'

<sup>7</sup> Obligatory inversion can only be found in sentences without focus. When the sentence contains a lexical focus, the *kevés* phrase can be postverbal, as shown in (i). Compare also footnote 6 for similar facts.

(i) PÉTER olvasott el kevés könyvet.  
 Péter read-3sg pv few book-acc  
 'It was Péter who read few books.'

These types of adverbs have the characteristic property that although they can occur without inversion in neutral indicative sentences, in such occurrences they cannot be stressed and they often have a different meaning (30a). When these adverbs are stressed, inversion is the only order they can occur with:

- (30) (a) *Lassan megérett a szilva.*  
 slowly pv-ripened-3sg the plum  
 ‘Slowly, the plums got ripe. (It is possible that the ripening itself went quickly.)’
- (b) <sup>1</sup>*Lassan {érett meg / \*megérett} a szilva.*  
 slowly ripened-3sg pv pv-ripened-3sg the plum  
 ‘The plums underwent slow ripening. (It is not possible that the ripening itself went quickly.)’

### 2.3. Summary of word order patterns

Before turning to the theoretical discussion of the above data, let us take stock of the findings so far. As we have seen, the exclamative phrase in *de*-exclamatives and *wh*-exclamatives is always left-adjacent to the verb. Following the E-phrase, the order of verb and preverb is variable with some E-expressions but not with others. The variation in this domain is summarized in Tables 1 and 2. Table 1 lists *wh*-phrases which do not contain other lexical material that might influence the distribution of the E-phrase. Table 2 lists the latter type of E-phrases separately: that in which *milyen/de* ‘what.kind, how’ modifies a quantifier or an adverbial:

Table 1  
 The distribution of *wh*- and *de*-phrases

	inversion	straight order
<i>mennyire, hogy</i> ‘to what extent/how much’	*	✓
<i>hány, mennyi</i> ‘how much/many’	✓	✓
plurals ( <i>kik</i> ‘who-pl’, <i>mik</i> ‘what-pl’)	✓	?
quantified phrases ( <i>ki mindenki</i> ‘who all’)	%	✓
<i>ki</i> ‘who’, <i>mi</i> ‘what’, <i>mikor</i> ‘when’, <i>hol</i> ‘where’		
<i>hogy(an)</i> ‘how’, <i>melyik (N)</i> ‘which (N)’, <i>milyen/de</i> Adj N ‘how Adj N’, etc.	✓	*

Table 2  
The distribution of *de/milyen...*-phrases

		inversion	straight order
with quantifiers	<i>sok</i> ( <i>N</i> ) 'many/much'	✓	✓
	<i>kevés</i> ( <i>N</i> ) 'few/little'	✓	*
with adverb type	grade, completion, intensity ( <i>nagyon</i> 'very much')	*	✓
	<i>durván</i> ('in a rough way')-class	✓	✓
	exclusive ( <i>későn</i> 'late')	✓	*
	<i>lassan</i> ('slowly')-class	✓	*

It is important to stress again that this classification is not fully exhaustive. Rather, its aim is to highlight types of phrases whose behaviour is characteristic for a particular class of items.

### 3. The syntactic structure of Hungarian exclamatives

#### 3.1. An initial comparison with interrogatives

Exclamative sentences differ from declaratives and interrogatives functionally: instead of asserting something (as do declaratives) or questioning something (as do interrogatives), they express surprise or astonishment about something outstanding. How is this function coded in Hungarian? Next to lexical marking (the *de* marker) and special phonology, is there a special **syntactic structure** which exclamatives assume?

The most instructive manner of looking at this question is to compare exclamatives to interrogatives. Such comparison suggests itself because in many languages there is a striking similarity between exclamatives and questions: they can both contain *wh*-phrases, and they share a number of significant properties, like the fact that *wh*-movement into the initial position in the sentence is obligatory in both:

- (31) (a) [What book] did you buy?  
(b) [What a strange book] you bought!

The presence of such structural parallels in some languages has given rise to analyses that try to fully derive exclamatives from questions or give a similar account for both (D'Avis 2002; Pesetsky–Torrego 2001; Fujii–Ono 2005). At the same time, there also exist languages in which placement of exclamative *wh*-phrases does not follow the placement of *wh*-phrases in

questions. French (Obenauer 1976) and Italian (dialects) (Munaro 2003; Portner–Zanuttini 2003) are known examples. In Paduan, for example, *wh*-constituents in questions always follow left dislocations (*a to sorela* ‘to your sister’), while complex *wh*-phrases in exclamatives precede them (Portner–Zanuttini 2003):

- (32) (a) A to sorela, [che libro] vorissi-to regalar-ghe? question  
 to your sister which book want-cl give-her  
 ‘To your sister, which book would you like to give as a gift?’
- (b) [Che bel libro], a to sorela, che i ghe ga regalà! exclamative  
 what nice book to your sister that cl her have given  
 ‘What a nice book, to your sister, they gave her as a gift!’

The situation in Hungarian exclamatives recalls the state of affairs from Paduan: while interrogative *wh*-phrases without exception get fronted into the immediately preverbal position triggering inversion between the verb and the preverb, some exclamative *wh*-phrases can occupy a position which seems to be distinct in the light of inversion.<sup>8</sup> Inversion can be missing sometimes with some E-phrases, as was noted above:

- (33) (a) Hány filmet {\*megnéztél / néztél meg}?  
 how.many film-acc pv-watched-2sg watched-2sg pv  
 ‘How many films did you watch?’
- (b) (Hogy) hány filmet {megnéztél / néztél meg}!  
 comp how.many film-acc pv-watched-2sg watched-2sg pv  
 ‘You watched so many films!’

Research on Hungarian (Horvath 1981; É. Kiss 1987; Brody 1995) has repeatedly analyzed inversion as indicative of some constituent moving to the unique contrastive focus position. Lack of inversion on the other hand is indicative of a distinct configuration: one in which there is no focused element in the sentence. From this it follows that the position of the exclamative phrase in (33b) is not the same as in (33a). And this in turn rules out the possibility of an analysis that would claim that the derivation of exclamatives runs fully parallel to questions. As will be shown in the rest of the paper, the derivations of the two are not the

<sup>8</sup> As the attentive reader will have noticed, lack of subject–auxiliary inversion also characterizes exclamatives in English, cf. (31) above. See Pesetsky–Torrego (2001), Fujii–Ono (2005) for an account of this.



same. With some E-phrases the derivation can partially overlap with that of questions, but never in a fully identical manner.

To see this precisely, the next two sections proceed to elaborate on the precise placement of E-phrases. Section 3.2 deals with the items in Table 2, and section 3.3 turns to Table 1.

### 3.2. The placement of adverbial and quantificational E-phrases (Table 2)

The distribution of E-phrases listed in Table 2 can easily be described by a simple principle, as these phrases show strict regularities when compared to their behaviour in indicative, neutral clauses. They occupy the same position in exclamatives and in indicatives. Consider the following two illustrative examples, repeated from above:

- (34) (a) De/milyen alaposan {megfázott / \*fázott meg} Ágnes!  
*de* how thoroughly pv-cold.caught-3sg cold.caught-3sg pv Ágnes  
 ‘What a thorough cold Ágnes got!’
- (b) Ágnes alaposan {megfázott / \*fázott meg}.  
 Ágnes thoroughly pv-cold.caught-3sg cold.caught-3sg pv  
 ‘Ágnes caught a thorough cold.’
- (35) (a) {De / milyen} kevés könyvet {olvastál el / \*elolvastál}!  
*de* how few book-acc read-2sg pv pv-read-2sg  
 ‘How few books you read!’
- (b) Kevés könyvet {olvastál el / \*elolvastál}.  
 few book-acc read-2sg pv pv-read-2sg  
 ‘You read few books.’

As (34b) shows, the intensity adverb *alaposan* ‘thoroughly’ can never occur with inversion in declarative sentences. The reason for such a characteristic positioning is presumably lexical: it has to do with the meaning of the adverbial (its features such as +grade, +contrast, Kiefer 1967). Phrases with *kevés* ‘few/little’ on the other hand show the opposite behaviour: they can only occur with inversion in neutral sentences, due to the lexical semantics of *kevés* ‘few’ (Szabolcsi 1997). Importantly, both *alaposan* and *kevés* keep their behaviour in exclamatives as well, leading to the generalization in (36):

- (36) The position of adverbial E-phrases in exclamatives is the same as the position they occupy in indicatives when they carry the main stress of the sentence.

