overSEAS 2012

This thesis was submitted by its author to the School of English and American Studies, Eötvös Loránd University, in partial fulfilment of the requirements for the degree of Master of Arts. It was found to be among the best theses submitted in 2012, therefore it was decorated with the School's Outstanding Thesis Award. As such it is published in the form it was submitted in overSEAS 2012 (http://seas3.elte.hu/overseas/2012.html)

DIPLOMAMUNKA

Káldi Tamás Anglisztika MA (Track: Linguistics)

CERTIFICATE OF RESEARCH

By my signature below, I certify that my ELTE MA thesis, entitled *A Comparative Analysis of the Information Structure of Hungarian and English Sentences* is entirely the result of my own work, and that no degree has previously been conferred upon me for this work. In my thesis I have cited all the sources (printed, electronic or oral) I have used faithfully and have always indicated their origin. The electronic version of my thesis (in PDF format) is a true representation (identical copy) of this printed version.

If this pledge is found to be false, I realize that I will be subject to penalties up to and including the forfeiture of the degree earned by my thesis.

Date: Budapest, 01 May 2012	Signed:

EÖTVÖS LORÁND TUDOMÁNYEGYETEM Bölcsészettudományi Kar

DIPLOMAMUNKA

A magyar és angol mondatok információszerkezetének összehasonlító elemzése

A Comparative Analysis of the Information Structure of Hungarian and English Sentences

Témavezető: Marosán Lajos

Készítette:Káldi Tamás
Anglisztika MA
(Track: Linguistics)

Abstract

The present work outlines a comparative analysis of a central information structure related notion, focus, in Hungarian and English sentences. The analysis has two central aims. First, to give a general outline of focusation (a core information structure related issue) in English and Hungarian on the basis of formal analyses of the notion. Second, to propose critical remarks with regard to these analyses and to point out the fact that focus, an intricate phenomenon in many respects, cannot be captured purely on formal semantic-syntactic grounds. The central claim made by the formal analyses at hand is that a distinction must be made between contrastive and non-contrastive focusation, and the idea that the English cleft construction is a parallel of the Hungarian pre-verbal focus construction due to its similar semantic properties. The cross-linguistic character of the present work is the result of this comparison. Critical remarks have been formulated based on a thorough investigation of the analyses and on the results of two empirical investigations. The general conclusion is that the suggested parallelisms are not as strict as suggested earlier, since the constructions at hand exhibit different semantic, pragmatic and discourse properties cross-linguistically. The investigation in the present work did not aim to invalidate the results of earlier accounts, but to point out that other semantic, pragmatic and empirical considerations are needed for a more complete theory of focus.

Contents

- 1. Introduction
- 2. What is information structure?
- 3. Topic and focus central notions of information structure
 - 3.1. Topic
 - 3.2. Focus
 - 3.2.1. Semantic aspects
 - 3.2.2. Pragmatic uses of focus
 - 3.2.3. Prosodic aspects
 - 3.3. Summary
- 4. The comparison of English and Hungarian focus
 - 4.1. The first approach: purely on semantic-syntactic grounds
 - 4.1.1. Exhaustivity in Hungarian and English corresponding syntactic structures
 - 4.1.2. Focus and quantifiers distributional aspects
 - 4.1.3. Identificational focus: a (potential) scope position
 - 4.2. The second approach: pragmatics involved
 - 4.2.1. Alternative motivations for the identificational information focus dichotomy
 - 4.2.2. A critical analysis of Onea's treatment
 - 4.3. Summary
- 5. The status of focus: empirical considerations
 - 5.1. The interpretation of Hungarian focus a psycholinguistic investigation
 - 5.1.1. Hypotheses and method
 - 5.1.2. Results
 - 5.2. A comparison of Hungarian and English focusation based on literary texts
 - 5.2.1. Hypothesis
 - 5.2.2. Method
 - 5.2.3. Discussion and results
 - 5.2.4. Conclusion
 - 5.3. Summary the empirical tests
- 6. Summary

References

Source of literary texts

List of abbreviations

1. Introduction

The general aim of the present work is to introduce two central information structure related concepts (topic and focus) in English and Hungarian, their possible analyses, and a critical assessment of these. Information structure has received significant attention in the literature, especially two of its basic notions; topic and focus. We will see that although these notions are relatively easy to capture intuitively, their definitions and semantic-syntactic analyses are not so straightforward. A substantial amount of formal analyses have been dedicated to accounting for topic and focus related phenomena, and consensus has still not been achieved. Three of these significant analyses have been chosen for closer investigation: É. Kiss (1998), Bende-Farkas (2006) and Onea (2007). The central claim that these accounts make is that a distinction must be made between two types of focus: the contrastive type, whose function is to define a set of relevant entities exhaustively, and the non-contrastive one, which is used for non-exhaustive identification. It is argued, that whereas non-contrastive focus is associated with certain syntactic structures (pre-verbal focus construction in Hungarian and clefts in English), this does not hold for the non-contrastive type. Another, consequent claim (most explicitly made by É. Kiss (1998)) is that due to the special semantic characteristics of the contrastive focus type Hungarian pre-verbal foci and English clefts are parallels. The more specific objective of the present work, is thus the examination of these claims, possibly in a critical manner. It will be pointed out that although these formal treatments have valid results in their own terms, further semantic, pragmatic and empirical aspects have to be considered for a more complete theory of focus. These suggestions will partly be formulated directly in relation to the analyses at hand, and, partly based on the results of two empirical investigations. Let us briefly provide a general outline of the present work.

In chapter 2. a definition of information structure is provided. Chapter 3. discusses notions of topic and focus with special emphasis on definition and analysis related questions. In Chapter 4. the outline of two formal semantic-syntactic based analyses (É. Kiss, 1998 and Bende-Farkas, 2006) and an alternative approach (Onea, 2007) is presented. Chapter 5. presents the findings of two empirical investigations: a psycholinguistic one (Kas & Lukács, 2012) examining focus interpretation in Hungarian subjects, and a comparison of literary texts carried out by myself.

The results support the suggestion that purely formal semantic-syntactic based accounts are not sufficient for a complete theory of focus. The purpose of this investigation, however is not to invalidate the findings of formal accounts, but to point out further possible aspects of analysis.

2. What is information structure?

The notion of information structure (IS) originates from Halliday (1967) and is defined in broadest terms as the intermediary cognitive mechanism "between the modules of linguistic competence" (Zimmermann & Féry, 2010 p.1) whose aim is to influence or update the interlocutors' state of knowledge or belief state in an act of communication. IS is construed as an interface between syntax and phonology, which is subject to two types of rule: its form is governed by IS-realization rules, while its semantic aspects are governed by IS-interpretation rules (Büring, 2005). In some frameworks it is posited that IS is a separate representational level; however, in line with the majority of authors the idea that aspects of IS (primarily topic and focus) are present as syntactic features will be taken up in the present work.

To give a more specific definition of IS, I rely on Krifka (2008) who adopts the view that communication is seen as "the continuous change of *common ground*," (p. 1) which is defined as the knowledge shared by the participants of a communicative act. IS is needed because as communication proceeds information has to be packaged according to the newly established common ground. If IS-realization rules are violated, infelicitous sentences result (1).

- (1) a. I have a computer, and I have to get my computer serviced.
 - b. *I have to get my computer serviced, and I have a computer.

Within the notion of common ground an important distinction is made. The truth-conditional aspects of information that is contained in the common ground is referred to by Krifka as *common ground content*, whereas other aspects, like, for example, the use of questions that have an information query nature, are subsumed under the term *common ground management*. The distinction becomes relevant when the use of different IS devices are analyzed: the former, truth-conditionally sensitive aspects fall in the domain of semantic investigation, whereas the latter are more related to the field of pragmatics. We will see, however, in later sections, it is not possible to give a complete theory of IS related issues without including both semantics *and* pragmatics. A watertight separation of the two levels of linguistic investigation is thus not a proper move.

An important note is made in Krifka (2008) concerning the status of IS-devices: certain features of language can be used to construct the propositional content of an utterance and, at the same time, can be used to package information according to common ground needs. In other words, these features cannot be regarded as IS-devices in the first case, but definitely

are IS-devices in the latter. A case in point is sentence accent. The accent does not influence the truth conditions of the answers in (2a) but does in (2b).

(2) a. A: What did John show Mary?

B: John showed Mary [the PICTures].

or:

A: What did John show Mary?

B: John showed [MARy] the pictures.

b. John only showed Mary [the PICTures]

John only showed [MARy] the pictures.

According to Krifka (2008) the above observation raises a theoretical problem: should we treat the two uses of the same feature as having no relation to each other, or should we say that accent in this case contributes to both. Although this question is valid, in my opinion, it is not as relevant to the analysis of focus (or other IS devices) as Krifka suggests: in relation to focus, the central subject of the present work, it will be demonstrated that information packaging, truth-conditional aspects and the formation of propositional content are closely interrelated issues. For this reason I conclude that sentence accent in (2) has one function, i.e. the designation of focus, consequently, it is an IS device. It is another question as to what distinction we make between the two occurrences of focus, or in broader terms, what typology of focusation we can formulate. These questions will be taken up and given thorough treatment in later sections.

When discussing IS in broad terms, especially in a work whose aim is to make a comparison between the relevant IS aspects (i.e. focus and marginally topic) of two different languages, the question of universality also comes into the picture. As it will become apparent, there is a parallelism between the IS status of the related elements cross-linguistically, but the realization of these statuses is achieved through different linguistic means, or even through pragmatic inference. More generally, this is suggested by Zimmermann & Féry (2010), Krifka (2008, 2006) among many, who claim that IS is a universal property of languages; the way it is encoded, however, differs cross-linguistically. Means of encoding include word order, choice of lexical items, syntactic constructions, prosody, and so on. The realization of IS is achieved by using these features to organize information in a way that the universal semantic concepts (Krifka, 2006), such as topic, comment, focus, background, given and new etc. are created. Although considerable amount of literature has been written on IS using these intuitively valid concepts, and although it has been found that these concepts are all prevalent in known natural languages, their definition is by no means an easy task. In fact, much of the literature has been devoted to the definition of these concepts themselves. In the next section we provide a revision of the available definitions for the notions of topic and focus.

3. Topic and focus – central notions of information structure

The three basic pairs of notions that have been used generally in the literature are the following: *new - given*, *topic - comment* and *focus - background* (Zimmermann & Féry, 2010). The purpose of the following subsections is to provide a general introduction to the notions of topic and focus. Focus (and partly topic) bears special relevance, as the cross-linguistic analysis of this notion will be the center of attention in the following sections. Issues related to problematic aspects of the definition and analyses of topic and focus will be discussed to provide sufficient data both from English and Hungarian. The character of chapter 3. is exhibitory; it presents a general background to the notions at hand.

3.1 Topic

The fact that languages tend to organize old information before new (or *topical* information before new) in sentences has been long recognized and studied (Krifka, 2006). Scholars who attempt to account for this observation have to face two long-standing problems. First, this way of structuring information is rather just a tendency; languages are different as to when and how they prefer to change the order of given and new information within a sentence according to different IS related factors, which makes it difficult to capture the tendency in general terms. Second, it is extremely hard to agree on what basic concepts are needed, and what the definition of these concepts should be (Erteschik-Shir, 2007). In general, the dichotomy of topic and comment are result of the distinction of *given* and *old*, but the relationship is not so straightforward, as we will see.

Our starting point in discussing the concept of topic and comment will be \acute{E} . Kiss (1999) who states that in the majority of sentences a statement is made about a person, thing or a group of these, or in more technical terms, information is stated about an entity or group of entities. The following sentences are adopted from \acute{E} Kiss (1999, p. 21), the glosses and translations are provided by myself.

(3) a. [János]_{Topic} vett egy autót.

John-Nom buy-3Sg-Past a car-Sg-Acc

'John bought a car.'

- b. [Az idős asszonyt]_{Topic} elütötte a vonat.
 the elderly woman-Sg-Acc Vp¹-hit-3Sg-Past the train-Sg-Nom
 'The elderly woman was run over by the train.'
- c. [A vonatokon]_{Topic} megszaporodtak a rablótámadások.

 the train-Pl-on Vp-multiply-3Pl-Past the-robberies-PL-Nom

 'On the trains the number of robberies have increased.'

The entities that we make a statement about in (3) (i.e. John, the elderly woman, the trains etc.) are the topics of the sentences, whereas the statements we make about them are the predicates. On this basis É. Kiss (1999, p. 22) defines topic as the constituent that names the entities that are known or that are supposed to exist by the interlocutors, and about which the predicate makes a statement.

By considering solely the definition of topic without the examples in (3), one could intuitively assume that subject and topic coincide. Indeed, in ancient times no distinction was made. In Aristotle's work subject is the part of the sentence about which the predicate says something (Krifka, 2008). The problem with this view is apparent if we consider (3). Obviously, the topic constituents in (3b) and (3c) do not coincide with the subject of the sentences, if we accept that the subject is defined by its case.² The fact that the elements that we now term as topic and subject today do not coincide has been pointed out by a number of scholars during the course of history, first in the Arab tradition and later in the eighteenth and nineteenth centuries in Europe (for short discussion see Krifka, 2008). The first fruitful move towards a more elaborate distinction and terminological clarification was made by the Prague School, where *givenness* became the focus of attention. Slightly later in the United States the terms

¹ Verbal-prefix is indicated as 'Vp' in glosses henceforth.

² The definition is by no means obvious, especially cross-linguistically, but it is generally maintainable in the case of Hungarian. For this reason we adopt it for the purposes of the present argumentation.

topic and comment were coined by Hockett, based on the Aristotelian subject – predicate distinction (Krifka, 2008). Later it was Reinhart (1982), who attempted to use the notions of topic and comment within a theory of common ground. In her view the information that is added to the common ground is not given as pure propositional content, but the entities are further associated with additional information as exemplified in (4). Essentially, the information that is added is the associational link itself between the topic and the comment constituent. Consider (4).

- (4) a. [John]_{Topic} [met Mary]_{Comment}.
 - b. [Mary]_{Topic} [met John]_{Comment}.

While the propositional content of (4a) and (4b) is the same from a truth-conditional view, in (4a) information about John is added to the common ground, whereas in (4b) it is information about Mary that is linked to the comment constituent. Following this line of reasoning, the topic can be defined as the constituent that "identifies the entity or set of entities under which the information expressed in the comment constituent should be stored in the common ground content" (Krifka, 2008, p. 23).