The relevance of stress might not be clear at first sight, so it deserves specific attention. The generalization in (36) states that the positions the E-phrase occupies in exclamatives correspond to stressed positions in indicatives. This effect can best be observed in the behaviour of *lassan*-type adverbials. As we have shown above in (29) and (30b), repeated here as (37a) and (37b), *lassan*-type adverbs in exclamatives occur with the word order they exhibit in indicatives when they are stressed, but crucially not with the word order they exhibit in indicatives when they are not stressed:

- (37) (a) {De / milyen} *lassan* {érett meg / \*megérett} a szilva!  
*de* how slowly ripened-3sg pv pv-ripened-3sg the plum  
 ‘The plums got ripe so slowly!’
- (b) <sup>1</sup>Lassan {érett meg / \*megérett} a szilva.  
 slowly ripened-3sg pv pv-ripened-3sg the plum  
 ‘The plums underwent slow ripening. (It is not possible that the ripening itself went quickly.)’

Unstressed *lassan* occurs without inversion and with a different meaning, and this placement (as well as reading) is ruled out in exclamatives (cf. 37a):

- (38) *Lassan* megérett a szilva.  
 slowly pv-ripened-3sg the plum  
 ‘Slowly, the plums got ripe. (It is possible that the ripening itself went quickly.)’

(36) thus captures the correspondence between exclamative placement and stressed positions in the left periphery. (36) also covers other adverbial phrases or quantificational phrases with *sok* ‘many, much’ and *kevés* ‘few, little’. As the reader can check for himself, all these phrases are stressed in their preverbal position they occupy in neutral indicative clauses.

Before closing this section, a note is in order about the topic of the previous section, the comparison between exclamatives and interrogatives. This is necessary because the findings in (36) have interesting repercussions for this topic as well. Unlike exclamatives, interrogative sentences leave no room for optionality in the placement of *wh*-phrases (33a): they are uniformly placed in the syntax, triggering inversion. Movement

to this position is usually taken to be triggered by the *wh*-feature on the *wh*-phrase (Chomsky 1995). The fact that exclamative sentences do not force the distribution of question-phrases onto E-phrases can be due to two reasons. Either exclamative syntax is “blind” to the presence of *wh*-features, or these features are not present on *wh*-E-phrases to begin with. In the light of previous work that claims that *wh*-words do not have an inherently interrogative meaning (Lipták 2001, which follows Cheng 1991), I contend that *wh*-words in exclamatives have no *wh*-feature, which explains why they do not have interrogative word order. The *wh*-feature that drives movement in interrogatives only characterizes *wh*-words in interrogatives.<sup>9</sup> Exclamative *wh*-phrases for example (similarly to relative pronouns, or indefinite *wh*-items, see Lipták *op.cit.*, chapter 4) do not carry *wh*-features that drive movement in interrogatives.

### 3.3. The distribution of other *wh*-phrases in exclamatives (Table 1)

While the distribution of the items in Table 2 was easy to account for, Table 1 is much more difficult to capture in a simple generalization. It is not surprising of course: since *wh*-phrases do not occur in indicative clauses, there is nothing to compare exclamatives to, in the indicative domain. Comparison with interrogatives does not reveal full parallels, either, since the distribution of *wh*-phrases in interrogatives is uniform and exceptionless: they all trigger inversion.

At the same time, the distribution of E-phrases in Table 1 does show certain regularities that recall parallels with indicative sentences. Before turning to these syntactic observations, the next subsection introduces the layout of the Hungarian left periphery in detail to prepare the ground.

#### 3.3.1. The structure of the Hungarian left periphery

Phrases that occur adjacent to the left of inverted verbs are standardly analyzed as contrastive **focus**, occupying the specifier position of FocP,

<sup>9</sup> In interrogatives, *wh*-expressions are bound by a word-level question operator morpheme ( $Q_{wh}$ ), which provides them with question semantics, and carries the feature that drives overt movement of *wh*-phrases to FocP. For further details see Lipták (2001). In non-interrogatives, no such  $Q_{wh}$  operator is present.

a distinguished position for such constituents.<sup>10</sup> When the specifier of FocP hosts a focused phrase (lexical focus or interrogative *wh*-phrase), the head of FocP has to be filled by the verb. This triggers obligatory inversion between the verb and the preverb, if the latter is present: the verb strands its preverb in a position lower than FocP (possibly in AspP). Focusing and verb raising to F<sup>0</sup> has the fine structure illustrated in (39):

$$(39) [\text{FocP } \{\text{focus}\} [\text{Foc}' V_1^0 \dots [\text{AspP } \text{pv} \dots [\text{VP } t_i ]]]]$$

FocP is a rather low projection in the Hungarian left periphery. It is dominated by a set of other left peripheral projections, most importantly the functional projections hosting distributive quantifiers (DistPs), topics (TopPs) and the complementizer projection (CP). These projections are ordered in the following way:

$$(40) [\text{CP } [\text{TopP}^* [\text{DistP}^* [\text{FocP } \{\text{focus}\} V^0 [\text{AspP } \text{pv} \dots ]]]]]]$$

Following the complementizer and topics, DistP is the projection of universal quantifiers in the left periphery. This projection was termed QP in É. Kiss (1987), and later came to be known as a distributive projection (DistP) due to Szabolcsi (1997), who argued that this position is unique in only hosting distributive constituents.

That DistP is a projection distinct from FocP can be seen from the fact that universal quantifiers (i) cannot occur in Spec,FocP themselves, i.e., do not trigger inversion and (ii) are not in complementary distribution with a focused expression. These properties are illustrated in (41) and (42). (41) shows that a universal quantifier does not trigger inversion and is not compatible with it:

- (41) (a) Mindenkit meghívott János az ünnepségre.  
 everyone-acc pv-invited-3sg János the celebration-on  
 ‘János invited everyone to the celebration.’

<sup>10</sup> The structural positions to be reviewed here reflect the result of “standard” research that is most often adopted for simple analyses of the Hungarian left periphery. It is important to keep in mind that this model has recently been criticized and newest developments have questioned the existence of FocP, and verb movement to Foc<sup>0</sup> (Horvath 2000; Koopman–Szabolcsi 2000; Olsvay 2000, to mention some). Such developments do not affect the current discussion in critical ways.

- (b) \*MINDENKIT hívott meg János az ünnepségre.  
 everyone-acc invited-3sg pv János the celebration-on  
 intended: 'It was everyone whom János invited to the celebration.'

(42) illustrates that universal quantifiers only allow a focus or a verb to follow them:

- (42) (a) Mindenkit JÁNOS hívott meg az ünnepségre.  
 everyone-acc János invited-3sg pv the celebration-on  
 'It was János who invited everyone to the celebration.'
- (b) Mindenkit (\*tegnap) meghívott az ünnepségre János.  
 everyone-acc yesterday pv-invited-3sg the celebration-on János  
 'Yesterday János invited everyone to the celebration.'

This is in accordance with the structure in (40) which registers the fact that DistP dominates FocP in Hungarian.

Recent work (Kálmán 2001) has argued that the DistP projection should rather be characterized as a DistP **field** comprising several slightly distinct projections. The split of the DistP projection is most notably required by the empirical properties of emphatic *sok* 'many/much'-phrases, which also occupy a DistP position when in the left periphery ('<sup>1</sup>' stands for emphasis):<sup>11</sup>

- (43) <sup>1</sup>Sok lányt meghívott János az ünnepségre.  
 many girl-acc pv-invited-3sg János the celebration-on  
 'János invited many girls to the celebration.'

Emphatic *sok*-phrases express the speaker's judgement about a high amount or numeric degree. (43), for example, indicates that according to the speaker's judgement, there were many invited girls (above average, above expectation or contrasting with only a few girls).

Evaluative *sok*-phrases are different from universal quantifiers in two respects. One is that they can occur in Spec,FocP as focused constituents (compare this with (41b) above):

- (44) SOK LÁNYT hívott meg János az ünnepségre.  
 many girl-acc invited-3sg pv János the celebration-on  
 'It was many girls who János invited to the celebration.'

<sup>11</sup> *Sok*-phrases without emphasis have a wider distribution. They can occur as topics or postverbal constituents as well.

The other is that emphatic *sok*-expressions always follow but do not precede universal quantifiers when the latter are also present in the left periphery:

- (45) (a) Mindenhova<sup>1</sup> sok lányt meghívott János.  
 everywhere many girl-acc pv-invited-3sg János  
 ‘János invited many girls to every place.’
- (b) \*<sup>1</sup>Sok lányt mindenhova meghívott János.  
 many girl-acc everywhere pv-invited-3sg János  
 ‘János invited many girls to every place.’

Universal quantifiers on the other hand have no ordering restrictions among themselves:

- (46) (a) Mindenkit mindenhova meghívott János.  
 everyone-acc everywhere pv-invited János
- (b) Mindenhova mindenkit meghívott János.  
 everywhere everyone-acc pv-invited János  
 ‘János invited everyone to every place.’

To accommodate the observed co-occurrence restrictions of quantificational phrases, one needs to assume the structure in (47): a unique *manyP* for *sok*-expressions, which is distinct from DistP.<sup>12</sup> According to the testimony of the facts above, emphatic *sok*-phrases can occupy either this *manyP* (cf. 47a) or that of focus (47b).

- (47) (a) [... [*manyP* *sok*-XP [AspP pv-V [...]]]]  
 (b) [... [<sub>FocP</sub> *sok*-XP V<sup>0</sup> [AspP pv [...]]]]

When the *sok*-phrase occupies Spec, *manyP*, it is adjacent to a non-inverted pv-V verb, which I assume stays in AspP, right below *manyP*.<sup>13</sup> When the *sok*-phrase occupies the focus position, it forces verb preverb

<sup>12</sup> The anonymous reviewer calls my attention to the fact that not all speakers seem to make the grammatical distinction between evaluative *sok*-phrases and universal quantifiers. For these speakers (45b) is grammatical. I consulted four extra speakers to check this point, and indeed one speaker out of the four allows for (45b). I refer such individual variation to future research.

<sup>13</sup> The adjacency requirement between the *sok*-phrase and the verb (similarly to that in (42b)) has not yet received explanation in the literature on Hungarian to my knowledge. Putting it down to the selectional restriction of *manyP* suffices for the purposes of this paper but it is nothing more than a mere descriptive coding

inversion, as focus constituents do. The structures in (47) will form the basis of the discussion in the next sections. The first section will analyze *wh*-E-phrases that can occur both with and without inversion. The second one deals with those that can only occur with inversion. The third one treats those which can only occur without inversion.

### 3.3.2. The position of *wh*-E-phrases with optional inversion

Let us start the discussion with the most characteristic type of *wh*-phrases that occur with optional inversion *wh*-phrases: *hány* and *mennyi* ‘how many/much’, which denote amount. These phrases show the exact same syntactic behaviour as the above mentioned *sok* ‘many, much’ phrases in indicatives:

- (48) (a) (Hogy) *hány* könyvet {megvettél / vettél meg}!  
 comp how.many book-acc pv-bought-2sg bought-2sg pv  
 ‘You bought so many books!’
- (b) ‘Sok könyvet {megvettél / vettél meg}.  
 many book-acc pv-bought-2sg bought-2sg pv  
 ‘You bought many books.’

This parallel suggests that the placement of *hány/mennyi* in (48a) and that of the *sok*-phrase in (48b) is identical: when the phrase occurs with inversion, it is focused in Spec,FocP, and when it occurs without inversion, it occupies *manyP* (cf. 47) (for a similar suggestion, see Kálmán 2001). This state of affairs can also be supported by other parallels between evaluative *sok*-phrases and *hány/mennyi*-phrases in exclamatives.

One such parallel is the fact that *sok*-phrases and *hány/mennyi*-phrases are adjacent to the pv-V sequence (when they occur without inversion):

- (49) (a) (Hogy) *hány* könyvet (\*tegnap) megvettél!  
 comp how.many book-acc yesterday pv-bought-2sg  
 ‘You bought so many books yesterday!’
- (b) ‘Sok lányt (\*tegnap) meghívott János az ünnepségre.  
 many girl-acc yesterday pv-invited-3sg János the celebration-on  
 ‘János invited many girls to the celebration.’

---

of the observed facts. The real explanation behind this adjacency presumably lies elsewhere.

Another parallel between the two concerns co-occurrence restrictions with lexical focused phrases. It seems that some speakers disallow a lexical focus after an evaluative *sok*-phrase (cf. 50a), similarly to the varying judgements (all) speakers provide for cases in which a *hány/mennyi*-phrase precedes focus (cf. 50b):

- (50) (a) %<sup>1</sup>Sok lányt JÁNOS hívott meg az ünnepségre.  
 many girl-acc János invited pv the celebration-on  
 intended: 'It was János who invited many girls to the celebration.'
- (b) %(Hogy) hány könyvet JÁNOS vett meg!  
 comp how.many book-acc János bought-3sg pv  
 'How many books JÁNOS bought!'

This parallel between the two types of constructions is arguably less strong due to the fact that both are subject to substantial individual variation, details of which are not completely clear to me. The fact, however, that both sentence types are in any event clearly marked does not run counter to the claim that the position of *sok*- and *hány*-phrases in them can be similar.

The above parallels single out one possible structural position that *hány/mennyi* can occupy: *manyP*. Universal quantifiers, which inhabit DistP, do not show the pattern in (50): they allow for a focus following them without any problem (see (42a) above). The same is also true about even higher left peripheral constituents, like topics. They do not only differ from exclamatives in the property in (50), but also in the property in (49): they need not be adjacent to a verb and can be followed by focus as well as other quantifiers or topics.

This identifies the position of *hány/mennyi* E-phrases as that of emphatic *manyP*, which, as argued before, is a position distinct from that of focus (51a). When these items occur with inversion, they occupy the focus position (51b):

- (51) (a) [... [*manyP* {*hány/mennyi*} [<sub>AspP</sub> pv-V [...]]]]  
 (b) [... [<sub>FocP</sub> {*hány/mennyi*} V<sup>0</sup> [<sub>AspP</sub> pv ...]]]

The distinct syntactic placement in the two cases has an effect on both semantic properties and syntactic behaviour, further supporting the structures in (51). Two important properties need mention here: distributive vs. collective readings and the licensing of postverbal superlatives.



As noted above, *manyP* is part of the quantificational field, the DistP field of Hungarian. Constituents in the DistP field have an obligatorily distributive reading. This is in stark contrast with FocP, which can host constituents with both distributive and collective readings (Szabolcsi 1997). Due to this essential difference, the meaning of *sok*-phrases differs in distributivity depending on their structural position. When they are in *manyP*, i.e., in the quantificational field, not triggering inversion, they are obligatorily distributive. When they are in FocP, triggering inversion, they are optionally distributive:

- (52) (a) <sup>1</sup>Sok gyerek felemelte a zongorát.  
 many kid pv-lifted-3sg the piano-acc  
 'Many kids lifted the piano (separately).'
- (b) SOK GYEREK emelte fel a zongorát.  
 many kid lifted-3sg pv the piano-acc  
 'Many kids lifted the piano (separately/together) (not just a few).'

The exact same phenomenon can be observed with *hány/mennyi*-phrases that are allowed to appear in both positions:

- (53) (a) (Hogy) hány gyerek felemelte a zongorát!  
 comp how.many kid pv-lifted-3sg the piano-acc  
 'How many kids lifted the piano (separately)!'
- (b) (Hogy) hány gyerek emelte fel a zongorát!  
 comp how.many kid lifted-3sg pv the piano-acc  
 'How many kids lifted the piano (separately/together)!'

The positional difference sketched in (51) results in syntactic differences between the two patterns, too. One such difference concerns the licensing of postverbal superlative expressions. The licensing of superlatives can only be done from the focus position, and not from the quantificational position, as was argued in É. Kiss–Farkas (2001):

- (54) (a) JÁNOS itta meg a legkevesebb bort.  
 János drank-3sg pv the least wine-acc  
 'It was János who drank the least wine.'
- (b) \*János minden nap megitta a legkevesebb bort.  
 János every day pv-drunk-3sg the least wine-acc  
 'János drank the least wine every day.'

Parallel to the facts in (54), *sok*-phrases license a superlative when they are syntactically focused in Spec,FocP, but not when they are in *manyP*, as (55) shows:

- (55) (a) János sokszor ért            ide a leggyorsabban.  
           János often arrived-3sg pv the quickest
- (b) \*János sokszor ideért            a leggyorsabban.  
           János often pv-arrived-3sg the quickest  
           ‘János often arrived here the most quickly.’