The definition formulated above lacks reference to what É. Kiss includes in her definition, namely, the condition that the topic must be known or supposed to exist by the interlocutors. On the other hand, É. Kiss does not include the notion of common ground into her definition. This difference between the two approaches has important theoretical consequences as to what we include in IS concepts. Krifka (2008) (following Reinhart's definition) argues that topic and comment do not belong to the set of information packaging devices because it is possible to imagine situations where it is not the *temporary* information state that defines

what is interpreted as the topic and what as the comment constituent. For example, Krifka (2008) insists, if a conversation starts between two interlocutors with the sentences *Did you know? John engaged Mary*, it seems reasonable to assume that there has been a long established interest in the speakers in *John* and *Mary*. Since this is a counter example of updating *current* information state, Krifka refuses the idea that topic and comment should be regarded as information packaging devices. In my opinion, it is hard to see why the definition of common ground or the function of IS devices could not be extended in a way that they make it possible to provide consistent accounts of such instances of language use. After all, language is used on numerous occasions in a way that the immediate information state is not communicated explicitly. I suspect that Krifka's decision to exclude topic and comment from among the set of IS devices, and thus to simplify terminology was made along reductionist lines, which is always welcome, but with a trade-off, in this case, that disregards important aspects of actual language use. For this reason, I suggest that topic is an IS device.

Since our primary subject matter is focus related questions in the present work, the notion of topic was primarily taken up for the sake of completeness, and to present some of the difficulties that are related to the definition of this core notion. The notion of topic will become relevant in chapter 5., here I present a definition which is relatively uncontroversial and fits our purposes. The definition has been taken from É. Kiss (2004, p.9).

(5) The topic function

The topic foregrounds an individual (a person, an object, or a group of them) from among those present in the universe of discourse as the subject of the subsequent predication.

The notion of focus is also part of the basic notions of IS and has been extensively discussed in the literature; not in an uncontroversial manner, though. First, I give a general introduction to the notion at hand, later I will present some further considerations with special attention paid to Hungarian.

Miller (2006) notes that although the definition of the term is not uniform in linguistics, the most important characteristics are shared: the main function of the focus is to highlight, contrast, emphasize or introduce a (new) piece of information. The notion was first dealt with systematically by Halliday (1967), who considered focus to be realized primarily by sentence accent, in a way that units of information are expressed through tone groups. In his analysis the information carried by tone groups is identical with new information, or at least with the information that is conceived by the speaker as new. This makes it possible that the sentence in (6a) can be realized in at least to ways (6b) and (6c), depending on what question it is supposed to answer (examples taken from Miller, 2006 p. 511).

- (6)³ a. John visited Susan yesterday.
 - b. John visited 'Susan yesterday.
 - c. 'John visited Susan yesterday.

The questions corresponding to (6b) and (6c) are *Who did John visit yesterday* and *Who visited Susan yesterday*, respectively. Another early treatment of the notion - still one that considers prosodic means of expressing focus more important than syntactic ones - is found in Chafe (1976). In this analysis contrastiveness gains special importance. Consider (7).

³ The apostrophe indicates primary sentential stress in the examples throughout the present work, if relevant.

(7) Ronald made the hamburgers.

In a sentence like (7) (further examples adopted from Miller, 2006) there are three information status factors to be taken into account: (i) knowledge that some hamburgers were made, (ii) a set of possible 'makers' and (iii) the statement about which possible candidate is the 'maker' (Miller, 2006). Although this is not made explicit, the three factors could be enumerated analogously in two other ways, depending on whether *made* or *the hamburgers* get the most prominent accent.

An important problem with this approach, in my view, is that it does not delineate focus from topic in a principled way, therefore, the validity or status of notions at hand could be questioned. It is not difficult to see other shortcomings of these early approaches either: besides accent no other means of expressing focus are mentioned. A number of other cases include clefts, for example, where focusation is expressed syntactically (8).

(8) It is [Ronald]_{Focus} who made the sandwiches.

Also, it appears that focus has more varied and extended uses than just picking an entity from a relevant set. It can be used, for example, to correct an utterance, and therefore, change current information status (9). This realization is referred to as the pragmatic use of focus (Krifka, 2008).

(9) A: Ronald made the hamburgers.

B: No, [John]_{Focus} made them.

For achieving a deeper understanding of the notion, I will provide a short discussion of the semantic and pragmatic aspects of focus in 3.2.1. and in 3.2.2., respectively. In 3.2.3. I present a short demonstration of how different theories handle the interaction of prosody and the syntactic realization of focus to complete the general overview of the notion at hand.

3.2.1. Semantic aspects

From a semantic point of view focus has been defined by Chomsky (1971), Jackendoff (1972) and others as the part of the sentence that refers to non-presupposed information. If this stand is maintained, then topic is necessarily defined as given, moreover, topic and focus are in a complementary relationship (Erteschik-Shir, 2007). It is interesting to note that the results of this approach *may* result in conflict with the syntactic analyses that regard focus as a constituent. Compare (10a) and (10b) where the focused elements in the latter do not form a constituent proper. Examples were borrowed from Erteschik-Shir (2007, p. 1).

(10) a. A: What did John do?

B: He [washed the dishes]_{Focus}.

b. A: What happened to the dishes?

B: [John washed]_{Focus} them.

In accordance with the above definitions that focus must be non-presupposed information, in (10a) the focused element is a syntactic constituent: *washed the dishes*. In (10b), however, the focus is *John washed* which does not form a constituent. Let me propose two possible solutions through which this problem can be circumvented. First, if question (10b) is

answered in a way that its subject is a definite expression, it is clear that its reference must already be present in the universe of discourse or situational context, or else interpretation would not be possible. If an indefinite expression is used, as for example in a potential answer to (10b): [A friend of mine washed]_{Focus} them, an existential presupposition must be present. In this answer the existential presupposition is that 'there exists a friend of mine.' Thus, either due to the definiteness of the subject or the existential presupposition triggered by the indefinite expression the subject must be part of the presupposition of the whole sentence. Thus, only washed should be interpreted as focus. The second, independent solution could be the analysis of the answer in (10b) as containing two foci: [John]_{Focus} [washed]_{Focus} them. The rationale behind this solution is that the question in (10b) does not specify the required information content of the answer, as, for example, the question Who washed the dishes would, where the wh-question requires purely the definition of a set of individuals.⁴ Since further evaluation of the two proposed solutions falls outside the scope of the present work, I will abandon the issue at this point.

Within formal semantics Rooth (1985) provides an analysis of the above presupposition-related definition. His starting point is also the question-answer pattern presented in (10). Rooth proposes that in this type of mini-context a set of propositions are created each with one variable (e.g. for (10a): {JOHN DID x}), and a set of alternatives (e.g. {washed the dishes, walked the dog etc.}). When the variable is substituted with a member of the alternative set, the relevant member gets interpreted as the focus. For illustration, a slightly modified example from Erteschik-Shir (2007, p. 39) is presented in (11).

(11) A: Which laundry did John wash? (proposition: JOHN WASHED X LAUNDRY) B: He washed [the whites]_{Focus}.

⁴ Note, that one member sets are completely acceptable.

In the example above the question creates a proposition with a variable, and in the answer one element from the relevant set of alternatives is chosen and inserted in the place of the variable assigning it a focus semantic value. Erteschik-Shir (2007) notes that this analysis has an important favorable consequence and points out two theoretical discrepancies. On the one hand, she notes that Rooth's approach accounts for the complementarity of topic and focus, which has been observed earlier. On the other hand, she points out that it is usually the context that defines the set of alternatives, but the question can define the set to varying specificity by delineating or restricting the set of available alternatives. In (11) the question is specific enough to delineate the set of entities that can be washed as laundry, but the question What did John wash? defines a much larger set, and it defines it much more obscurely; consequently, more reliance is needed on the extra-linguistic context. For this reason Erteschik-Shir suggests that a distinction be made between what- and which-questions. An additional point, in my opinion, is that it is hard to maintain homomorphism between semantic and syntactic representations in the case of sentences, such as (10b); a criterion that has been held valid since the basic tenets of formal semantics were formulated by Montague. If we confine ourselves to this principle, our theory must not tolerate propositions of the form X them (cf. 10b), which apparently have to be admitted into Rooth's analysis. Also, the elements that get substituted into the proposition X them, i.e. John washed do not form a constituent proper, therefore, the principle of homomorphism is violated again. If, however, it is only washed that is interpreted as focus, the basic definition that focus contains all the nonpresupposed information, must be reformulated. Since the aim of the present discussion is to illustrate problematic aspects of focus definition and present how definitions at different levels of linguistic analysis may be in conflict, no attempt will be made to solve the question. Further investigation into Rooth's treatment is needed to see how the problem of homomorphism is circumvented.

An important property or function of focus is its ability to express contrastivity. Since this is true only about certain types of focus, a distinction between contrastive⁵ and non-contrastive foci must be made. The contrastive type has been given various terms in the literature such as *contrastive-*, *narrow-*, *exhaustive-*, *exclusive-* or *identificational focus*. The instances that do not express contrastivity are generally called *information focus*. The aim of the present work is to examine the parallelisms between these focus types cross-linguistically in Hungarian and English. In this subsection I present only a short demonstration of the basic difference between the two types; a comprehensive account of the phenomenon will be provided in chapters 4. and 5. Let us consider information focus first. The function of information focus is to introduce new information: it non-contrastively designates a set of entities from a contextually defined set for which the predication is valid (É. Kiss, 1998). Note that his type of focus is not different from what we have defined so far. For illustration I present examples of my own in (12) (note that (12b) is the translation of (12a)).

- (12) a. Megérkezett [János]_{Focus}.
 - Vp-arrive-3Sg-Past John-Nom
 - b. '[John]_{Focus} has arrived.'

In (12) in both Hungarian and English *John* is the entity that is introduced as new; note that the sentences do not express contrastivity, i.e. they do not generate an alternative set for which the predication *has arrived* does not hold. Another observation supports the non-contrastive reading: both (12a) and (12b) can be completed with an additional sentence felicitously, as

The characterization 'contrastive' is a tentative one at this point. In the following section it will be demonstrated that this focus type is preferably analyzed as one with an exhaustive interpretation. Also the logical connection between contrastivity and exhaustivity will be clarified.

demonstrated by (13a) and (13b), respectively.

- (13) a. És Mari is megérkezett.

 and Mary-Nom too Vp-arrive-3Sg-Past
 - b. 'And Mary has arrived, too.'

As we will see in chapter 4., formal analyses claim that this type of focusation has non-exhaustive interpretation. Contrastive focus, on the other hand, is a more special type of focusation, where the set of focused entities about which a statement is made in the predication is defined in contrast to an alternative set to which the predication does not hold. This type of focus has special syntactic realizations: as É. Kiss (1998) suggests the focused constituent occupies a pre-verbal position in Hungarian, and in English the focus constituent is clefted. Consider examples of my own in (14).

- (14) a. $[János]_{Focus}$ érkezett meg. John-Nom arrive-3Sg-Past Vp
 - b. 'It is [John]_{Focus} who has arrived.'

The interpretation of these sentences differ from those in (12): both the Hungarian and English sentences correspond to the proposition JOHN HAS ARRIVED, but they identify John as the only entity for which the predicate part of the proposition is valid. The contrastive interpretation of sentences in (14) can be demonstrated by the observation that contrary to the sentences in (12), they cannot be completed with the sentences in (13) felicitously or without violation of pragmatic principles. The purpose of this short outline of the two types of focus has been the introduction of the basic distinction of the contrastive and non-contrastive

variants. Chapters 4. and 5. will entirely be dedicated to the analysis of these varieties of focus and the possible cross-linguistic parallelisms they exhibit.

Further aspects that are not connected to the semantic definition of focus, but are intrinsically related to its semantic properties are the use of operators that are intimately related to focus. Such, so called focus-sensitive particles, are *only, also, even, too* etc. in English and *csak, is, sốt* etc. in Hungarian. To put it informally, these elements are related to focus because their meanings all have to do with alternatives, and the choices we can refer to form alternative sets (Krifka, 2008). *Only* expresses that the element it has scope over is exclusively picked from the relevant set, and, therefore, it often occurs in the above mentioned contrastive focus. Hence, the observations related to the semantics of this particle, and the use of *only*-phrases will gain special relevance in subsequent sections. *Also* conveys that the presupposition is valid for other alternatives as well, and the use of *even* triggers the interpretation that what the focus refers to is extreme in the set of alternatives (Krifka, 2008). Krifka also mentions that these operators have to have scope over the focus; their position and, consequently, their scope have truth-conditional consequences (15), but scope and focus still must not be confused, since different scope with the same focus leads to different interpretations: consider (16a) and (16b) (examples have been borrowed from Krifka, 2008, p. 12).

(15) John only introduced Mary to Sue.

- (16) a. Mary only said that [John]_{Focus} stole a cookie.
 - b. Mary said that only [John]_{Focus} stole a cookie.

In (15) *only* can have scope over *introduced*, *Mary*, *Sue* or the entire VP itself, but not over *John*. In (16) *only* has different scope, but the focus is the same in the two sentences, since it is *John* that is the non-presupposed part of the sentence. Consequently, (16a) is understood as 'it is only John about whom Mary stated that he stole a cookie,' whereas (16b) is interpreted as 'Mary said that John and nobody else stole a cookie.' The scope interactions between *csak* – *only* and focus will be discussed in more detail in the following section.

When considering semantic properties of focus, the question of what truth-conditional properties it has inevitably comes up. More specifically, the question is how sentence's truth-condition changes if particular elements get interpreted as focus. In the following I attempt to illustrate the question with an example of my own (17).

- (17) a. John stole a [cookie]_{Focus}.
 - b. [John]_{Focus} stole a cookie.

Apparently, the presuppositions that relate to the two sentences above are different: the presupposition related to (17a) is *John stole something* whereas the one related to (17b) is *Somebody stole a cookie*. Since the presuppositions differ as to what variables they contain, i.e. what we have to substitute into them in order to get either (17a) or (17b), the truth-conditions of the resulting sentences will also differ. Focus, hence, seems to be truth-conditionally sensitive. In what follows, two other, more established examples of the relevant phenomenon will be presented and parallel to this the definition of focus will be further

refined.

Naturally, much depends on what exactly we choose to define as focus when attempting to settle truth-conditional related questions. First of all, to illustrate how many various uses of this term exist, I provide a short list of possible descriptions based on Bende-Farkas (2006): 1. a discourse function (that establishes question-answer congruence), 2. the prosodic means of expressing this function, 3. the constituent that is marked by this prosody, 4. a syntactic position (especially in Hungarian) 5. the focus related set of semantic properties etc. In the present work focus is defined as 1. a syntactic object i.e. a *constituent* (although we will see, and have seen cases where it is not in the traditional sense); 2. which can be derived either from prosody or syntax (depending on which language or instantiation we are looking at); 3. whose semantic property is that it designates a subset of a (potentially given set of individuals) about which the predicate makes a statement (É. Kiss, 2006); and 4. which has special pragmatic properties. It will be demonstrated in the following chapters that the different points of this definition are in an intricate relationship; syntactic and prosodic means of focusing can alter its semantic properties, and pragmatic factors contribute to focus interpretation and use to a great extent.