The same is true about exclamation when they appear in different positions. Exclamative *wh*-phrases can only license a superlative phrase from the focus position (i.e., with inversion), but not from *manyP* (without inversion):

- (56) (a) (Hogy) hányszor értél            ide a leggyorsabban!  
           comp how.often arrived-2sg pv the quickest
- (b) \*(Hogy) hányszor ideértél            a leggyorsabban!  
           comp how.often pv-arrived-2sg the quickest  
           ‘How often did you arrive here the most quickly!’

On the basis of these facts, there remains little doubt that the structures in (51) (parallel to those in (47)) are on the right track about exclamation: just like emphatic *sok*-phrases, exclamative *hány/mennyi*-phrases occupy either Spec,*manyP* or Spec,FocP. Does this come as a surprise? Certainly not, since the two types of phrases share common semantic features. Both emphatic *sok*-phrases and exclamative *hány/mennyi*-phrases are **evaluative** expressions (expressing the speaker’s judgement) with a high **amount** reading. *ManyP* in Hungarian subcategorizes for constituents with these two features. This is what allows for *hány/mennyi* to occur in this position in exclamation. Note furthermore that *manyP* seems to be only compatible with **high** amount readings. While *sok*-phrases express **high** amount as part of their lexical meaning, *hány/mennyi*-phrases do not. They are in principle compatible with both high and low amount readings. Placement in *manyP*, however, singles out the high amount reading (Kálmán 2001), strengthening the claim that the *hány*-expression is in *manyP*:

- (57) (a) (Hogy) hány            filmet megnéztél!  
           comp how.many film-acc pv-watched-2sg  
           ‘You watched so many films! / \*You watched so few films!’

- (b) (Hogy) hány filmet néztél meg!  
 comp how.many film-acc watched-2sg pv  
 ‘You watched so many films! / You watched so few films!’

Having accounted for *hány/mennyi*, what is left now is to account for quantified E-phrases and plurals, which show a similar behaviour to *hány/mennyi*:

- (58) (a) (Hogy) ki mindenki {eljött / ?jött el} az ünnepségre! (= (22))  
 comp who everyone pv-came-3sg came-3sg pv the celebration-to  
 ‘The (different) kinds of people/the number of people who came to the celebration!’
- (b) (Hogy) mi mindent {megettél / ?ettél meg}! (= (23))  
 comp what everything-acc pv-ate-2sg ate-2sg pv  
 ‘The number of things you have eaten!’

I contend that quantified *wh*-phrases, like *ki mindenki* ‘who all’ and plurals like *kik* ‘who-pl’ also have a similar optionality in placement as *sok*-phrases and *hány/mennyi*-phrases described above. This is due to the fact that these phrases are **quantificational** phrases, expressing high amount as well.

That E-phrases with the universal quantifier *minden* ‘every’ express high amount is beyond doubt. The presence of the quantifier in these phrases is presumably linked to the fact that exclamatives are scalar expressions (see section 4).<sup>14</sup> They always invoke a scale on which the E-phrase denotes a high scalar value. It is likely that the presence of the universal quantifier emphasizes some property of this scale: for example that the individuals range over various values of the scale. Leaving the implementation of this intuition aside, the amount reading of quantified E-phrases can be accounted for along these lines. The fact that these *minden* ‘every’-phrases are slightly dispreferred in the focus position sug-

<sup>14</sup> The exclamative nature of such universal quantifiers is clearly observable in languages in which these elements are strongly required to indicate exclamative use of the sentence they occur in. Dutch *allemaal* ‘all’, (although not brilliant in the example in (i)) is necessary to make the exclamative interpretation salient (Marcel den Dikken, p. c.):

- (i) Wat je ??(?allemaal) moet doen om aan een baan te komen! (Dutch)  
 what you all must do to on a job to come  
 ‘The things you have to do to get a job!’

gests furthermore that the quantificational nature of these phrases is so strong that their default placement is in the quantificational domain.

Plural E-phrases in my opinion need to receive a similar analysis: they can, at least for some speakers, appear in the *manyP* position. This is presumably linked to the fact that plurality can be conceived of as quantification in semantics (Link 1983). For speakers who assign quantificational value to these plural phrases, *manyP* is an acceptable position. For speakers who do not treat these as quantificational, they pattern with ordinary *ki* 'who', *mi* 'what' *wh*-phrases that always occur in the focus position.

Summing up, this section provided arguments to the effect that E-phrases that can occur both with and without inversion can occupy two positions in the Hungarian left periphery, the specifier of *manyP* or that of *FocP*:

- (59) (a) [... [*manyP* {*hány/mennyi* / *ki mindenki* / %*kik*} [*AspP* pv-V [...]]]]  
 (b) [... [*FocP* {*hány/mennyi* / ?*ki mindenki* / *kik*} V<sup>0</sup> [*AspP* pv ...]]]

These two positions were identified and told apart using evidence from (i) the distribution of verb movement (inversion), (ii) co-occurrence restrictions of E-phrases with other constituents, (iii) licensing of superlative postverbal constituents, (iv) the availability of distributive/collective readings, and (v) the availability of high and low amount readings. Taking the lead of this structural analysis, it was concluded that the class of *wh*-E-phrases with the distribution in (59) comprise high amount expressions with an evaluative reading. This is because *manyP* is selective as to the kind of constituents it hosts: it only allows for amount expressions with evaluative meanings. While evaluative meaning characterizes all exclamative expressions, only *hány/mennyi*, *ki mindenki* and *kik*-type expressions express high amount lexically. This is why their placement allows for the kind of optionality observed.

The distribution of other types of *wh*-phrases will be discussed in the next section.

### 3.3.3. The position of *wh*-E-phrases with obligatory inversion and obligatory straight order

With the analysis of *hány/mennyi*-expressions in place, identifying the position of E-phrases with an obligatory placement becomes significantly easier.

Starting the discussion with those *wh*-E-phrases that occur with obligatory inversion (those that denote individuals, times, manners and reasons like *ki* ‘who’, *mi* ‘what’, *hol* ‘where’, *mikor* ‘when’, *hogyan* ‘how’ etc.) the picture is very clear. As inversion is the key characteristic of Spec,FocP being filled in Hungarian, the conclusion is that these elements are in FocP:

(60) [... [<sub>FocP</sub> {*ki* / *mi* / *hol* / *mikor* / *hogyan*} V<sup>0</sup> [<sub>AspP</sub> pv ...]]]

The focal placement of these items is further supported by the tests used in the previous section. E-phrases in this position are optionally distributive or collective (61), and they license a postverbal superlative expression (61b):

- (61) (a) (Hogy) melyik két gyerek emelte fel a zongorát!  
 comp which two kid lifted-3sg pv the piano-acc  
 ‘(I am surprised at) which two kids lifted the piano (separately/together)!’
- (b) (Hogy) mikor értél ide a leggyorsabban!  
 comp when reached-2sg pv the quickest  
 ‘(I am surprised at) the time you got here as the quickest!’

While the focal placement of *ki* ‘who’, *mi* ‘what’, *hol* ‘where’, *mikor* ‘when’, *hogyan* ‘how’-type phrases is beyond doubt, the question why they receive such a placement is more difficult to answer. Upon first sight, one is inclined to connect this property to the *wh*-hood of these constituents: after all, *wh*-phrases also occupy the focus position in interrogatives. If *wh*-phrases in exclamatives are like *wh*-phrases in interrogatives, a similar distribution is expected.

This line of reasoning, however, cannot be on the right track for various reasons. The most robust of these is that obligatory focusing does not only affect *wh*-phrases. Some *de*-phrases also trigger obligatory inversion, as was illustrated in (26d) above:

- (62) De drága könyvet {vettél meg / \*megvettél}! (= (26d))  
*de* expensive book-acc bought-2sg pv pv-bought-2sg  
 ‘How expensive a book you bought!’

The behaviour of such *de*-phrases rules out the possibility of linking focal placement to *wh*-hood.

Other reasons not to connect focal behaviour with *wh*-hood involve the lack of full parallels between exclamatives and interrogatives, as was

mentioned already. To repeat these, the syntax of exclamatives was shown not to be parallel to that of interrogatives in that (i) exclamatives, but not interrogatives, can involve non-*wh*-phrases (*de*-phrases, cf. (2)), (ii) exclamatives allow for some *wh*-phrases in positions that are not available to *wh*-phrases in interrogatives (section 3.1), (iii) matrix exclamatives, unlike matrix interrogatives can have an overt complementizer (cf. (4)).