Let us return now to truth-conditional aspects. On the basis of the semantic definition adopted above (i.e. point 3.), and considering the observations made with respect to (17), focus seems to have truth-conditional effects. Let us now consider another truth-conditionally sensitive case where an overt operator is present. In (18a) the focus is in the scope of the distributive universal quantifier; the presupposition associated with (18a) is determined by this scope and could be phrased as 'there is a unique person for every boy that every boy loves,' whereas in

The semantic definition will be refined as work proceeds. Here I adopted a simplified definition by É. Kiss (2006), who relies on an extensive source of literature in roughing out the basic semantic properties of focus.

(18b) the quantifier has no scope over the focus; its presupposition is that 'there exists a unique person who is loved by every boy' (examples adopted from Bende-Farkas, 2006. p. 11).⁷

- (18) a. Minden fiú [Marit] $_{Focus}$ szereti. every boy-Sg-Nom Mary-Acc love-3Sg-Pres 'For every boy x, it is Mary whom x loves.'
 - b. [Marit]_{Focus} szereti minden fiú.
 Mary-Acc love-3Sg-Pres every boy-Nom
 'Mary is the person loved by every boy.'

Another truth-conditionally sensitive case is Hungarian pre-verbal focus⁸ and, English clefts whose semantic properties include exhaustivity, i.e. where the elements designated by the focus constitute the exhaustive subset of the contextually available set of alternatives.⁹ Szendrői (2005) neatly demonstrates the point; let us examine the difference between (19) and (20) (examples borrowed from p. 5).

- (19) a. János magával vitte Marit és Évát.

 John-Nom self-with take-3Sg-Past Mary-Acc and Eva-Acc

 'John took Mary and Eva with him.'
 - b. János magával vitte Marit.John-Nom self-with take-3Sg-Past Mary-Acc'John took Mary with him.'

For the sake of uniformity the glosses are not taken from the authors, but are provided by me throughout the present work.

⁸ For detailed syntactic analysis see section 3.1.

⁹ A characteristic that is often included in the definition of focus, e.g. in É. Kiss (2004 p. 78) or Szendrői (2005), and will be thoroughly discussed in section 3. and 4.

- (20) a. János Marit és Évát vitte magával.

 John-Nom Mary-Acc and Eva-Acc take-3Sg-Past self-with

 'It was Mary and Eva that John took with himself.'
 - b. János Marit vitte magával.John-Nom Mary-Acc take-3Sg-Past self-with'It was Mary that John took with him.'

Szendrői observes that (19b) logically follows from (19a), but this is not the case with (20b) and (20a). The situation is not so straightforward, however, as not only pre-verbal focus exists in Hungarian, but post-verbal as well. As pointed out by É. Kiss (1998), this distinction is especially relevant because the semantic differences between pre- and post-verbal focus serve as counterexample to traditional theories of focus where the same semantic analysis is provided for both. É. Kiss claims that the presupposition (and consequently the truth-conditional aspects) of the two types of focus differ (examples adopted from p. 247).

- (21) a. Tegnap este [Marinak] $_{Focus}$ mutattam be Pétert. last night Mary-Dat introduce-1Sg-past Vp Peter-Acc 'It was [to Mary] $_{Focus}$ that I introduced Peter last night.'
 - b. Tegnap este bemutattam Pétert [Marinak]_{Focus}.
 last night Vp-introduce-1Sg-past Peter-Acc Mary-Dat
 'Last night I introduced Peter [to Mary]_{Focus}.'

While in (21a) Mary is exhaustively identified, in (21b) this is not so; Mary is purely presented as non-presupposed information (É. Kiss, 1998).

In 3.2.1. it has been established that the function of focus constituent is present non-presupposed information, and that it has two distinct types: contrastive and non-contrastive focus. It has also been demonstrated that focus is truth-conditionally sensitive especially the contrastive variant.

3.2.2. Pragmatic uses of focus

The present subsection will show four instances of pragmatic focus use with relevant examples. Let us begin with a relatively broad pragmatic definition of focus provided by Erteschik-Shir (2007) according to whom focus in a sentence is a constituent that a speaker wants to draw the hearer's attention to when uttering that sentence. It is interesting to note that in this definition the speaker draws attention to the *constituent* itself, which may seem odd for the first sight; in Krifka (2008) there is a distinction that can clarify this apparent sloppiness. Krifka views *expression focus* and *denotation focus* as separate phenomena; the former – to use Erteschik-Shir's phrasing – *draws attention to* the way of formulating the message; which can include wording, spelling pronunciation or other language-related aspects, whereas the latter is understood as drawing attention to the denotation of the focus-marked constituent. Generally the use of the term focus is meant as denotation focus in the literature, and in the present work, as well. For the sake of completeness, we present and example of expression focus here. This type is most commonly used in corrections where the denotation of the original and the corrected versions do not differ, as (22) shows (Krifka, 2008, p. 7).

(22) Grandpa didn't [kick the bucket]_{Focus}, he [passed away]_{Focus}.

Krifka also observes that while focus in its semantic use can have truth-conditional effects,

this is not so when it is used in the pragmatic sense. Erteschik-Shir (2007) gives another type of example through which it can be demonstrated that the domain of focus can be designated

depending on the speaker's interpretation of a given utterance. This example is called the 'lie

test' (Erteschik-Shir, 2007. p. 39).

(23) A: John said that he knows Peter.

B: a. That's a lie, he didn't.

b. That's a lie, he doesn't.

When speaker B uses sentence (23a) as a reply, the subject is interpreted as topic and the

whole VP as focus, while if (23b) is used as a response, the focus is inside the VP; the focus is

he knows Peter in this case.

Let us mention two more types of pragmatic use of focus as discussed in Krifka (2008). First,

focus can be used for information correction or confirmation (24a) and (24b), respectively.

(24) A: Mary stole the cookie.

B: No, [Peter]_{Focus} stole the cookie!

B: Yes, [Mary]_{Focus} stole the cookie.

Second, it can be used to express parallelisms either across predicates or within them. In these

cases, too, the elements are picked from a set of alternatives, with the special requirement that

all the alternatives are picked from the same set. (25a) is an example of parallelism across

predicates, (25b) is an example where the parallelism holds on a more restricted set; between

DPs, as Krifka (2006) and Rooth (1992) suggests. (examples borrowed from Krifka, 2008. p.

- (25) a. [Mary]_{Focus} stole the [cookie]_{Focus} and [Peter]_{Focus} stole the [chocolate]_{Focus}.
 - b. An '[American]_{Focus} farmer talked to a '[Canadian]_{Focus} farmer...

In the present subsection four types of pragmatic focus use have been presented; the expression focus, focus designation by negation, correction – confirmation and expression of parallelisms. These examples were mentioned because they represent typical cases of focus use. In section 4.2 it will be demonstrated that pragmatic aspects are not only important to understand how focus is used, but they contribute to giving a more complete account of its semantic properties, as well. In section 5.2 further pragmatic characteristics of focus will be presented and analyzed.

3.2.3. Prosodic aspects

Sentence accent has an important role in focus marking in both English and Hungarian. It is a generally observed fact that Hungarian is a non-configurational language, i.e. its flat VP makes it possible for the arguments to surface in a relatively free order, whereas English word order is much more rigid. Consequently, stress has a more significant role in focus marking and other IS related aspects in English than in Hungarian. First, I consider English, then move on to Hungarian.

The observation that English has an in-situ focus, i.e. type of focus that is not syntactically marked, indicates the importance of prosody in focus marking in English. This type is called intonational or in-situ focus, because no syntactic movement takes place in order to achieve

focus marking, but an in-situ element can get focus interpretation. For illustration I present (26).

- (26) a. John loves '[Mary]_{Focus}.
 - b. It is [Mary]_{Focus} who John loves.

In (26a) focus is marked by prosody, whereas in (26b) it is marked syntactically. The question whether the two structures receive the same interpretation will be discussed in chapter 4.

For a better understanding of how prosodic focus marking in English takes place, let us briefly outline some questions that relate to the analysis of the relationship between prosody and focus. If we consider focus as a syntactic object that is realized by means of prosody, and by means of a syntactic operation, logically two possible directions of analysis are possible: either we derive the marking of focus from sentence accent or the other way around. In Erteschik-Shir (2007) we find analyses approaching the problem from both directions. It is important to point out, however, as Erteschik-Shir does, that although the choice of approach implies that either the speaker's or the hearer's point of view is taken as a basis, neither approach, being generative in nature, does consider processing related questions at all.

Let us begin with a short overview of an approach where the marking of focus is derived on the basis of prosody. A general observation is that stress falls on the focused element in a sentence in English. In fact Erteschik-Shir (2007) formulates a rule that states exactly this and no more. The primary reason for formulating a rule permissive as this one is the realization of the inadequacy of Jackendoff's (1972) principle, which states that if a phrase is selected as focus in a sentence S, it has to bear the highest stress within S.¹⁰ The reason for the 10 The formulation of Jackendoff's rule relies on the Nuclear Stress Rule (Chomsky and Halle, 1968), which

inadequacy of this principle is that if *only* sentence final stress is taken into account, the interpretation with respect to focus becomes ambiguous (Erteschik-Shir, 2007). The examples in (27) (borrowed from Erteschik-Shir, 2007 p. 30) neatly illustrate the point.

(27)¹¹ a. Maxwell killed the judge with [a 'hammer]_{Focus}.

b. Maxwell [killed the judge with a 'hammer] Focus.

c. [Maxwell killed the judge with a 'hammer]_{Focus}.

Although stress falls on the rightmost element in all the sentences in (27), it is apparent that their focus constituent cannot be determined purely by the stress itself, since it changes with respect to what question the sentences correspond to; cf. (28a, b, c) respectively (p. 31).

(28) a. What did Maxwell kill the judge with?

b. What did Maxwell do?

c. What happened.

It seems that non-primary stress plays a part in the interpretation as well; for example, a felicitous answer to (28c) would be 'Maxwell killed the judge with a 'hammer (Erteschik-Shir, 2007). Erteschik-Shir's criticism, namely, that Jackendoff's stress rule is too strong seems convincing and, consequently, her more permissive formulation, which claims that will be accepted here: "assign *stress* to the focus constituent" (Erteschik-Shir, 2007, p. 31).

An example of an analysis where the opposite direction is taken, i.e. where "focus assignment is derived from the distribution of pitch accents" (Erteschik-Shir, 2007, p.32) is found in

states that a distinction must be made between lexical and sentential stress patterns, and at sentential level the primary stress is assigned to the rightmost element of the focused constituent.

¹¹ For illustrative purposes only the sentence final main stress is indicated in this case.

Selkirk (1995). According to Selkirk's Basic Focus Rule "An accented word is F(ocus)marked"12 (p. 555-556). F-marking can take place in three ways and is configurationally determined: 1. if a head is F-marked, the phrase is F-marked, 2. if an internal argument is Fmarked, the head is F-marked and 3. if an antecedent of a trace of an NP or Wh-movement is F-marked, the trace is F-marked as well. These three rules exploit the distinction between internal and external arguments, and, thus, ensure that a subject cannot further project to higher nodes, whereas objects can project to VPs in the following way. If a verb is F-marked, VP gets F-marked, as well, since V is a head (rule 1.). If an object is F-marked, by rule 2. V is F-marked as well, which in turn triggers the F-marking of the whole VP by the application of rule 1. We have seen in connection to (27c) that in certain cases the whole sentence is assigned focus value. An important question arises: how do these rules ensure that a whole sentence is focused? In the present analysis Selkirk claims that if a VP is F-marked licensing of intervening heads occurs which ensures that the whole sentence is F-marked. In the case of sentences containing unaccusative predicates she claims that the subject of these types of sentences originate in object position, and move to subject position during derivation leaving a trace. Rule 3. ensures that this trace is F-marked, since its antecedent is F-marked, as well. Consider (29b), where the whole sentence given as answer to (29a) is assigned focus (example sentences adopted from Erteschik-Shir, 2007, p. 33, indication of trace and focus added).

- (29) a. What's been happening?
 - b. [The SUN₁ came out t_1]_{Focus}.

Erteschik-Shir (2007) notes that although this analysis has important merits, since no

¹² Note that Selkirk's rule is formulated as an opposite of Erteschik-Shir's formulation. (Erteschik-Shir, 2007, p. 32)

introduction of [+/- focus] feature is required and therefore a more economical theory can be achieved, it does not lack circularity as it relies on a stress assigning mechanism; something that it aims to explain.

In Hungarian, the situation with respect to the relation of focus marking and sentence accent seems more straightforward, since focus has a special, invariable syntactic position.¹³ This position, as observed by É. Kiss (1999, 2004) among many, is pre-verbal; at a descriptive level¹⁴ the claim that focus and the verbal-prefix (or verbal-modifier in more general terms) are in complementary distribution is uncontroversial as exemplified by the sentences of my own in (30).

(30) a. [Péter]_{Topic} 'megházasodott.

Peter-Nom Vp-get-3Sg-Past-married

'Peter got married.'

b. *'[Péter]_{Focus} megházasodott.

'It is was [Peter] Focus who got married.'

c. '[Péter]_{Focus} házasodott meg.

Peter-Nom get-3Sg-Past-married Vp

'It was [Peter] Focus who got married.'

In (30a), *Peter* is the topic of the sentence, as the primary stress falls on the verbal element; *megházasodott* (*got married*), whereas in (30b) *Peter* receives primary stress; it is interpreted

¹³ Kálmán (2001) mentions special cases where this is not so (p. 73, gloss and English translation added)

e.g. És mikor viszik le [a lányok]_{Focus} a szemetet?

and when carry-3Sg-Pres V-P the girl-Pl-Nom the garbage-Acc

And when will [the girls]_{Focus} take out the garbage?

The analysis of these special cases fall outside the scope of the present work. Here we only consider preverbal focus, as this type will be given a thorough account in chapters 4. and 5.

¹⁴ Particular syntactic analyses attempting to attain higher level of adequacy, however, differ as to what structural status they assign to verbal modifiers and foci (For further details see É. Kiss, 2004).

as focus. In (30c) *Peter* receives the same stress, but the verbal-prefix occupies a post-verbal position; the sentence is acceptable. The type of focus in (30b) is generally termed pre-verbal Hungarian focus, and its status and semantic properties will mainly be subject of chapters 4. and 5. An attempt to account for the above observation was made by Kálmán & Kornai (1989), who formulated the following rule: the focused element bears a so called *eradicating stress*. ¹⁵ In their analysis (an autosegmental approach) particular elements, most prominently contrastive topic and focus, are assigned a diacritic **f** which serves as a marker in the underlying representation and is responsible for assigning the eradicating stress. É Kiss (2004) notes that the main characteristics of Hungarian focus are its phonologically prominent realization and the fact that the following verb lacks stress and, concomitantly, this latter part contains presupposed information. Consequently, the eradicating stress bearing element forms a phonological word with the following verb. To illustrate the point I adapt slightly modified examples provided by É. Kiss (2004, p. 77).

(31) a. Pétert ['János]_{Focus} mutatta be Marinak.

Peter-Acc John-Nom introduce-3Sg-Past Vp Mary-Dat

'As for Peter, it was John who introduced him to Mary.'

¹⁵ Eradicating stress is defined as a main stress in a sentence after which no other main stress can occur. A fine example is the following: *Marival 'János ment el a búcsúba vasárnap* (Mary-with John-Nom go-3Sg-Past away the village-fair-to Sunday. *It is John who went with Mary to the village-fair on Sunday.*), where the element *János* is assigned the main stress and the rest of the sentence has a 'flat' prosody. This type of stress was given the name 'eradicating' because it deletes all possible following (main) stresses (cf. *Marival 'János ment el a 'búcsúba 'vasárnap*).

- János ['Pétert]_{Focus} mutatta be Marinak.
 John-Nom Peter-Acc introduce-3Sg-Past Vp Mary-Dat
 As for John, it was Peter that he introduced to Mary.
- Pétert ['Marinak]_{Focus} mutatta be János.
 Peter-Acc Mary-Dat introduce-3Sg-Past Vp John-Nom
 As for Peter, it was to Mary that John introduced him.

The eradicating stress, hence, is directly related to the pre-verbal focus position. It is interesting to note that in Kálmán & Kornai (1989) the prosody is derived from an underlying representation, i.e. if an element is assigned **f**, it triggers the placement of the eradicating stress. In my opinion, however, the set of examples in (31) suggest the opposite: (31a) is acceptable, since the pre-verbal element does not bear eradicating stress, whereas (31b) is unacceptable, because it does; in fact the difference between the two sentences is exactly their different prosodic realizations. This observation also sheds light on circular aspects of Kálmán & Kornai's analysis: why does an element get assigned eradicating stress? Because it bears a diacritic **f**. How is it possible to know that an element has been assigned an **f**? The eradicating stress that it bears is indicative of this. For this reason, I suggest that focus (and perhaps other IS related elements, such as topic) should be derived from stress in Hungarian.

In section 3.2.3 I presented some aspects of the relationship between focus and prosody. It has been shown that in English two possible ways of focus derivation are possible: either from syntax or from prosody. The presentation of the question in the case of Hungarian focus served a double purpose: on the one hand I suggested that focus assignment should be derived from prosody, and other hand Hungarian pre-verbal focus has been further discussed, a focus type whose properties will be the main subject of the subsequent chapters. Obviously, prosody

has a crucial role in focusation in both languages. Also, not all types of focus have been considered in section 3.2.3.; different aspects and realizations lend themselves to comprehensive analysis, in fact there is a vast amount of literature available on the issue. The above presentation, however, is sufficient for our purposes, as in the following sections primarily the syntactic, semantic and pragmatic aspects of English and Hungarian focusation will be the center of attention.

3.3. Summary

In chapter 3. two basic concepts of IS have been discussed: topic and focus. It has been established that both topic and focus are syntactic constituents. Topic is generally defined as an element in a sentence for which a predication is valid. Topic and subject, however, do not inevitably coincide. Focus was introduced as the element that contains non-presupposed information. The semantic, pragmatic and prosodic aspects of focus have been dealt with in more detail. After the discussion of problematic areas of formal semantic analysis of focusation contrastivity and truth-conditional aspects were examined. It has been demonstrated that contrastivity is an important feature of focus, and has special syntactic realizations: pre-verbal focus in Hungarian, and clefts in English. This distinction will gain special relevance in the following chapters. It has also been pointed out that focus exhibits truth-conditionally sensitive properties, especially when scope interactions are present or when it expresses contrastivity. The pragmatic uses of focus of correction and confirmation have been briefly discussed, and it has been pointed out that other pragmatic aspects will also be crucial in understanding focus. These aspects will be dealt with in more detail in the subsequent chapters. With relation to prosody, it has been shown that sentence accent has different roles in English and Hungarian which follows from typological differences: in English, where word order is relatively fixed, prosody has a more prominent role in focus marking than in Hungarian.

4. The comparison of English and Hungarian focus

In chapter 3. a general introduction to two basic notions of IS were presented; topic and focus. More attention was paid to focus, and its the semantic, pragmatic, syntactic and prosodic aspects. The difficulties of finding a uniform account of focus has been outlined at different levels of linguistic analysis, and a working definition has been adapted from É. Kiss (2006), which states that a., focus is derived either from prosody or syntax (depending on which language, instantiation of focus or framework of analysis we are looking at), b., focus is a syntactic object; i.e. it forms a constituent and that c., focus is the constituent whose semantic property is to designate a subset of a (contextually) defined set of individuals about which the predicate makes a statement. In the present chapter I will provide a comparison of two approaches to English and Hungarian focus, and attempt to demonstrate that each can be regarded as valid in their own terms, but both fail to capture some broader (pragmatic) observations with the result that the definitions they provide have to be made more general. The first approach (É. Kiss, 1998, Bende-Farkas, 2006) attempts to capture focus related observation purely in formal semantic and syntactic ways, whereas the second (Onea, 2007) involves pragmatic considerations as well. In the formal semantic-syntactic based treatment properties of focus are accounted for within the generative paradigm, making use of notions that are commonly defined in the minimalist framework and formal semantics. Two works have been chosen that, in my opinion, are crucial to understanding the issue at hand: É. Kiss (1998) and Bende-Farkas (2006). In É. Kiss (1998) a fundamental theoretical distinction is made between identificational focus and information focus, and it is stated that this distinction can be regarded as a parametric variation among languages. Identification focus (the preverbal focus construction) expresses exhaustive identification, whereas information focus merely conveys new information by designating relevant set members. The motivation for É. Kiss to compare Hungarian and English in this respect is the idea that the two languages have different parametric settings for marking exhaustiveness and contrastivity. É. Kiss also states that in English it is cleft sentences, whose function is to express exhaustivity; consequently there is a strong parallelism between clefts and the Hungarian type pre-verbal focus. This claim has special importance, since based on our empirical findings, this correspondence in its strict reading is hard to maintain, and consequently, a more permissible definition is needed for Hungarian pre-verbal focus. The second work in the formal semantic-syntactic paradigm is provided by Bende-Farkas (2006), who argues that information focus (or Hungarian focus in her terms) is best analyzed compositionally as combined by intonationally marked focus (or English type focus) and a "covert maximality operator" (p. 2), whose meaning is closest to Hungarian *csak* or English *only*. Here, a distinction similar to that of made by É. Kiss (1998) is also maintained, but terminology differs: Bende-Farkas adopts the term information focus for similar purposes as É. Kiss does, and introduces operator focus as a variant roughly corresponding to É. Kiss's identificational focus. The essential difference between the analyses provided by É. Kiss and Bende-Farkas is that according to the former the focus position is a scope position, and exhaustive identification is triggered by the movement of the focused element into this position, whereas the latter posits a covert operator which is responsible for the exhaustive interpretation. Onea's (2007) approach does not reject notions used in the generative literature, but motivates certain semantic properties of focus by pragmatic considerations. As we will see, exhaustive interpretation is a consequence of a principle called maximal informativity in this framework. In my opinion, purely sentence, mini-context level and semantic considerations are not sufficient for providing adequate theories of meaning, therefore, when interpretation of certain structures are given (partly) pragmatic motivation, theories of higher explanatory adequacy can be formulated with a significantly lower degree of circularity. Also, it will become apparent, that out of context analyses of the instances of Hungarian focus exhibit semantic properties that would render it a special feature of the language, and, therefore, one would suppose that its instantiations and use are restricted to special contexts. On the basis of analyzing data from literary translations, however, it can be shown that the use of Hungarian focus is subject to less strict principles and is more widely used than what the formal semantic-syntactic approaches would suggest. Empirical evidence for this suggestion is presented in chapter 5.

4.1. The first approach: purely on semantic-syntactic grounds

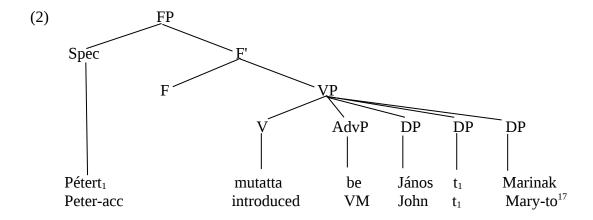
As was pointed out, two approaches will be outlined in section 4. In 4.1 a presentation of two semantic-syntactic based analysis (É. Kiss, 1998 and Bende-Farkas, 2006) is provided with special emphasis on the former. ¹⁶ The theoretical framework in which É. Kiss formulates her theory is an early version of the minimalist approach; features, functional projections, the LF component and scope operations are basic notions used in her account. The distinction she puts forward between the two focus types is made as follows: 1. *identification focus* exhaustively identifies the members of the subset of a contextually defined set to which the predication is valid, and its realization involves syntactic movement, i.e. the focus constituent moves to the specifier position of a functional F(ocus) head; 2. *information focus* purely expresses new information and it requires no syntactic movement. It is also important, that while sentences do not necessarily contain an identificational focus, all sentences must contain an information focus. For the sake of precision, the definition of identificational focus

¹⁶ The relevant results of the two papers at hand are relatively the same (the works differ mainly in the theoretical approaches); the claim between the parallelism that I attempt to investigate in chapter 5. is more explicitly articulated in É. Kiss (1998).

provided by É. Kiss (1998) is cited verbatim (1) from p. 245:

(1) The function of identificational focus: An identificational focus represents a subset of the set of contextually or situationally given elements for which the predicate phrase can potentially hold; it is identified as the exhaustive subset of this set for which the predicate phrase actually holds.

In semantic terms, it is suggested that an abstract operator, which expresses exhaustive identification, binds a variable to which identification focus serves as the value. Syntactically this is achieved by movement to spec-F which makes it possible for the focus constituent to be realized in scope position. The syntactic representation of Hungarian pre-verbal focus is presented in (2), borrowed from É. Kiss (2004, p. 86).



É. Kiss (1998) remarks that although the distinction that she bases her analysis on has been long recognized (for example, in Halliday, 1976), and terms such as *contrastive focus* vs. *presentational focus* or *narrow focus* vs. *wide focus* have been used in the literature to refer to this dichotomy, specific analyses failed to give a principled account of the difference.

¹⁷ Gloss also borrowed from É. Kiss (2004, p. 86).

According to É. Kiss, the lack of consistency originated from two main sources: either the interpretation of identificational focus had been analyzed as a result of a movement of the appropriate elements to scope position in LF or it was posited that information focus can receive exhaustive interpretation in an ad hoc manner. An illustrative example of the conflation of the two types of focus is found Krifka (1992), where a uniform semantic representation to focus is proposed in general (3). The approach is named as the structured meaning theory of focus. Consider example (21) from 3.2.1., repeated here as (3).

- (3) a. Tegnap este [Marinak]_{Focus} mutattam be Pétert.

 last night Mary-Dat introduce-1Sg-Past Vp Peter-Acc.

 'It was [to Mary]_{Focus} that I introduced Peter last night.'
 - b. Tegnap este bemutattam Pétert [Marinak]_{Focus}.
 last night Vp-introduce-1Sg-Past Peter-Acc Mary-Dat
 'Last night I introduced Peter [to Mary]_{Focus}.'

According to É. Kiss (1998) the semantic difference expressed by the two distinct structures are not captured by the structured meaning theory of focus (Krifka, 1992), in which the representation in (4) would be assigned to both (3a) and (3b). (4) can be verbalized as follows: at the present state of discussion there is a proposition which asserts that I introduced someone (=x) to Peter, and (by Lambda-conversion) it is Mary that I introduced to him.

(4) ASSERT($\langle \lambda x.introduced(I, Peter, x), Mary \rangle$)

The problem with (4) is that the expression of exhaustivity is completely lost, i.e. it is not suitable for the representation of a construction such as the Hungarian-type pre-verbal focus,

or the English cleft construction. In Krifka the problem is circumvented by the introduction of an illocutionary operator, which binds foci and in this way renders the necessary exhaustive interpretation.¹⁸

Bende-Farkas (2006) takes on a slightly different approach, but her conclusion regarding the status of Hungarian pre-verbal focus is very similar. Here, the exhaustive interpretation is accounted for compositionally: it has two components, one being information focus (which is essentially the same as in É. Kiss) and the other a covert maximality operator whose meaning is closest to Hungarian *csak* (*only*). Consequently, Bende-Farkas argues, the Hungarian-type pre-verbal focus is a composite of the English-type intonation focus and exhaustive reading as such. Contrary to É. Kiss, Bende-Farkas points out that the parallelism between pre-verbal focus in Hungarian and clefts in English is not as strict especially in terms of question-answer congruence related issues. Bende-Farkas maintains the parallelism, however, in the case of non-exhaustive focus types, and asserts that this type of focus is the unmarked one crosslinguistically. Consider (5) borrowed from Bende-Farkas (p. 6).

- (5) a. Kit hívtál meg?
 - who-Acc call-2Sg-Past Vp
 - b. Jánost hívtam meg.

John-Acc call-1Sg-Past Vp

'It is John whom I have invited.'

c. Meghívtam például Jánost.

Vp-call-1Sg-Past for-instance John-Acc

'I've invited John, for instance.'

¹⁸ The exact formulation of how this works is not outlined in Krifka; another deficiency pointed out by É. Kiss (1998). A problem that may arise from this type of analysis is the question whether the presence of an operator of this type can be justified or motivated independently.

If (5b) is given as answer to (5a), the interpretation is exhaustive, as has already been established, but as (5c) indicates, it is possible to give a non-exhaustive answer using post-verbal, information focus, as well. Here the set of invited people is defined only partially, as the phrase p'eld'aul (for-instance) explicitly indicates. In my opinion, there is a problem with this reasoning, namely, that the lack of explicit reference to non-exhaustiveness in Hungarian results in infelicitous answers; compare an answer in (6) to (5a). The same problem occurs in 'e. Kiss (1998), who claims that wh-questions can be answered with sentences containing information focus (7) (p. 249 – 250).

- (6) ??? Meghívtam Jánost.Vp-call-1Sg-Past John-Acc'I invited John.'
- (7) a. Hol jártál a nyáron?

 where go-2Sg-Past the summer-in

 'Where did you go in the Summer?'
 - b. ???¹⁹ Jártam 'Olaszországban.
 go-1Sg-Past Italy-in
 'I went to Italy (among other places).'