Due to these considerations the focal placement of *ki*, *mi*, *hol*, *mikor*, *hogyan*-type phrases cannot be due to a parallel with interrogatives. The Hungarian facts are not compatible with analyses that try to reduce exclamatives to interrogatives (D'Avis 2002) and claim that the two clause types have identical syntax when it comes to the placement of *wh*-phrases (as is done for English in Pesetsky–Torrego 2001 or Fujii–Ono 2005).

What drives the movement of *ki*, *mi*, *hol*, *mikor*, *hogyan*-type phrases then? It is clear that whatever it is, it must be distinct from the driving force of interrogative *wh*-phrases. The property that drives this movement is likely to be inherent to every exclamative phrase, not only those confined to Spec,FocP, namely the *ki*, *mi*, *hol*, *mikor*, *hogyan*-type. The unifying property of all E-phrases is that they are evaluative scalar expressions. I propose that focus placement of E-phrases follows from this very property: being scalar requires focusing. It is the evaluative scalar nature of *ki*, *mi*, *hol*, *mikor*, *hogyan*-type elements that allows and forces them to occur in the focus position. Section 4 below will elaborate on this idea in more detail, showing how scalarity affects the form and placement of exclamative phrases.

### 3.3.4. The position of *wh*-E-phrases with obligatory straight order

Before closing this section, however, the distribution of yet another type of E-phrases need to be accounted for: those that never occur without inversion. It seems we can be short about these items, as their behaviour is rather exceptional and almost idiomatic. There are two *wh*-E-phrases with this property: *mennyire* and *hogy* ‘to what extent/how much’ denoting extent. Following the logic of the findings in the previous section, the fact that these never occur with inversion shows that they are not in FocP. Instead, *manyP* suggests itself as a possible candidate. It seems, however, that the position of the *mennyire*-phrase is not in *manyP*, but rather the position that completion/intensity adverbs like *nagyon* ‘very much’ or *alaposan* ‘thoroughly’ also occupy. These kinds of adverbials

also always occur without inversion and express the exact same meaning of extent:

- (63) (a) Éva nagyon {megnőtt / \*nőtt meg}.  
 Éva much pv-grew-3sg grew-3sg pv  
 'Éva has grown a lot.'
- (b) \*Nagyon ÉVA nőtt meg.  
 much Éva grew-3sg pv  
 'It was Éva who has grown a lot.'

Since *mennyire*-phrases also express high extent or intensity (rather than amount, as *sok*-phrases or *hány/mennyi* E-phrases), I take it that they assume the placement of *nagyon*-type adverbials:

- (64) [... [AdvP {*nagyon* / *mennyire*} [AspP pv-V [...]]]

It needs to be mentioned that the position of *nagyon*-type grade, completion or intensity adverbials is indistinguishable from that of emphatic *sok*-phrases syntactically: (i) *sok*- and *nagyon*-phrases are in complementary distribution, (ii) both types can only stand without inversion and (iii) they do not tolerate a focused constituent to their right. Leaving a comparison between *nagyon*- and *sok*-phrases for further research, the rest of the paper will not deal with this kind of data any more.

#### 4. Focus in the theory of exclamatives

The previous section gave a structural analysis of E-phrases in Hungarian, and delivered the result that the placement of exclamatives involves two possible positions: *manyP* and *FocP*:

- (65) (a) [... [*manyP* {*hány* / *mennyi* / *ki mindenki* / %*kik*} [AspP pv-V [...]]]  
 (b) [... [*FocP* {*hány* / *mennyi* / ?*ki mindenki* / *kik*} V<sup>0</sup> [AspP pv ...]]]  
 (c) [... [*FocP* {*ki* / *mi* / *hol* / *mikor* / *hogyan*} V<sup>0</sup> [AspP pv ...]]]

Due to lexical restrictions of the former, only amount expressions fit into *manyP*, while all exclamative phrases can occupy the focus slot (with the exception of extent-denoting ones in 3.3.4, put aside as idiomatic ones). The present section aims at explaining this distribution, concentrating primarily on the role focusing plays in exclamative syntax. The first subsection will spell out the semantics of exclamations briefly. The second

subsection will point out that focusing in the syntax is a natural consequence of exclamative semantics. This section will also provide some analysis of relativized exclamatives (cf. example (3)).

#### 4.1. The semantic characteristics of exclamatives

The semantics of exclamatives has been reasonably well-studied in recent years. The following list of semantic properties is based on pioneering work in Elliott (1974), Grimshaw (1979), Michaelis–Lambrecht (1996) and Portner–Zanuttini (2003):

- (66) Semantic properties of exclamatives
- (a) FACTIVITY. The proposition exclamatives denote is entailed.
  - (b) SCALAR IMPLICATURE. Exclamatives assert that the degree of a particular scalar property lies at the extreme end of a (contextually given) scale.
  - (c) INVOKING A SET. Exclamatives invoke a set of alternative propositions; and they indicate that the proposition in this set exceeds the expected ones (the latter called “widening” in Portner–Zanuttini 2003).
  - (d) EXPECTATION CONTRAVENTION. Exclamatives express that something is unusual and surprising.
  - (e) EMOTIVENESS. Exclamatives assert an affective stance towards a propositional statement.

Factivity is a major semantic property of exclamatives. Exclamatives introduce the presupposition that their propositional content is true. When uttering (67), the speaker subscribes to the fact that the addressee watched some films:

- (67) (Hogy) hány        filmet    megnéztél!  
       comp how.many film-acc pv-watched-2sg  
       ‘You watched so many films!’

Due to the factive property, exclamatives cannot be embedded under non-factive predicates (see also (6)–(8) in section 2 above):

- (68)\*Úgy tudom,    hogy hány        filmet    megnéztél.  
       so    know-1sg comp how.many film-acc pv-watched-2sg  
       ‘I know that you watched many films.’

Next to factivity, the scalar and set-invoking nature of exclamatives is also considered to be defining properties of exclamations in Portner–



Zanuttini (2003). Scalarity refers to the fact that exclamatives always operate on a scale: the surprising property that the exclamative expresses is placed on a scale that contains alternative values corresponding to various degrees, ranging from small to high degrees. The exclamative singles out an extreme degree on this scale.

It is important to note that scalarity characterizes all exclamatives across the board, irrespective of whether they contain lexical elements that can be associated with a scale. Phrases of gradable adjectives, for example, have been claimed to include a specification of degree (Corver 1990). This makes E-phrases with adjectives perfect exclamative phrases. Yet, E-phrases of other categories also get associated with a scale in Hungarian. Nominals for example, which are standardly not associated with degrees, get associated with a high degree property in exclamatives. (69) is associated with a scale of importance, and indicates that the visiting person is exceptional in this respect:

- (69) (Hogy) ki jött el ebbe a faluba!  
 comp who came-3sg pv this-into the village-into  
 ‘What a person came to this village!’

The set-invoking property of exclamatives (property iii) means that exclamatives invoke a set of **alternative propositions**; the use of exclamatives is to point out that the true proposition among these alternatives is the one that exceeds the expected one. In this sense, exclamatives **widen** the original scale on which they operate. Widening means that the extreme value they define falls outside the standard scale. The sentence in (67), for example, indicates that the number of films the addressee watched is greater than the alternatives under consideration, namely being one film, or a few films, or an expected number of films. (69) indicates that the importance of the visiting person is higher than normal.

Widening thus gives rise to yet another important property of exclamatives: expectation contravention. This means that exclamatives express that something is unexpected, unusual, out of the ordinary. The exclamative lexicon sometimes provides first-hand evidence for the expectation contravention nature of exclamatives. Functional heads or exclamative morphemes in exclamatives often originate from words with an emotive or adversative meaning. A telling example is the adversative

coordinator *de* ‘but’ in Hungarian, which is the exclamative word used in what I refer to as *de*-exclamatives:<sup>15</sup>

- (70) *De jó volt az a buli!*  
 but good was that the party  
 ‘How great that party was!’

Exclamative *de* arguably originates from the adversative coordinator ‘but’, whose role as a coordinator is to express the contrast by indicating expectation contravention.

The last key characteristic of exclamatives is emotiveness. Exclamatives express the speaker’s surprise, which is an affective (emotive) stance. Emotivity is responsible for the fact that exclamatives often contain expressive lexical items (on the latter in general see Potts–Roeper 2006), as was observed above in (9a):

- (71) *Milyen rohadtul megfáztam!*  
 how rottenly pv-cold.caught-1sg  
 ‘What an awful cold I got!’

In another context the emotive nature of exclamatives is lexicalized by **csoda** ‘wonder’, an emotive word (den Dikken–Lipták 1997), which sometimes forms obligatory part of the exclamation:

- (72) (a) *Mi-(csoda) egy fickó!*  
 what-wonder a guy  
 ‘What a guy!’  
 (b) *Mi a csoda!*  
 what the wonder  
 [idiomatic ejection of surprise]

This concludes the description of the semantic characteristics of exclamatives. Of these characteristics two prove to be relevant for the syntactic analysis of exclamatives that is to be implemented in this paper: scalar

<sup>15</sup> Serbo-Croatian has a similar use of the adversative coordinator (Boban Arsenijević, p. c.):

- (i) *Al je Jovan snazan!*  
 but is Jovan strong  
 ‘How strong is Jovan!’

implicature and invoking a set. The next section will show how these properties account for the syntactic placement of E-phrases in Hungarian.

#### 4.2. The role of focus in Hungarian exclamatives

The question that section 3 ended upon was (recall (65a, b, c)): why can the syntactic FocP position host E-phrases in Hungarian and why does it **have** to host the kinds that cannot occur in *many*P? In the light of the observed semantic properties of exclamatives, this question can now be answered in the following way.

The syntactic focus placement of exclamative phrases follows from the fact that exclamatives invoke a set of alternatives. As was shown above, exclamatives always invoke a set of **alternative propositions**. The role of this set of alternative propositions is to spell out what the exclamative proposition differs from: the exclamative states that the true proposition among these alternatives exceeds the expected ones. Now, recalling a set of alternatives characterizes contrastive focus constructions in general across languages, including the Hungarian contrastive focus placed in Spec,FocP (Kenesei 1986; Rooth 1992).<sup>16</sup> For illustration, consider the following example with a lexical focus in FocP:

- (73) A MINISZTERELNÖK jött el ebbe a faluba.  
 the prime.minister came-3sg pv this-into the village-into  
 ‘It was the prime minister who came to this village.’

Contrastive focus in this case operates on a contextually determined set of people about whom the sentence could be true but is not: a set made up of several other persons next to the prime minister, like the president, the pope, etc. Contrastive focus identifies the prime minister among these as the only individual about whom the proposition is true. The same set-formation mechanism takes place in exclamatives. (74) forms a contrastive set that ranges over people of various significance (a janitor, a mayor, a minister or the prime minister), just like (73) does:

- (74) (Hogy) ki jött el ebbe a faluba!  
 comp who came-3sg pv this-into the village-into  
 ‘What a person came to this village!’

<sup>16</sup> Contrastive focus is referred to as “identificational focus” in É. Kiss (1998).

The only difference between the lexical focus example in (73) and the exclamative one in (74) is that the set in the latter is placed on an evaluative **scale**. Scalar readings are inherent to exclamatives as was pointed out in the previous section. While this scalar reading is missing in (73), it can be brought in with the use of so-called focus sensitive adverbials like the scalar *only* or *even*. These also associate with scales (Rooth 1992) that are similar to those found in exclamatives:

- (75) Csak a helyi polgármester jelent meg a faluban.  
 only the local mayor showed-3sg up the village-in  
 ‘Only the local mayor showed up in the village (and not a minister or the prime minister).’

A sentence like (75) establishes a scale on which the local mayor is associated with a low value of importance, as opposed to other individuals with a higher value of importance. In other words, contrast in the case of exclamatives falls on a degree property: it singles out an extreme degree, opposing it to other, less extreme degrees.

On the basis of these parallels I put forward the claim that it is the set invoking nature of exclamatives that explains their focal placement. Exclamative constituents are focused phrases, focus falling on a value of an evaluative scale.<sup>17</sup> The scalar nature of exclamatives can be implemented by the presence of an exclamative operator (O<sub>PEX</sub>) that is present on every E-phrase as illustrated in (76). The workings of this operator is similar to that of *only* in that it establishes an evaluative scale and forces focus syntax onto the E-constituent.

- (76) [... [<sub>FocP</sub> [<sub>E-phrase</sub> O<sub>PEX</sub> {*ki / mi / hol / mikor / hogyan*}] V<sup>0</sup> [<sub>AspP</sub> PV ...]]]

The presence of such an evaluative scalar operator in exclamatives can be motivated indirectly by observations about the lexical specification of E-phrases. Since the exclamative operator is a scalar operator, it is expected, that other, non-scalar operators are ruled out in E-phrases. This expectation is borne out. Non-scalar focal particles, like *pontosan* ‘exactly, precisely’ are ruled out in E-phrases:

<sup>17</sup> That focus underlies exclamatives is not entirely new, although it has never been spelled out extensively in the literature to my knowledge. For proposals that touch on the focal nature of exclamatives, see Gutiérrez-Rexach (1999) and Nelson (1997) on Spanish and English exclamatives respectively.

- (77) (Hogy) (\*pontosan) mikor jött meg a vonat!  
 comp exactly when arrived-3sg pv the train  
 ‘(I am surprised at) the exact time when the train arrived.’

The syntactic placement of E-phrases occurring with inversion is thereby explained. The focus placement follows from their interpretation as exclamatives, invoking a set of alternatives that range over degree expressions. The scalar set invoking reading of exclamatives characterizes every exclamative phrase, including those that can also occur without inversion in Hungarian, like the amount phrases like *hány/mennyi* ‘how much/many’. Since their exclamative interpretation does not differ in any way from other E-phrases in terms of scalar set-invoking behaviour, I take these elements to be associated with an evaluative scalar  $O_{PEX}$  operator as well. Their placement in the *manyP* position (cf. section 3.3.2), indicated in (78) does not contradict the claim that E-phrases are focused, as *manyP* can contain semantically focused expressions and is evaluative by definition:<sup>18</sup>

- (78) [... [*manyP* [<sub>E-phrase</sub>  $O_{PEX}$  {*hány/mennyi* / *ki mindenki* / %*kik*}] [<sub>AspP</sub> pv-V [...]]]

Note that the focus analysis of E-phrases gets support in other domains of grammar as well as other syntactic constructions. The effects of focusing can be observed in (i) phonological behaviour; (ii) the existence of non-sentential exclamatives and (iii) relativized exclamatives. The remainder of this section elaborates on these phenomena.

Turning first to the syntax–phonology interface, the focus analysis of E-phrases is clearly supported by phonological considerations. Exclamations always contain an emphatic phrase. The emphatic phrase always corresponds to the constituent that denotes the surprising thing or property (the E-phrase), which always receives the main accent of the sentence. The focus-analysis of exclamatives thus in turn explains why exclamatives can only occur in positions which can carry the main accent of the clause, as was stated in the generalization in (36), repeated here:

- (79) The position of adverbial E-phrases in exclamatives is the same as the position they occupy in indicatives when they carry the main stress of the sentence.

<sup>18</sup> See arguments in Brody (1990) and Surányi (2002) to the effect that inhabitants of DistP positions can have focus semantics.

This requirement follows from the fact that only positions associated with main stress can host focused constituents.

Turning now to the syntactic domain, two important exclamative constructions support the focal analysis of exclamatives. Both involve constructions that arguably involve ellipsis: non-sentential exclamatives, i.e., exclamative utterances that do not involve a full sentence. Hungarian has two kinds of non-sentential exclamatives. One involves ordinary E-phrases, like the exclamative in (72) above, repeated here:

- (80) Mi-\*(csoda) egy fickó!  
 what-wonder a guy  
 ‘What a guy!’

Like (80), and its English version, non-sentential exclamatives are usually nominative/adjectival predicative phrases. Although such utterances are widespread in languages, their non-sentential nature has not received attention in the literature. Following recent findings about so-called (non-sentential) **fragment** phrases in general (Merchant 2004), it looks likely that non-sentential exclamatives are elliptical phrases in which only one constituent survives and all other parts of the utterance are deleted. Although further research is needed to establish whether this is really so,<sup>19</sup> such a deletion analysis would provide a strong piece of evidence in favour of the focused nature of E-phrases: as Tancredi (1992) and Merchant (2001) have shown, ellipsis can only operate in sentences where the non-elided remnant constituent is focused. If exclamative phrases like (80) can survive ellipsis, it is clearly because they are focused.

A similar kind of reasoning can also be applied to the other kind of non-sentential exclamatives, relativized exclamatives, like (81), which was introduced in example (3) above:

- (81) (a) Amennyit te egyszerre megeszel!  
 rel-how.many-acc you once pv-eat-2sg  
 ‘The amount you eat in one sitting!’  
 (b) Amiket te megeszel!  
 rel-what-pl-acc you pv-eat-2sg  
 ‘The things you eat!’