Contrary to É. Kiss and Bende-Farkas, I propose that it is rather impossible that the answers in (6) and (7b) are given to the corresponding questions in any conversation, even if we posit that through a grave and deliberate violation of the principle of quantity some pragmatic effects are intended to be achieved. The answers are rather unlikely in virtually all possible contexts, therefore, contrary to É. Kiss and Bende-Farkas, I suggest that the parallelism

¹⁹ Question marks added.

between English and Hungarian information focus cannot be upheld when question-answer congruence is analyzed. It is interesting to note, however, that whereas these answers sound awkward without explicit reference to non-exhaustivity, similar answers containing more than one element in the information focus status may sound acceptable, and can even receive exhaustive interpretation. For example, *Jártam Olaszországban és Spanyolországban (I went to Italy and Spain*) could be a potential answer to (7a). This issue will be taken up in section 4.2.2. where pragmatic aspects will also be involved in the analysis.

In section 4.1. the basics of a fundamental distinction between two focus types has been established. The two focus types are 1. pre-verbal Hungarian focus²⁰ and its parallel, the English cleft both of which is realized in a syntactically marked structure and have exhaustive interpretation, and 2. information focus, which is syntactically unmarked and does not have exhaustive interpretation. Possible analyses were presented, and I have suggested that the proposed parallelism does not necessarily hold in question-answer pairs. In the following subsections I present a short summary of some details of the analyses at hand including syntactic, distributional and scope related aspects.

4.1.1. Exhaustivity in Hungarian and English – corresponding syntactic structures

In the account provided by É. Kiss (1998) the distinction between the two types of focus is motivated primarily semantically: focus can either represent new, non-presupposed information (information focus) or it can indicate that the referent(s) constitute a subset of a contextually defined set in an exhaustive manner (identificational focus). É. Kiss argues that the two types are not simply "interpretational variants" (p. 249) of each other, but differ both

²⁰ The term *pre-verbal Hungarian focus* is used when the structure is referred to in general, as it is less theory dependent. When É. Kiss's theory is discussed, identificational focus is used for the same structure.

in their semantic and syntactic properties. To make the claim stronger, and to demonstrate that the two types of focus do not have the same IS status, É. Kiss proposes that English marks the difference as well: the constituent corresponding to the Hungarian-type pre-verbal focus is the cleft constituent in English (compare (3a) and (3b)). Consequently, in English a non clefted, in-situ constituent has the status of an information-focus, and in this way it is not capable of expressing exhaustiveness. One would immediately argue, that prosody, especially in English, is capable of exhaustive definition. This is an important point where the accounts provided by É. Kiss and Bende-Farkas disagree. Bende-Farkas takes a more permissive stand and claims, implicitly, though that there are occasions where non-clefts with proper prosody correspond to Hungarian pre-verbal focus. In (8) (borrowed from Bende-Farkas, p. 3) this is exactly the case.

- (8) a. Whom did you invite?
 - b. E.: I invited '[Mary]_{Focus}.²¹
 - c. H.: [Marit]_{Focus} hívtam meg.

[Mary-Acc]_{Focus} inivte-1Sg-Past Vp

According to Bende-Farkas (2006) in cases that involve such question-answer congruence, the two different types of focus correspond to each other. The fact that English intonationally marked focus does not necessarily have to be interpreted exhaustively is demonstrated by a test devised by Szabolcsi (1981). In Szabolcsi's test two sentences are presented, each with a focus. The first of the pair contains two coordinated NPs, the second contains only one NP. The test shows that the focus in the first sentence has exhaustive interpretation if the second sentence is not a logical consequence of it. In (9) (adopted from É. Kiss, 1998. p. 250), this is indeed the case: as (9b) does not follow from (9a), but rather contradicts it, the focus in (9a)

²¹ Accent mark added.

can be said to exhaustively identify the set of items that Mary picked out for herself. In the second case, however, (9d) is accepted as a logical consequence of (9c), since the (information) focus in (9d) is not interpreted exhaustively.

- (9) a. Mari [egy kalapot és egy kabátot]_{Focus} nézett ki magának.
 Mary-Nom a hat-Acc and a coat-Acc pick-3Sg-Past Vp herself-Dat
 'It was [a hat and a coat]_{Focus} that Mary picked for herself.'
 - b. Mari [egy kalapot]_{Focus} nézett ki magának.
 Mary-Nom a hat-Acc pick-3Sg-Past Vp herself-Dat
 'It was [a hat]_{Focus} that Mary picked for herself.'
 - Mari kinézett magának [egy kalapot és egy kabátot]_{Focus}.
 Mary-Nom Vp-pick-3Sg-Past herself-Dat a hat-Acc and a coat-Acc
 'Mary picked [a hat and a coat]_{Focus} for herself.'
 - d. Mari kinézett magának [egy kalapot]_{Focus}.
 Mary-Nom Vp-pick-3Sg-Past herself-Dat a hat-Acc
 'Mary picked a [hat]_{Focus} for herself.'

The examples both in Hungarian and English demonstrate the exhaustive properties of the pre-verbal and cleft-focus (i.e. the identificational focus), respectively, and the non-exhaustive nature of the post-verbal (i.e. information) focus. The conclusion that can be drawn from Szabolcsi's test, i.e. that it works for English even if the post-verbal constituents are assigned primary stress demonstrating that syntactic operations are necessary for achieving exhaustive interpretation, contradicts observations made by Bende-Farkas with regard to (8). In my view this contradiction nicely illustrates the fact that mini-context analyses cannot capture the semantic properties of focus. Based on the comparison of the observations made with respect

to (8) and (9), I suggest that whereas Hungarian pre-verbal focus has an obligatorily exhaustive interpretation, English intonationally marked in-situ (i.e. non-cleft) focus *can* have such interpretation in certain contexts. In 4.2. it will become clear that with the help of a pragmatic principle (the principle of maximal informativity) this question can easily be settled.

The present subsection outlined the semantic rationale behind the parallelism between the Hungarian pre-verbal focus and English clefts. It has also been demonstrated that according to É. Kiss (1998) and Szabolcsi (1981) this parallelism is stricter than suggested by Bende-Farkas (2006) where in question-answer pairs non-clefted constituents can also receive exhaustive interpretation. For this reason the parallelism, as proposed by É. Kiss, seems to hold in a more restricted set of cases.

4.1.2. Focus and quantifiers – distributional aspects

The observation that identification focus cannot contain a universal- (10a) or an existential (*valaki/valami* – *somebody/something*) quantifier (10b), and that similarly, *also*- (10c) and *even*-phrases (10d) are disallowed for this function has long been recognized. É. Kiss (1998) suggests that the parallelism that none the above listed elements can appear in identificational focus holds in both Hungarian and in English, and motivates her claim on semantic basis. To illustrate the point I present four examples of my own (10).

(10) a. *[Minden lány]_{Focus} jött meg.

every girl-Nom come-Past Vp

*'It is [every girl]_{Focus} who has arrived.'

- b. *[Valaki]_{Focus} jött meg.somebody-Nom come-Past Vp*'It is [somebody]_{Focus} who has arrived.'
- c. *[Mari is]_{Focus} jött meg.Mary-Nom also come-Past Vp? 'It is [also Mary] who has arrived.'
- d. *[Még Mari is]_{Focus} jött meg.even Mary-Nom also come-Past Vp?'It was [even Mary] who has arrived.'

The semantic motivation of the disallowance of such operators according to Kenesei (1986) is that universal quantifiers do not operate on sets in an exclusive manner. For example, in the case of *minden lány* – *every girl*, no member is excluded from the set, but all girls of the contextually defined set of girls are included. As far as *also*-phrases are concerned, É. Kiss (1998) argues that when contained in clefts they retain their exhaustive interpretation in a way that what is referred to in the phrase is added to the already exhaustively defined subset. Let us demonstrate the point with the help of É. Kiss's examples (p. 252).

(11) A: Bill danced with Mary.

B: No, it was Sam that danced with Mary.

C: It was also John that danced with her.

In (11) B uses the identificational focus in a correcting way, and asserts that among the men, present at some occasion, it was Sam but not Bill (and no one else) who danced with Mary. C, in turn, adds one more member, i.e. John and hence the exhaustively defined set of men with whom Mary danced contains two and only two members. In my opinion, although É. Kiss's analysis seems valid in the special context of (11), there other occurrences of *also*- and *even*-phrases where these are used for different purposes. Numerous instances of these occurrences can be found in various contexts. The following examples and analysis do not aim to invalidate the claim that elements at hand cannot occur in identificational focus in the standard reading, but to demonstrate the fact that this type of construction is not used solely for exhaustive identification, as suggested by É. Kiss and others. The observation might turn out to be interesting, especially, because in these instances clefted constituents are not used for the above outlined exhaustive identification, but for adding new propositional content that holds for the element already introduced to the discourse and denoted by the clefted phrases (co-referential elements have been co-indexed)! I have found numerous instances of such occurrences through a Google search, some of which are presented in (12).²²

²² The examples were found through a Google search (04 Apr 2012) for phrases like "it is also she who" and "it was also he who" etc. The exact location of the examples and the corresponding number of hits of the specific *also*- and *even*-phrases is:

⁽⁸a) http://en.wikipedia.org/wiki/Piet%C3%A0 (Michelangelo) for "it is also she who": 132 000 hits

⁽⁸b) <u>http://www.adopting.org/adoptions/reunion-hearts-on-the-line-search-and-reunion,6.html</u> for "it was also she who": 145 000 hits

⁽⁸c) http://www.bewilderingstories.com/issue383/past_imperfect9.html for "it was even he who": 2 880 000 hits

⁽⁸d) http://www.youtube.com/all_comments?v=-O4NhAiHPSU&page=1 for "it was even her who": 228 000 hits

Although the results relying purely on Google search can be rough, the relatively great number of hits, however, demonstrates that the construction is widely used, moreover, the ones checked are all used in the function exemplified in (8)

- (12) a. This is said because, being that Christ is one of the three figures of Trinity,Mary_i would be his daughter, but it is [also she_i] who bore him.
 - b. Although it was Kathy_i who had insisted that he accompany her_i to the adoption agency and terminate his rights, it was [also she_i] who had provided his name.
 - c. It was he_i who had mentored her throughout her career. It was [even he_i] who had steered Nigel back onto the straight and narrow in his other existence.
 - d. Julia Child_i was an amazing cook yes; but it was [even her_i] who said that cooking is what made us who we are and who we are distinguishes our food.

In these cases it is interesting to observe that the second sentence of each two-sentence quotation contains a cleft construction, in which the clefted constituent contains a pronoun anaphorically linked to the previous sentence. Note that in this way the clefted constituent does not convey new information, nor does it designate elements from a contextually defined set, but serves as the topic of the sentence about which a predication is made in the subordinate clause. In my opinion, the observation might cause an overall problem for the majority of the theories outlined so far, since the function of the cleft construction in these cases is neither to present new information, nor to express contrastivity and/or exhaustivity. In these examples, of which a substantial amount can be found, the entities in the constituent that has so far been analyzed as focus are contextually (and exhaustively) defined,²³ whereas the predicate part of the sentence contains new information; the addition takes place outside the traditionally defined focus constituent. The observation, of course, does not invalidate the theory, but it indicates some of its weaknesses: the instances of clefts in (12) are not

²³ This is apparent from the grammatical construction of the sentences, as well: the cleft constituent contains a pronoun, whose antecedent is in the previous sentence (see co-indexation).

counterexamples to (10c) and (10d), since their interpretation differs, but examples of clefts with different semantic properties. An important question that has a bearing not only on IS related issues but many other fields of linguistics is the age long problem of the validity of strict categorial definitions: Is it possible to assign linguistic terms to classical definitions? Since the purpose of the present work is not to answer such broad technical questions, we will not dwell on the issue any longer, but remark that the abandonment of strict categoriality may help us towards theories of higher explanatory adequacy. Another, more relevant question is whether it is possible to give an account of focusation purely in syntactic-semantic terms. On the on hand, observations made in relation to (12) demonstrate that other uses of clefts are possible, which may require the revision of the results of the above outlined theories, on the other hand, it is possible that pragmatic aspects should be considered as well.

In the present subsection it has been shown that a universal- or an existential quantifier, *also*-and *even*-phrases are incompatible with construction associated with identificational focus both in English and in Hungarian. To account for the observation a semantic explanation was provided. It was found, however that *also*- and *even*-phrases can occur in clefts, with different semantic properties, though. I have also pointed out that these findings may cause a problem for theories (especially for that of É. Kiss) which claim that a strict parallelism between Hungarian pre-verbal focus and English clefts exist.

4.1.3. Identificational focus: a (potential) scope position

As it has been noted earlier, the identificational focus constituent is located in spec-F. It is also argued by É. Kiss (1998) that spec-F is a scope position, and consequently, the constituent that is c-commanded by the constituent in this position gets exhaustive interpretation; the

observation is claimed to be valid both in English and Hungarian. É. Kiss (1998) claims that interaction with other operators reveals the exact nature of scope effects. Consider examples in (13) borrowed from (p. 254).

- (13) a. Minden fiú [Marival]_{Focus} akart táncolni.

 every boy-Sg-Nom Mary-with want-Past to-dance

 'For every boy it was [Mary]_{Focus} [of the relevant persons] that he wanted to dance with.'
 - b. [Marival]_{Focus} akart táncolni minden fiú.
 Mary-with want-Past to-dance every boy-Sg-Nom
 'It was [Mary]_{Focus} [of the relevant persons] that every boy wanted to dance with.'
 - c. It is always [Mary]_{Focus} that every boy wants to dance with.

According to É. Kiss (1998), in (13a) the exhaustive identification is in the scope of the universal quantifier; it has the interpretation that every boy wanted to dance with (*only*) one girl; Mary. On the other hand, in (13b) the opposite is true: the universal quantifier is in the scope of the exhaustive identification, since in this case among the relevant set of girls there is (*only*) one, Mary, with whom all the boys wanted to dance. It is important to note, however, that prosody has an important role, which É. Kiss fails to point out. In my opinion, the interpretation functions of (13a) and (13b) do not map onto disjunct sets, but to overlapping ones: if the main stress falls onto the first element of (13b), i.e. *Mari*, it *can* be interpreted as an alternative to (13a) with exactly the same reading, or more formally, it *can* be interpreted as a proposition where, indeed, the exhaustive identification is in the scope of the universal quantification. If, however, the main stress falls on the main verb *akart* (*wanted*), the sentence

gets the interpretation proposed by É. Kiss with the additional fact that the individual denoted by the pre-verbal constituent gains a contrastive reading: it is Mary, but not someone else, with whom all the boys wanted to dance. Consequently, in my view, a more permissive rule must be formulated, which states (informally) that identificational focus *can* take scope, but this is not necessarily the case.

The stronger claim that É. Kiss advocates may be upheld in the case of English information focus, though. The only possible reading of (13c) is that Mary is the only girl with whom *all* the boys wanted to dance on the relevant occasion. Thus, it can be claimed that the universal quantifier takes scope over the identificational focus in the case of English clefts. In my view, however, the only question this observation raises is exactly the one it tries to answer: how do we know that clefted constituents occupy scope position? Without the universal quantifier *always* the sentence would have the same interpretation with respect to exhaustiveness; compare (14).

(14) It is [Mary]_{Focus} that every boy wants to dance with.

In (13c) *always* quantifies over the set of occasions and not over the set of girls or boys, thus the propositional meaning of (13c) and (14) differ as to on how many occasions it is true that Mary and no one else is the person with whom all the boys want to dance. Thus, we cannot talk about scope interaction in the way it was possible in the Hungarian sentences.

Another important point, closely related to exhaustivity, in the analysis provided by É. Kiss (1998) is the account of *only*-phrases. *Csak* (*only*) is analyzed as an operator that adjoins to an XP and carries a [+ identificational focus] feature. Consequently, the whole XP *csak* is

adjoined to has to move to spec- F^{24} and the sentence gets the observed exhaustive interpretation. Consider (15), borrowed from É. Kiss (1998, p. 165).

János [csak Marit]_{Focus} hívta meg.John-Nom only Mary-Acc invite-3Sg-Past Vp'It was [only Mary]_{Focus} that John invited.'

The additional semantic content conveyed by csak to plain identification focus is accounted for by \acute{E} . Kiss in a reductionist manner, an approach that is often welcome in scientific investigations in general, but in this case it does not seem to be maintainable. She argues that the difference is semantic in nature; when csak is used, an evaluative presupposition is introduced into the meaning of the sentence. In my view, this presupposition is indeed present when elements whose denotation includes scalar properties appear in the pre-verbal *only*-phrase (16a, b), but when the scalar nature of the denotations is not made explicit, the evaluative presupposition is motivated solely contextually (16c) (examples in (16a) and (16b) are of my own).

- (16) a. [Csak három virágot]_{Focus} vettem.

 only three flower-Acc buy-1Sg-Past

 I bought [only three flowers]_{Focus}.
 - b. [Csak öt fok]_{Focus} volt a házban.
 only five degree-Nom was the house-in
 It was only five degrees in the house.
 - c. Mari [csak Jánost]_{Focus} szereti. (borrowed from É. Kiss, 1998, p. 266)

²⁴ In some cases it is possible for *csak* to stay inside the VP, e.g. *János Marit hívta csak meg*. Here, *csak* remains stranded, and acts as a floating quantifier (É. Kiss, 1998). This, however, does not affect the exhaustive interpretation of the sentence.

Mary-Nom only John-Acc love-3Sg-Pres

Mary loves [only John]_{Focus}.

The reductionist characteristic of the analysis, in my opinion, is that it attempts to conflate sentences with csak-phrases where entities that have inherently scalar nature and those that do not in a way that they uniformly trigger an evaluative presupposition. É. Kiss argues that in (16c) a set of people is presupposed with whom Mary can potentially be in love with, and also that these individuals are ranked along a scale. In the current situation it is only the person on the highest position on the scale (John) that Mary loves. The major problem with this analysis is that a scalar implicature is present in (16a) and (16b) but not in (16c), where we have no clue whatsoever about how the rest of the members are ordered; such a ranking could be defined contextually, but the sentence is equally interpretable without it. Or, more simplistically, no reliance of a scalar implicature is needed for the successful interpretation of sentences of the type (16c). Consider the sentence in (17a), which is a paraphrase of (16c). (17a) emphatically expresses exhaustivity, but the existence of an ordered set is not implied; in fact it is not even possible, as demonstrated by (17b), where the focused entity has an inherently scalar nature. The fact that the explicit expression of exhaustivity is compatible with the use of *csak* suggests that the evaluative presupposition proposed by É. Kiss is not inherently present, but is at best determined contextually.

(17) a. Mari senki mást nem szeret, csak Jánost.

Mary-Nom nobody else-Acc no love-3Sg, only John-Acc

Mary loves nobody, but John.

b. * Semmi más, csak öt fok volt a házban.nothing else, only five degree-Pl was the house-in* It was nothing else but five degrees in the house.

One could object to the above reasoning claiming that it is reference to temperature, i.e. a scalar or numerically expressible quantity that is incompatible with this type of explicit marking of exhaustivity, but the claim is wrong, since if it is applied to other quantified entities, as in (18), the intended meaning will differ from that which involves scalar implicatures.

(18) Csak három virágot, és semmi mást nem vettem.
only three flower-Acc and nothing else-Acc not buy-1Sg-Past
I bought nothing else but three flowers.

Here, it is not the amount of flowers that we exhaustively identify, but three flowers as opposed to any other potential item of any number. Again, we see that *csak* does not necessarily introduce an evaluative presupposition or scalar implicature, but has the function of picking or selecting entities from a set and making this selection an in exhaustive manner.

To summarize, the two semantic-syntactic based treatments, presented in section 4.1., contain a number of essential observations with regard to the interpretation of English and Hungarian focus phenomena. These observations, however, and their respective analyses are sometimes hard to maintain for several reasons. The motivation for the above outlined treatments is the fact traditional semantic theories are not able to account for the interpretational differences between the two focus types defined by É. Kiss (1998). As a start, it has been established that

in Hungarian two types of focus exist: identificational focus, and information focus (adapting É. Kiss's terminology). The former is regarded as a special variety, as it has an exhaustive interpretation, it requires syntactic movement, and its use is optional; while the latter is considered the default type, as its interpretation is non-exhaustive, it does not have a fixed syntactic position, and it is obligatory. An important claim made by É. Kiss (1998), and less explicitly by Bende-Farkas (2006), is that Hungarian identificational focus corresponds to English cleft constructions. It has been shown that although Szabolcsi's (1981) test indicates that the semantic parallelism between the two constructions holds in general, in questionanswer pairs, as pointed out by Bende-Farkas (2006), the parallelism is not always present. For this reason I have proposed a tentative, and more permissive conclusion in this regard: whereas Hungarian pre-verbal focus has an obligatorily exhaustive interpretation, English intonationally marked in-situ (i.e. non-cleft) focus can have such interpretation in certain contexts. Hence, parallelisms between Hungarian post-verbal information focus, which is always non-exhaustive, and English non-cleft focus, which may be exhaustive, cannot strictly be upheld. It has also been demonstrated that in Hungarian certain elements (valaki somebody, is - also etc.) cannot appear in the pre-verbal identificational focus, due to its semantic properties. To enforce the parallelism, É. Kiss proposed that the situation is the same with the corresponding English cleft constructions. It has been found however, that the distribution of the operators at hand is different in English clefts. I have suggested that these occurrences are an alternative use of clefts with different semantic properties; in fact, this is the reason why also and even can appear in them. For this reason I claim that the suggested parallelism between the Hungarian identificational focus and English clefts is not as strict as predicted. Scope interactions have also been investigated, and it has been suggested that again, a more permissive statement about the scope effects of Hungarian focus has to be made: identificational focus can take scope, but it does not necessarily do so. I have also found that it is problematic to show scope effects in the case of English clefts, at least in the way \acute{E} . Kiss suggests. Finally, I have argued, that the evaluative presupposition that is posited in the case of csak-clauses is not necessarily present, even when quantified entities are denoted. All these findings suggest that whereas the formal approaches to the semantic and syntactic properties of focusation have important and, by no means, insignificant results, the regularities they formulate are too strict, and further observations might motivate more permissive definitions. Also, a particularly significant observation is that the parallelism between the two identificational focus construction in English and Hungarian is not as strict as proposed by \acute{E} . Kiss (1998). In the next section I attempt to point out some of the other weaknesses of these theories, and outline accounts that involve alternative semantics and motivate exhaustive interpretation pragmatically.

4.2. The second approach: pragmatics involved

In the previous analyses the properties of focus were accounted for with the help such theoretical tools as operators and syntactic relations; especially c-command and scope. Formal accounts of linguistic phenomena often involve some degree of circularity, and this is especially true within the framework of the minimalist theory, where features are posited to be the triggering force for syntactic movements and semantic operations. In the case of focus, a somewhat simplified but commonly upheld argumentation proceeds within minimalism as follows: Why do certain elements move to spec-F? Because they have a [+ identificational focus] feature, and feature checking requires them to move to that position. Why do these elements get an exhaustive interpretation? Because they have moved to spec-F due to their [+ identificational focus] feature. The operator account of focus is also problematic, as Wedgwood (2005), among many, claims: abstract elements are posited for the desired

semantic effects; in the case of focus, a covert operator is responsible for the exhaustive reading. Again, in a simplified manner, the reasoning proceeds along the following lines: Why is it necessary to posit a covert operator? Because the sentence has exhaustive interpretation. Why does it have exhaustive interpretation? Because there is a covert operator that is responsible for the given reading. Although these accounts attain a relatively high level of descriptive adequacy, not in an unproblematic way as we have seen, their adequacy at the level of explanation is sometimes difficult to maintain, especially due to lack of independent motivations. An alternative treatment provided by Onea (2007) approaches the question from a different perspective taking pragmatic considerations into account. In the following, an outline of this treatment is presented.

4.2.1. Alternative motivations for the identificational – information focus dichotomy

Onea also maintains the view that the core observation is that Hungarian identificational focus conveys exhaustivity, whereas this is not so in the case of post-verbal information focus. He argues that the real motivation for distinguishing the two types, however, is not to be sought in this interpretational dichotomy itself. In Onea's account the interpretational differences fall out from the analysis of presuppositions conveyed by the relevant sentences and the pragmatic principle of maximal informativity. The presuppositional differences are the result of the order of elements: in a sentence where the verb is followed by a verbal modifier the action or state of affairs denoted by the verb is part of the sentence's presupposition, i.e. the verb is used anaphorically as referring to the event introduced into context earlier. On the other hand, if the verbal modifier comes before the verb, the verb is not used anaphorically, hence it is not part of the presupposition. To illustrate Onea's (2007) reasoning I present two examples of my own (19).

'John called Mary. He called her at midnight.'

b. János felhívta Marit. Éjfélkor fel-hívta (Marit). $e_1 \neq e_2$ John-Nom Vp call-Past-3Sg Mary-Acc. midnight-at Vp-call-Past-3Sg (Mary-Acc)

'John called Mary. He called her at midnight.'

Onea argues that in (19a), where the verb precedes the verbal modifier in the second sentence, the verbal elements must refer to the event referred to in the previous sentence ($e_1 = e_2$), hence anaphoric use is inevitable. On the contrary, in (19b), where the verb follows the verbal modifier in the second sentence, the verbal elements cannot be interpreted anaphorically ($e_1 \neq e_2$). In presuppositional terms the event denoted by the verb is part of the presupposition of the second sentence in (19a), but it is not in the second sentence in (19b). In this account, the interpretation of foci does not require separate mechanisms (like operator movement, scope etc.) but falls out 'automatically', since the two different types of sentences (ones with the verbal modifier preceding or following the verb) are interpreted at different levels (the level of DPs *or* sentences, as we will shortly see) depending on what alternatives the sentences presuppose. The starting point is the observation that *wh*-questions cannot be answered in a way that the information focus in the answer corresponds to the *wh*-element in the question.²⁵

As a demonstration an example of my own is presented (20).

where went.you the summer in

went.I Italy.to

'Where did you go in the summer?

'I went to Italy.'

²⁵ Note, that É. Kiss (1998) claims the opposite (example repeated from section 4.1 (7) p. 249 – 250)!

cf. A: Hol jártál a nyáron? B: Jártam Olaszországban.

Contrary to Onea (2006), and our observations, in É. Kiss's account the answer to this question can be felicitous.

(20) A: Ki vitte el Mari könyvét?

who take-3Sg-Past away(=Vp) Mary book-Abl-Acc

'Who took away Mary's book?'

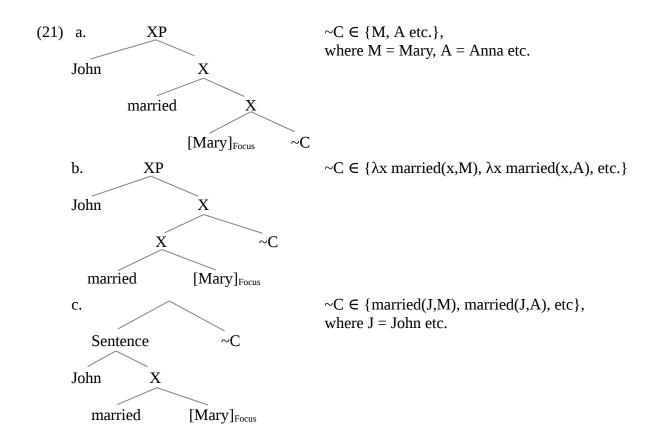
B: * Mari könyvét elvitte [János]_{Focus}.

Mary-Nom book-Abl-Acc away(=Vp)-take-3Sg-Past John-Nom

'Mary's book was taken away by John.'

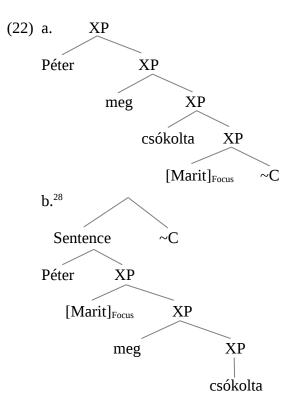
The reason why B's answer inappropriate in (20) lies in the above outlined fact, namely, that sentences that contain post-verbal focus presuppose the event denoted by their verb. Before proceeding, some clarification of the theoretical background is due. Again, Rooth's work (1992) is referred to, where it is posited that when focusation takes place a set of alternatives and the corresponding presupposition is generated. The notation for this set, referred to as the *focus-presupposition*, is ~C. Since the same sentence can be used in different contexts (of course, not with the same prosody, though), focus-presupposition can be located at various syntactic positions giving rise to different presuppositions, as (21)²⁶ demonstrates (adopted from Onea, 2007).

²⁶ In my view, an important theoretical inconsistency at this point is that it is always the post verbal element that is assigned [+Focus] in the representation. This contradicts the commonly accepted view that focus contains non-presupposed information; a question generally overlooked in the analyses presented in 4.1. As we will see, I will make a vague attempt to slightly modify this, and claim that it is [Mary], [married] (!) and [John married Mary] that should be analyzed as focus.



In (21a) ~C is located at the level of DPs, therefore, the set of available alternatives contains DPs, whereas in (21c) ~C is generated at the sentence level, and consequently, the set of alternatives contains full fledged propositions. We have seen in (20) that information focus in an answer cannot correspond to the *wh*-element in its corresponding question. Onea (2006) thus assumes that ~C cannot project over a full V.²⁷ Let us now present how Rooth's analysis applies to the Hungarian pre-verbal focus construction.

²⁷ The apparent circularity of the reasoning will be discussed in the following section.



Péter meg-csókolta [Marit]_{Focus}. Peter-Nom Vp kiss-3Sg-Past Mary-Acc 'Peter kissed Mary.'

Péter [Marit]_{Focus} csókolta meg. Peter-Nom Mary-Acc kiss-3Sg-Past Vp 'Peter kissed Mary.'