<sup>19</sup> Initial investigations in English point to this direction: Ono (2005) shows that exclamative constituents in English can occur as remnants left behind in sluicing, for example.

As is clear from the morphology of the *wh*-expression, these sentences are relative clauses. Since relative clauses are dependent, subordinated constituents, these utterances, too, are most presumably non-sentential constituents just like the elliptical type in (80) involving a non-relative E-phrase. The deletion process that has taken place in relativized exclamatives arguably deletes the predicate whose subject is a lexical DP containing the relative clause.<sup>20</sup>

- (82) (a) ~~Elképesztő a mennyiség~~, amennyit te egyszerre megeszel.  
 astonishing the amount rel-how.many-acc you once pv-eat-2sg  
 ‘The amount you eat in one sitting is astonishing.’
- (b) ~~Elképesztők az ételek~~, amiket te megeszel.  
 astonishing-pl the food-pl rel-what-pl-acc you pv-eat-2sg  
 ‘The things you eat are astonishing.’

If such a deletion analysis is on the right track,<sup>21</sup> this provides evidence that the relative clause (the E-phrase), is focused. Interestingly, one can find other indication that the relative clause as a whole is focused in these sentences, and that it has a particular, scalar focus interpretation that is different from ordinary contrastive focus. The evidence comes from the distribution of lexical focused phrases within the relative clause. The argumentation takes several steps, which are sketched in the following.

As the next examples show, the presence of lexical focus inside the exclamative phrase gives a sharply ungrammatical result:

<sup>20</sup> To some degree, the head of the relative clauses can also survive the deletion process, giving rise to headed relative exclamatives, although the result is dispreferred to the free relatives in (81). Nominal relatives are the best here (ib):

- (i) (a) <sup>???</sup>A mennyiség amennyit te egyszerre megeszel!  
 the amount rel-how.many-acc you once pv-eat-2sg  
 ‘The amount you eat in one sitting!’
- (b) <sup>?</sup>Az ételek, amiket te megeszel!  
 the food-pl rel-what-pl-acc you pv-eat-2sg  
 ‘The things you eat!’

<sup>21</sup> While the deletion account seems plausible for Hungarian, languages might differ in whether they derive these sentences with ellipsis or not. See some arguments against a deletion account of English *The things you eat!* type of exclamatives in Portner–Zanuttini (2005).

- (83) (a) \*Amennyit TE eszel meg egyszerre!  
 rel-how.many-acc you eat-2sg pv once  
 ‘The amount YOU eat in one sitting (as opposed to someone else)!’
- (b) \*Amiket TE eszel meg!  
 rel-how.many-acc you eat-2sg pv  
 ‘The things YOU eat (as opposed to someone else)!’

This behaviour is particular, as relative clauses in general can easily contain lexical focus expressions:

- (84) [Amiket TE eszel majd meg], AZOKAT tettem a hűtőbe.  
 rel-how.many-acc you eat-2sg later pv those-pl placed-1sg the fridge-into  
 ‘The things YOU will eat (as opposed to someone else) are the ones I have put into the fridge.’

The obligatory absence of a focus phrase inside the relative in (83) follows from the fact that the relative clause as a whole is a focus expression, which, as was argued above in this section, is associated with a scalar operator  $Op_{EX}$ . Due to this operator, the relative clause assumes a scalar focus reading, just like any other E-phrase:

- (85) [E-phrase  $Op_{EX}$  [amennyit te egyszerre megeszel]]!

As a result, the exclamative can only have this kind of focus reading, and is not compatible with an ordinary contrastive focus reading at the same time. The problem that results when the relative clause contains a lexical focus is precisely the latter: the relative receives two conflicting types of focus interpretation. This is due to a phenomenon called **focus percolation** that characterizes Hungarian relative clauses in general. In short, focus percolation means that the interpretation and syntactic distribution of Hungarian relative clauses is sensitive to whether they **contain** a focused constituent or not. If a free relative clause contains a focus element, the relative clause as a whole strongly prefers to be focused as well. This is illustrated in (86):

- (86) (a) <sup>???</sup>\*János megette [amit MARI készített el].  
 János pv-ate rel-what-acc Mari prepared pv  
 ‘János ate what MARI prepared.’
- (b) [Amit MARI készített el] ette meg János.  
 rel-what-acc Mari prepared pv ate pv János  
 ‘It was what MARI prepared that János ate.’



As can be seen in these examples, the presence of focus on *Mari* within the relative clause forces focus interpretation and focus distribution on the whole relative clause as well. If the relative is not in SpecFocP (triggering inversion), the sentence becomes considerably degraded, as (86a) shows.<sup>22</sup> It is this focus percolation phenomenon that rules out lexical focus inside exclamative relatives. An internal focus would force contrastive focal interpretation onto the whole relative sentence, and as such it would come into conflict with the scalar focus interpretation that is a necessary ingredient of the exclamative phrase:

(87) \*<sub>[(+focus)]</sub> [E-phrase Op<sub>EX</sub> [ amennyit TE<sub>(+focus)</sub> eszel meg]]!

Since Op<sub>EX</sub> and  $\langle + \text{focus} \rangle$  are linked to a distinct contrastive focus meaning, they are in complementary distribution. This conclusion in turn provides evidence for the obligatorily focused nature of E-phrases. If the exclamative relative clause was not marked for an exclamative scalar focus reading, a lexical focus phrase could happily occur inside it, similarly to the grammatical instances of relative clauses with lexical foci where this is possible (84).

Summarizing the claims, this section spelled out a theory of exclamatives in which their syntactic focus behaviour was derived from their inherent semantic properties of being scalar and set-invoking. It was argued that similarly to focused phrases with scalar operators like *only*, Hungarian exclamative phrases contain a covert exclamative operator that gives them scalar semantics. Due to this operator they have the distribution of focused elements: they have to occur in a verbal position which is either FocP or *many*P. Evidence for the focused nature of the E-phrases was also provided from the realm of non-sentential, arguably elliptical, exclamative constructions.

<sup>22</sup> Next to focusing the relative clause itself (as in (86b)), there are other ways of licensing an internal focus in relatives. One involves focusing the head of the relative, if there is one (ia). Another one involves focusing some other phrase in the matrix clause (ib) (István Kenesei, p. c.):

- (i) (a) János AZT ette meg [amit MARI készített el].  
 János that-acc ate pv rel-what-acc Mari prepared pv  
 'It was what MARI prepared that János ate.'
- (b) JÁNOS ette meg [amit MARI készített el].  
 János ate pv rel-what-acc Mari prepared pv  
 'It was János who ate what MARI prepared.'

## 5. Summary of findings and the relevance of the Hungarian data for the theory of exclamatives

The aim of this last section is to summarize the results of the paper and highlight their relevance for the study of exclamative syntax in general. The latter is very important as syntactic research on exclamatives has up to now been rather small-scale, based on data from few languages only. The Hungarian data have received no theoretical attention yet in cross-linguistic research, although they are clearly relevant for the study of exclamativity in general, as they show syntactic behaviour that to my knowledge has not been attested in other languages.

### 5.1. Summary of findings

The present paper was devoted to the study of exclamative sentences, concentrating primarily on word order properties of the most frequent types of exclamative constructions. Hungarian E-phrases can be formed both with or without *wh*-words. Non-*wh*-E-phrases contain an intensifying element *de* ‘how’ and distribute just like *wh*-E-phrases.

The syntactic distribution of E-phrases in Hungarian is a complex matter that was carefully described in section 2. E-phrases were found to fall into two major types depending on what position they occupy. The larger class can only occur in the Spec,FocP position, triggering inversion. These are phrases which do not inherently refer to an amount. A smaller class of phrases can also occur in a different position, which was argued to be a quantificational position, Spec, *many*P, the position of the evaluative amount expression *sok* ‘many’ in indicative clauses, which is not associated with inversion. This class of E-phrases comprises amount phrases only. The two positions, FocP and *many*P, which exclamative phrases can occupy were distinguished using syntactic tests and co-occurrence restrictions. The distribution of E-phrases can thus be summarized in (88):

- (88) (a) [... [*many*P {*amount*-phrases} [AspP PV-V [...]]]]  
 (b) [... [FocP {*amount* and *non-amount*-phrases} V<sup>0</sup> [AspP PV ...]]]

Alongside these cases, there exists yet another small class with intensity expressions that always occur without inversion, due to a (sometimes covert) adverbial of intensity that can never be focused.