In (22a), borrowed from Onea (2007, p. 4 – 5), the focused element follows the verbal elements, consequently, it is the action denoted by the verb that becomes salient, or which is "asserted" (p. 4) in Onea's terms. The corresponding presupposition is *Peter kissed x* (cf. 21); consequently, \sim C is generated at the level of x, i.e. at the level of DPs. Since \sim C, as already assumed, cannot project over a verb, the set of alternatives is defined at the level of DPs; e.g. {Mary, Elizabeth, Norah, Bill etc.}. In (22b), on the other hand, it is not the action denoted by the verb that is asserted, but the denotation of the DP, since it precedes the verb. According to Onea, in this way, the denotation of the verb is part of the proposition, and consequently, \sim C is generated at sentence level, giving rise to a set of alternatives that potentially include {PETER KISSED MARY, PETER KISSED ELIZABETH, PETER KISSED NORAH etc.}, i.e. full fledged propositions. The exhaustive reading of (22b) is accounted for pragmatically: as the sentence can potentially be an answer to a wh-question, Onea assumes that the answerer must

²⁸ In this representation the verbal modifier precedes the verb. Onea assumes that verb movement takes place instead of the movement of the verbal modifier. This idea does not follow the generally held view, where verbal modifiers are posited to be generated in a post-verbal position, and moved later in the derivation.

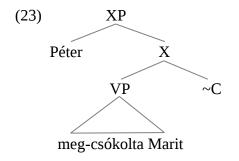
confine themselves to a principle of maximal informativity, and hence, must exhaustively define the set of individuals who performed the action.

In 4.2.1 an alternative account of the identificational and informational dichotomy has been outlined. Onea (2006) relies on two theoretical considerations: an alternative semantics model of presuppositions and the pragmatic principle of maximal informativity. In the following section I attempt to formulate my criticism in connection with the account at hand.

4.2.2. A critical analysis of Onea's treatment

Onea's treatment is appealing for a number of reasons. First, the characteristics of pre-verbal focus are neatly explained involving three distinct levels of analysis: 1. at the level of semantics, Rooth's framework of alternative semantics makes it possible to generate the relevant set of alternatives, 2. at the level of syntax, independent motivation is provided for the preferred word order (i.e. different word order corresponds to different presuppositions), and 3. the exhaustive interpretation of pre-verbal focus is motivated pragmatically. In my view, the explanation of focus-related phenomena based on the question-answer pattern, and the use of ~C in the syntactic representation is preferable for another reason, as well. Since the distinction of pre- and post verbal focus may be completed with another variety of focus, and, as a consequence, the overall definition of focus may be altered in a way that captures observations otherwise lost in the accounts provided by É. Kiss (1998) and Bende-Farkas (2006). Apparently, not only the pre- and post-verbal elements in sentences like (22) can be analyzed as focus. Note, that ~C does not necessarily have to be generated at the sentence level in sentences containing verb modifiers pre-verbally. Actually, if we confine ourselves to the mechanism introduced by Rooth (1992), it seems that such a sentence is ambiguous.

Assigning it the representation in (23), it becomes apparent that the set can equally be generated at the level of the verbal predicates, as well. Consequently, a completely different set of alternatives emerges. In these cases it is the verb that should be analyzed as focus; an instance that remained neglected in the formal treatments outlined in 4.1.



Péter [meg-csókolta]_{Focus} Marit. Peter-Nom Vp-kiss-3Sg-Past Mary-Acc 'Peter kissed Mary.'

If we base the explanation of focus interpretation on the above summarized question-answer congruence pattern, it turns out that in sentences with pre-verbal verb modifiers either the post-verbal element or the verbal element itself can be assigned a focus semantic value. Thus, the two possible representations of the sentence in (22a) (*Péter megcsókolta Marit*) is (24), where in (24a) *Mari* is analyzed as an information focus, and in (24b) the verbal predicate *meg-csókolta* is focused. In the latter case the sentence is a possible candidate as an answer to the question *Mit csinált Péter Marival?* (*What did Peter do to Mary?*). This means that the presupposition of the sentence is that *Peter did x to Mary*, and ~C includes possible actions such as {kissed, invited, called etc.}.

- (24) a. Péter meg-csókolta [Marit]_{Focus}.
 - b. Péter [meg-csókolta]_{Focus} Marit.

The result that falls out of the analysis, namely, that a verbal element can be assigned focus semantic value, as well, has favorable consequences with regard to the observation discussed

at the end of section 4.2.2. (cf. (12)). In these English cleft sentences the elements (mostly pronouns) in the clefted constituents are used anaphorically (i.e. referring to a contextually given antecedent), and the predicate part contains the new information. In Onea's terms this would mean that the clefted constituents are presupposed, and, consequently, the non-presupposed part, i.e. the verbal predicate is assigned focus value. Since the elaboration of what the semantic-syntactic representation of such sentences would exactly be in terms of ~C falls outside the scope of the present work, we will not dwell on the issue any longer, but point out that an investigation into the question would result in a more unified cross-linguistic theory of focus.

Another favorable aspect of Onea's analysis is that it gives a more complete account of focus use: in the formal treatments outlined in the previous section pre-verbal focus was examined purely in the question-answer paradigm as mini-context. Note, however, that by analyzing identificational foci from a presuppositional point of view its appearance in further contexts is predicted, as well. This is neatly demonstrated by (19). Apparently this type of focusation is used in narrative language use, an issue that is subject of section 5.2.3.

Let us now turn to some of the weaknesses of the Onea's account. Although applying pragmatic principles, and combining them with formal analyses seems favorable in general, there are instances where semantics and pragmatics are in conflict within the same framework. This is the case with Onea (2006), when data such as (25) (a slightly altered version of (7) repeated here) are to be accounted for.

(25) a. Hol jártál a nyáron?

where go-Past-2Sg the summer-in

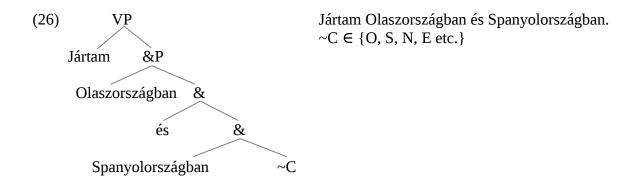
'Where did you go in the summer?'

- b. ??? Jártam 'Olaszországban.²⁹go-Past-1Sg Italy-to'I went to Italy.'
- c. Jártam Olaszországban és Spanyolországban.go-Past-1Sg Italy-to and Spain-to'I went to Italy and Spain.'

While the answer in (25b) is unacceptable, (25c) is adequate and felicitous. This contradicts the claim made by É. Kiss (1998) and Bende-Farkas (2006) that English intonational (in-situ or non-cleft) focus and Hungarian post-verbal information focus are parallels of each other. Apparently, both question-answer pairs (25 a-b) and (25 a-c) are felicitous in English, but this is only true for (25 a-c) in Hungarian. It is also important to note that whereas (25b) cannot have an exhaustive reading, (25c) can!

The question is whether Onea's framework can handle the observation made with respect to data in (25). If we attempt to capture the difference between (25a) and (25b) purely with the theoretical concept of ~C (i.e. within Rooth's semantic framework), the problem is obvious: if we posit that in the case of information focus ~C is generated at the level of DPs (26), and ~C cannot project over a VP, how is it still possible that we *can* get exhaustive interpretation in (25c)?

²⁹ Question marks added.



The suggestion that the default interpretation is indeed non-exhaustive can be proven by applying Szabolcsi's (1981) test (cf. (9) in 4.1.1.). The test sentences are as follows:

(27) a. Jártam [Olaszországban és Spanyolországban]_{Focus}.
 go-Past-1Sg Italy-to and Spain-to
 'I went to Italy and Spain.'
 b. Jártam [Olaszországban]_{Focus}.

'I went to Italy.'

Since (27b) is a logical consequence of (27a), it can be concluded that the focused elements get non-exhaustive interpretation by default. Here, it seems that pragmatic and syntactic-semantic analyses are in conflict with each other, and what we can say at best is that although the default interpretation is still non-exhaustive, in certain cases pragmatics overwrites semantics, and consequently, post-verbal focus *can* also get exhaustive interpretation. The relevant shortcoming of Onea's treatment is that no reference is made to such instances, and, hence no mechanism is worked out to overcome these difficulties.

There is another, broader theoretical problem with Onea's account, as well: the issue of circularity. The assumption that ~C cannot project over a VP is not motivated independently.

As a starting point Onea observes that post-verbal focus is an infelicitous answer to a *wh*-question. He supports this claim by the observation that different presuppositions correspond to sentences with different order of verb and verbal-prefix, and also states that this observation in itself is not sufficient, since it does not explain the fact that sentences with verb + verbal-prefix order *and* a post-verbal focus do not exist. At this point the assumption that ~C is unable to project over the VP becomes unavoidable. The problem is that this assumption originates from the observation that a particular configuration simply does not exist, but nothing else supports this view. The assumption is weakened by the observation in (27), too. Thus, lack of independent motivation and circularity weaken the explanatory power of this analysis, as well.

In sum, Onea (2006) has a number of favorable aspects: the relevant phenomena are treated at different levels of linguistic analysis with the result that more precise generalizations can be made. I suggested that the adaptation of Rooth's framework of alternative semantics enables VPs to be assigned focus semantic value, moreover the semantic properties of the special type of clefts in (12) can also be analyzed. It has also been mentioned that the present presupposition based treatment allows for further uses of foci apart from the question-answer paradigm. Two further points have been made in connection with the weaknesses of the account at hand. First, I have suggested that the semantic-syntactic mechanism of ~C is not able to represent cases where post-verbal focus has exhaustive interpretation. Second, it has been pointed out that circular reasoning weakens the strength of the account.

4.3 Summary

In the present chapter formal accounts of focus have been outlined. The first section (4.1)

presented two purely semantic-syntactic based treatments by É. Kiss (1998) and Bende-Farkas (2006). Both works make a principled distinction between the Hungarian pre-verbal focus construction (named as identificational focus or operator focus) and the unmarked realization of focus (information focus). The distinction is motivated semantically: the former has exhaustive interpretation, whereas the latter does not. In É. Kiss exhaustive interpretation follows from the claim that spec-F is a scope position, whereas Bende-Farkas posits a covert maximality operator for the same purpose. É. Kiss makes the claim that due to their parallel semantic properties, the pre-verbal focus in Hungarian is parallel to the cleft construction in English. It has been pointed out, however, that this is not always the case, especially in question-answer pairs. The fact that spec-F is a scope position is successfully supported in É. Kiss by the examination of scope interactions between spec-F and other operators. I have proposed that the idea that clefts exhibit parallelism in this respect, as well, turn has turned out to be less convincing since no proper example of scope interaction has been provided. This observation further weakens the parallelism. In section 4.1.2. alternative uses of clefts have been found: in numerous cases where also- or even-phrases are clefted the construction at hand exhibits different semantic properties providing an additional counterexample of the proposed parallelism. It has been also shown that although É. Kiss suggests in a reductionist manner that an evaluative presupposition in the case of *csak*-pharses is always present, in my view, this is not necessarily the case, since interpretation of these phrases is possible in a number of different cases. In the section 4.2 an alternative account of focus provided by Onea (2006) has been outlined. In this account alternative semantics, presuppositional aspects, and the pragmatic principle of maximal informativity contribute to the analysis of different focus types in Hungarian. I have also put forward some critical remarks. It is a favorable result that verbal elements can be assigned focus semantic value as well, and it is also a positive aspect of the framework that it enables the analysis of other uses of focus apart from questionanswer pairs. I have mentioned two theoretical problems, as well: 1. the semantic mechanism adopted from Rooth (1992) is not able to explain why certain coordinated post verbal foci can get exhaustive interpretation, and 2. circularity, the ever returning problem, is present in Onea's work as well; the inability of ~C to project over a VP does not seem to be motivated independently.

5. The status of focus: empirical considerations

In the previous chapter an outline of the theoretical and formal analyses of English and Hungarian focus was provided. The phenomenon has numerous aspects that lend themselves to thorough investigation; in the present work syntactic-semantic, and to a lesser extent pragmatic analyses are in the center of attention. In chapter 5. our subject of investigation will be further narrowed: the interpretation and possible occurrences of Hungarian pre- and postverbal focus, and the related cleft and intonational types of focusation in English and their possible parallelisms suggested earlier will be examined. While the distinction of the two types is pre-theoretical (and can be made intuitively as well), the outlined theories, are heavily theory dependent. We have demonstrated that although the formal accounts presented in chapter 4. have important results, they do not lack such discrepancies as undue reliance on the authors' own linguistic intuition, a partly consequent neglect of real language use, and a certain degree of circularity. These problems are not unique to these analyses, though. Since research in the generative paradigm is carried out based on considerations that are not in conflict with such methods (e.g. out of context analysis, reliance on the intuition of not more than one person etc.), similar criticism is often formulated. In my view, these concerns do not invalidate the results achieved in the generative literature but may serve as valuable input to other empirical studies, which, in turn, may foster the refinement of linguistic theories.

Interdisciplinarity has ample justification in general; therefore, it is welcome in linguistics, as well.

In chapter 5, the results of two empirical investigations will be outlined. The first (5.1), a psycholinguistic one (Kas & Lukács, 2012), examines the interpretation of focus in Hungarian, with special emphasis on exhaustivity. Although this experiment does not provide us with the possibility to compare Hungarian and English from the relevant perspectives, as it only considers Hungarian data, its results may turn out to be crucial in understanding how focusation and focus interpretation works in general. For this reason it was found to fit the tenor of the present work. The second subsection (5.2) is an attempt of my own to demonstrate that the parallelisms put forward by the formal treatments in chapter 4. are not as strict as suggested, and that pragmatic factors contribute to both the interpretation and use of the various types of focus at hand. The method of this rudimentary attempt consisted in comparing parallel sentences containing focus from literary works in English and translated into Hungarian and vice versa. Structural and interpretational aspects alike were examined and related to each other. The overall outcome of both, rather tentative, attempts is that although results achieved in the generative paradigm are important, they need to be revised, and by means of pragmatic and contextual considerations more permissive definitions are necessary for attaining a higher level of explanatory adequacy.

5.1 The interpretation of Hungarian focus – a psycholinguistic investigation

The aim of the first empirical investigation outlined in the present section is to examine the interpretation of the Hungarian pre-verbal focus construction in adult speakers, and assess formal analyses of focus interpretation based on its results.³⁰ The primary rationale of the 30 In the current brief summary of Kas & Lukács (2012) I make reference only to those points that are relevant

investigation carried out by Kas & Lukács (2012) is to test whether the predictions provided by formal accounts of focus can be supported empirically, or more specifically, whether psycholinguistic evidence for exhaustive interpretation can be given. Another question framed in the paper is how different focus marking constructions influence focus interpretation. As we will see, empirical data does not entirely support the results of formal treatments.