Similar to these intensity adverbs, E-phrases with other adverbial elements (as well as quantificational ones) have also been studied. It was shown that quantificational and adverbial phrases that always show a peculiar, stress-sensitive behaviour in the preverbal domain retain the same behaviour in exclamatives as well. These phrases were found to be placed in the same position in both indicative and exclamative clauses.

These findings lead to the conclusion that exclamative clause type is not associated with a singular position in which E-phrases have to appear. In this they starkly differ from interrogative clauses, which always host interrogative phrases in the same position, Spec,FocP.

The reason for not being associated with one syntactic position is that exclamatives are associated with a type of focal semantics that can be hosted in more than one position: evaluative scalar focus. Due to the fact that evaluative scalar focus phrases can be hosted by more than one syntactic slot, exclamatives can be placed in more than one slot as well: in FocP, *many*P or preverbal adverbial positions. The choice between these positions is entirely lexical. *Many*P only accepts amount expressions, while FocP is compatible with both amount phrases and other types. Adverbial positions in exclamatives correspond to adverbial positions in indicatives and are selective for features like +grade, +contrast, etc.

These results prove relevant for various domains of syntactic investigations, the most important Hungarian-specific one of these being the study of clause types, focus types and the layout of the left periphery. In addition, the findings also have important ramifications for the cross-linguistic theory of exclamatives, as the next section will show.

## 5.2. Relevance of findings for the study of exclamativity

The Hungarian facts discussed in this paper have important consequences for the syntactic study of exclamatives. This is the more important to point out, as exclamatives have not yet been extensively studied. The handful of articles on this topic usually concentrate on one or the other exclamative construction in a given language (Postma 1996; Bennis et al. 1998; Bennis 1998 on Dutch; D'Avis 2002 on German; Grimshaw 1979; Nelson 1997; Pesetsky–Torrego 2001; Portner–Zanuttini 2003; Fujii–Ono 2005 on English; Ono 2002 on Japanese; Portner–Zanuttini 2003; Munaro 2003 on Italian (Paduan and Bellunese respectively); Espinal 1997; Gutiérrez-Rexach 1999; Villalba 2003 on Spanish). Theoretical studies building on a cross-linguistic approach are missing, except for pioneering

work in Portner–Zanuttini (2003), which is the only study providing a general theory of exclamatives (based on an English–Italian comparison). It is the claims of this latter paper that will be reviewed in the light of the Hungarian data discussed above.

The part of Portner–Zanuttini (2003) (P & Z for short) for which the Hungarian facts are relevant concern the definitions provided for exclamatives. Based on the crucial meaning components of exclamations, P & Z design tests with which exclamatives can be distinguished from other clause types and can be defined accurately in the syntax.

One of the important syntactic properties that characterize exclamatives in their view is their operator-variable structure. The operator-variable structure gives rise to the fact that exclamatives denote alternative propositions, as was shown in section 4.1 above. Portner and Zanuttini moreover define the operator-variable structure found in exclamatives as a necessary-*wh* operator-variable structure, and build their semantics explicitly on *wh*-quantification in them:

(89) Exclamatives involve a *wh* operator-variable structure. (= (1a) in P & Z)

Hungarian exclamatives provide evidence that *wh*-syntax is not a necessary ingredient of exclamatives. In addition to *wh*-exclamatives, *de*-exclamatives also have the exact same distribution and meaning as *wh*-exclamatives. An example from above (21b) demonstrates this again:

(90) {De /milyen} sok könyvet {megvettél / vettél meg}! (= (21b))  
*de* how many book-acc pv-bought-2sg bought-2sg pv  
 ‘You bought so many books!’

It is clear therefore that the definition in (89) is too narrow to cover all data. The Hungarian facts show that languages can use available syntactic means of focus in the expression of exclamatives. The minimal modification to be made in (89) is the addition that the operator-variable structure can also be an operator-variable structure of the focus kind.

This modification is by no means a substantial amendment, as it is known from the literature that contrastive focus also sets up an operator-variable structure, just like *wh*-movement (É. Kiss 1998). As was spelled out above, contrastive focus also requires the consideration of a set of alternatives (Rooth 1992), just like *wh*-operators do. Defining the operator-variable structure of exclamatives in terms of focus is also advantageous because it subsumes the earlier proposal in terms of a *wh*-variable struc-

ture (cf. 89), if one subscribes to the view that *wh*-movement is a subcase of focusing (Chomsky 1977; Rochemont 1986). Adopting the latter view, the new definition can be given in (89’):

(89’) Exclamatives involve a focus operator-variable structure.

The second characteristic of exclamatives in P & Z is the factivity of exclamatives (see also Fujii–Ono 2005 for an analysis that uses factivity for the syntactic definition of exclamatives). To use factivity as a test for exclamatives, P & Z propose to identify exclamatives as *wh*-clauses that cannot be embedded under non-factive predicates (following Grimshaw 1979):

(91) Mary knows / \*thinks / \*wonders how very cute she is.

While the factivity of exclamatives is beyond doubt, and the embedding test is sound, the problem that Hungarian presents with respect to this test is its inapplicability to exclamative constructions that in general cannot be embedded, namely all *de*-exclamatives in Hungarian:<sup>23</sup>

- (92) (a) \*Elképesztő, hogy de rohadt hideg van. (= (13b, c))  
 astonishing that *de* rotten cold is  
 ‘It’s astonishing how awfully cold it is.’  
 (b) \*Meglep, hogy de rohadt hideg van.  
 surprise-3sg that *de* rotten cold is  
 ‘It surprises me how awfully cold it is.’

The question is then, how to characterize *de*-exclamatives. What differentiates them from *wh*-exclamatives and what rules them out in embedded positions?

Notice that disqualifying *de*-exclamatives from exclamativehood would not do. Native speaker intuition “feels” that if something, *de*-exclamatives are even more strongly “exclamative” in the illocutionary sense of this word than *wh*-exclamatives. I propose to implement this intuition by saying that *de*-exclamatives and *wh*-exclamatives differ in their **expressivity**.

Expressivity characterizes expressive constructions, the latter being phrases that are strongly tied to the utterance situation, notably to

<sup>23</sup> The same problem is presented by certain Spanish exclamatives (Espinal 1997) or Japanese ones (Ono 2002), which cannot be embedded, either.

the emotional state of the speaker (Potts 2005; Potts–Roeper 2006).<sup>24</sup> Expressivity in exclamatives is present due to their semantic property **emotiveness** (see section 4.1 above). While some kind of emotiveness is present in every exclamative, it seems to be the case that not all exclamatives have the same emotive content or expressive nature. Certain exclamatives are always expressive, while others only optionally are.

With this assumption in place, we can explain the distribution of *de*-exclamatives in (91), if we make the further plausible assumption that **expressive exclamatives** are only licensed in root contexts—due to the fact that only root contexts have exclamative illocutionary force (defined as a speech act in the sense of Austin 1962), which I take to be licensing expressive exclamatives. As a result, expressive exclamatives can only be used in root clauses. If this argumentation is on the right track, the distinction between *de*-exclamatives and *wh*-exclamatives in Hungarian boils down to a difference in expressivity: the former are obligatorily expressive, while the latter are not.

It must be noted that the obligatory root occurrence of expressive exclamatives can also be witnessed in the case of *wh*-exclamatives. When *wh*-exclamatives are embedded under a predicate that cannot express the same utterance situation, they lose their expressivity. Consider the following examples:

- (93) (a) How very tall Lisa is! (expressive utterance)  
 (b) John finds it amazing how very tall Lisa is. (non-expressive utterance)

While (92a) is an expressive statement about the speaker's surprise, (92b) is not expressive either about the speaker's surprise, nor about John's. This can be easily captured by saying that *wh*-exclamatives in embedded positions are not expressive.

If these conclusions are on the right track, they provide evidence that expressivity, an optional property of exclamatives, is a syntactically relevant notion that needs to be used in the characterization of exclama-

<sup>24</sup> Expressive adjectives for example can only be attributed to the speaker, even when they are embedded. Consider for example the expressive *damn* in (i) (Potts–Roeper *ibid.*):

(i) [Bill reporting to Sue]: “John says that your *damn* dog has bitten the neighbour's cat!”

Even though *damn* is found in the clause that reports John's statement, it indicates the speaker's (Bill's) disapproval. This shows that expressive elements are linked to the utterance situation, not their syntactic environment.

tive constructions. This enables a finer distinction between diverse types of exclamative contexts and constructions both within one language and across languages.

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