5.1.1. Hypotheses and method

The three relevant hypotheses put forward in Kas & Lukács (2012) are the following: 1. neutral and focus sentences are equally accepted by adults in exhaustive contexts, 2. in non-exhaustive contexts neutral, but *not* focus sentences are accepted by adult speakers, and 3. exhaustive interpretation is fostered by the use of more focus features³¹ in a sentence. The first two hypotheses partially follow from what we have already established, namely, the claim that owing to their exhaustive interpretation, focus sentences have a more restricted use. For illustration a set of examples of my own is presented in (1).

(1) context A:³² a room in which John is repairing a bicycle
 a. (focus) János [a biciklit] szerelte meg.
 John-Nom the bicycle-Acc repair-3Sg-Past Vp
 'It is the bike that John has repaired.'

for our purposes. Some of the hypotheses and the question of focus interpretation (e.g. focus interpretation in children) will be left out.

³¹ Here, the term 'focus feature' refers to the individual syntactic and prosodic means of marking focus.

³² Let us assume that the context in all cases is presented in the form of a picture depicting a past state of affairs. As we will see, this picture-sentence pairing method was applied by Kas & Lukács.

b. (neutral) János megszerelte a biciklit.

John-Nom Vp-repair-3Sg-Past the bicycle-Acc

'John has repaired the bicycle.'

context B: a room in which John is repairing a bicycle and a television

c. (focus) *János [a biciklit] szerelte meg.

d. (neutral) János megszerelte a biciklit.

The third hypothesis has not been explicitly dealt with in the formal literature, since this paradigm does not allow graduality; i.e. a structure is posited to have either exhaustive or non-exhaustive interpretation. We will see, however, that reliance on explicit clues greatly influences the acceptance of sentences of the relevant sort. A generativist objection to this claim might be that this is a matter of the competence – performance dichotomy, and once a [+ exhaustive] feature appears in the sentence it must be interpreted exhaustively. The objection is not completely valid, though, as will be demonstrated based on the results.

The basic idea of the method used by Kas & Lukács (2012) has already been presented in (1). The subjects were presented picture – sentence pairs; in the verification task they had to decide whether the sentences were acceptable in the contexts described by the picture. The pictures featured figures of two animals carrying out activities on two objects (e.g. a deer repairing a washing machine and a cat repairing a television) in all possible configuration, i.e. one animal working on one object, one animal working on two objects, two animals working on the same object etc. The presented sentences included neutral and focused ones of the following types: neutral SVO, SVO with stress (either on the subject or on the object), SVO subject focus (in Hungarian primary stress falls on the subject in this case), neutral SOV, SOV object focus (primary stress on object) and SOV object focus with verbal suffix (this type

corresponds to what we have termed as the Hungarian pre-verbal focus construction). Each subject was presented a random sequence of all the 120 picture – sentence pairs. The task was to verify whether the sentence was acceptable in the context defined by the picture or not.

5.1.2. Results

The hypotheses formulated on the basis of formal, semantic-syntactic based accounts have only partly been confirmed by the results of the experiment. While the first hypothesis is strongly supported by the fact that a substantial majority of subjects (90%) accepted both focus and neutral sentences in exhaustive contexts, the second hypothesis has been found hard to maintain, as focus sentences were accepted at a relatively high rate of 40% to 60%³³ in nonexhaustive contexts. Kas & Lukács (2012) claim that the latter result poses serious problems for formal accounts which predict that sentences containing focus are logically excluded from non-exhaustive contexts. The third hypothesis, however, which contradicts generative assumptions has been supported. The results demonstrate that while only pre-verbal or intonationally marked foci were relatively frequently accepted in non-exhaustive contexts, when several focus features were present in the sentences the acceptance rate significantly decreased. Based on these results Kas & Lukács (2012) conclude that only one focus feature in a sentence is not sufficient, but it is the pre-verbal focus construction together with contrastive prosody that trigger exhaustive interpretation. Kas & Lukács (2012) point out, however, that the results related to the third hypothesis should not be regarded as conclusive due to an imperfection of the experiment design: only object focus sentences, which were accepted on a relatively smaller number of occasions, were administered to test the claim. The problem is that in general the SOV pattern in Hungarian outnumbers any other configurations,

³³ Kas & Lukács (2012) make a distinction between sentences with subject and object focus (cf. list of sentence types used in the experiment). The acceptance rates are 40% and 60% for the two types respectively.

as shown based on corpus data, therefore an OSV would more easily be interpreted as subject focus than an SOV as object focus. Due to these frequency effects and the fact that only object focus sentences were tested these findings cannot be regarded as conclusive.

In section 5.1 an important empirical test of focus interpretation was presented with the aim of assessing the findings of previously discussed formal accounts. Although the results of Kas & Lukács (2012) are not completely conclusive it has been established that the interpretation of focus sentences in adults works differently from what theories in chapter 4. would suggest: (identificational) focus sentences were also accepted in non-exhaustive contexts and the number of focus features influenced focus interpretation.

5.2 A comparison of Hungarian and English focusation based on literary texts

It has been argued throughout the present work that the principles governing the occurrence of different types of focus might be less strict than what one would assume based on the results of formal treatments. Literary texts and their translations are suitable for examining these occurrences for two principal reasons to support or dismiss this suggestion. On the one hand, in certain cases it is important for the author to be precise as to for what entities a particular statement is valid (i.e. the author may want to make it explicit whether the intended reading is exhaustive or non-exhaustive), and this has to be reflected in the translation, as well, in order to effectuate the narrative or dramatic impact conveyed by the source text. For this reason I assume that both authors and translators are careful of the choice of the syntactic means through which they convey their intended reading. On the other hand, in some cases the choice of a particular focus type is motivated by the author's and/or translator's style, or some other pragmatic reasons that have not been taken into consideration by formal treatments. In

this way new possible uses of the given constructions may be found.³⁴ After the examination of several texts by different authors and translators, it has become evident that both motivations for this type of investigation are valid: in some cases pre-verbal or cleft focus is used in Hungarian and English, respectively, to achieve exhaustive reading, in other cases the choice is motivated by pragmatic factors, for example, to make certain elements salient in the context, or to produce the desired dramatic effect. As a consequence of this, we will see, the parallelism between the constructions is weakened. It is important to point out again, however, that the objective of this type of investigation is not to invalidate results formulated in the generative paradigm, but to demonstrate that through further considerations and investigations more comprehensive accounts can be provided. Before the discussion of the particular samples and the results, a brief presentation of the starting hypothesis and the method is provided in the following two sections.

5.2.1. Hypothesis

The hypothesis is essentially the claim made by É. Kiss (1998, p. 250) cited verbatim in (2).

(2) The semantic difference between the two types of Hungarian focus constructions also holds between their English translations. (Instances of the Hungarian pre-verbal identification focus have been translated by a cleft construction, and instances of a VP-internal information focus by an in-situ constituent assigned a pitch accent.) The cross-linguistic correspondence of the interpretations is not an accident; I claim that the English realization of

³⁴ The reader might object at this point on the grounds that what is analyzed by generative accounts is not how focus constructions are *used*, but, rather, how they are *interpreted*. The objection is not valid, though: references as to what the *function* of focus is are often and explicitly made by both É. Kiss (1998) and Bende-Farkas (2006).

identificational focus is the cleft constituent.

In the discussion below I will use the more neutral term 'Hungarian pre-verbal focus *construction*' or its shorter versions instead of the term 'identificational *focus*' used by É. Kiss, partly to make this investigation less theory dependent and partly because, as we will see, the construction at hand has alternative uses different from identificational focusation proper.

5.2.2. Method

In order to get a complete picture, source texts and their translations have been examined in both languages. As it has been established that the marked focus type is pre-verbal in Hungarian and cleft in English, I concentrated on these in the analysis. The Hungarian source text was the novel *Elutazás és hazatérés* (*A Guest in my own Country*) by György Konrád. The English source texts were the *Dubliners* (*Dublini emberek*), a series of short stories by James Joyce, and another series, *The Adventures of Scherlock Holmes* (*Sherlock Holmes kalandjai*) by Sir Arthur Conan Doyle.³⁵

As a first step, I searched for cleft constructions in the English source texts, and aligned them with their translations. Second, I did a search for pre-verbal foci in the Hungarian translations, and aligned them with their corresponding sentences from the source text. Next, I followed the same procedure with the Hungarian source text: after listing the pre-verbal foci and aligning them to their English counterparts, I carried out a search to find cleft constructions in the translation and their corresponding sentences in the source text. The spotting of clefts is relatively easy in searchable documents: all the strings "it is" and "it was" have been

³⁵ Availability of in the source language and the target language was an important influencing factor in the choice of texts.

collected, and in this way the number of sentences was reduced to an amount that was processable by reading. Although this is an extremely primitive method, it made the process of selection effective, and a sufficient number of clefts have been found. Finding Hungarian pre-verbal foci, on the other hand, turned out to be much more cumbersome: the texts have been processed purely by reading. Finally, the sentence pairs have been grouped according to the types of foci and their context of occurrence. Since it is extremely difficult to list all the structures of the relevant type, partly because of the size of the texts and partly because in Hungarian if a constituent is pre-verbal it does not necessarily mean that it is focused, the research is *not* quantitative. The objective is to list a sufficient amount of data to support or reject the hypothesis.

5.2.3. Discussion and results

One of the most important suggestions of the formal analyses outlined in the previous section was that Hungarian pre-verbal focus corresponds to English clefts, and vice versa. The primary motivation for this was semantic: in both constructions the focused element refers to a subset of a contextually defined larger set, and this subset gets exhaustive identification. At this point it is important to make reference to the relation between exhaustivity and contrastivity in order to eliminate misunderstandings in the following analysis. As pointed out also by Kenesei (2005), in the case of exhaustive identification a complementary set of the designated (sub)set is created. The members of that complementary set do not need to be specified, moreover, *cannot* be specified in most of the cases. To illustrate the point I rely on an example of my own (3).

(3) A könyvet János vitte el, (és nem más).

the book-Acc John-Nom carry-3Sg-Past Vp, (and not else)
'It was John who took the book home, (not someone else).'

The example shows that since the bracketed phrases can potentially complete the sentences, an (implicit) complementary set is created; the members of this set remain unspecified. Hence, (3) demonstrates that when exhaustive identification takes place contrastivity is present, as well; contrastivity is a logical consequence of exhaustive interpretation. This fact is captured in terms of features in É. Kiss (1998): identificational focus has [+exhaustive] and [+contrastive] feature values. For this reason, in the following I will use the two characteristics interchangeably, not due to sloppiness, however, but to emphasize which characteristic relevant at the given point. Let us now turn to the analysis of the aligned sentence pairs.³⁶

Instances of cleft constructions and their corresponding pre-verbal focus counterparts are prototypically exemplified in cases where the exhaustive reading is reinforced explicitly by lexical items such as *éppen* (*exactly*) or *csakis* (*just/only/alone*) in the Hungarian translation (4).

- (4) a. E.: I am no official agent. I understand that it was [your daughter] who required my presence here, and I am acting in her interests. (SH/IV)

 H.: Én nem vagyok hivatalos bűnüldöző. [Éppen [az ön lányának]] volt az óhaja, hogy idejöjjek, én csak az ő megbízottja vagyok. (SH/IV, p. 61)
 - b. E.: "I see many objections to any such theory." "And so do I. It is

³⁶ The sources of aligned pairs are indicated with abbreviations. For the list of abbreviations see 'Source of literary texts' under the References part. Most of the electronic versions do not contain page numbering. In these instances the exact location cannot be indicated.

precisely for [that reason] that we are going to Stoke Moran this day."
(SH/VIII)

H.: "Nekem meglehetősen gyanús lenne az így felállított teória." "Nekem is, Watsonom. [$\acute{E}pp$ [ezért]] utazunk el még ma Stoke Moranbe." (SH/VIII, p. 115)

c. E.: As to who this prisoner is, I have no doubt that it is [the daughter],Miss Alice Rucastle, if I remember right, who was said to have gone to America. (SH/XII)

H.: Ami pedig a fogoly személyét illeti, az senki más nem lehet, [*csakis*]Mr. Rucastle lánya]], ha jól emlékszem, Miss Alice, aki állítólag Amerikába utazott. (SH/XII, p. 182)

All the examples in (4) demonstrate the parallelism between English clefts and Hungarian pre-verbal focus not only structurally, but interpretationally, as well (cf. section 4.1.3; discussion of *csak*-phrases). The interpretational and structural parallelism between clefts and pre-verbal foci is exemplified by a number of further instances from the sample texts, two of which are cited in (5).

(5) a. E.: A Frenchman or Russian could not have written that. It is [the German] who is so uncourteous to his verbs. (SH/I)

H.: Francia vagy orosz ember ezt biztosan nem írhatta. [*Csak* [a német]] bánik ilyen galádul az igékkel. (SH/I)

b. E.: It was [Joe Dillon] who introduced the wild west to us. (D/E)

H.: [Joe Dillon] hozta közénk a vadnyugatot. (D/E)

Just as in (4), in (5) the source text is English, and the translations of the clefts contain preverbal focus. Considering our hypothesis as a starting point, (5a), too, is a prototypical case: in the first sentence a number of nationalities is evoked, and from this set 'German' is identified exhaustively. Exhaustivity logically conveys contrastivity. Contrastivity is explicitly stated in the sentence preceding the one containing the cleft, reinforcing thus the exhaustive interpretation. (5b), however, is slightly problematic: although the syntactic parallelism holds, i.e. a cleft construction has been translated into a pre-verbal focus, the semantic parallelism does not. (5b) is the initial sentence of a short story, therefore, there is no contextually defined set from which the denotation of the focus can be picked, and consequently, there is no possibility for exhaustive interpretation either. The reader my object at this by claiming that exhaustive interpretation could still be elicited through semantic tests. Although the objection is valid we will shortly see that the function of pre-verbal focus is different in this instance. This observation, thus, will not invalidate the semantic observations, but complete the functional definition of focus and weaken the claim about the parallelism between the constructions at hand. Before discussing the function of this type of focus construction use in detail, let us demonstrate the case where Hungarian pre-verbal foci are translated into English (6).

(6) a. H.: Alighanem [ez az ostoros fiatalember] botránkoztatott meg egy idősebb urat a szomszéd házból. (...) Tény, hogy az öregúr valahonnan elővette serétes vadászpuskáját, eltalálta, és megsebesítette ezt az ostorpattogtató fiatalembert. (E&H, p. 90)

- E.: It was probably [the fellow with the whip] who outraged an older gentleman from the next building. (...) In any case the old gentleman pulled out his hunting rifle and wounded the young whip-cracker. (E&H)
- b. H.: András volt az, egykori kocsisunk, akinek ábrándozásra méltóan nagyszabású karizma volt. [Ő] fényesítette a linóleumot a szobámban, viaszos kefével korcsolyázott rajta, [ő] hozta fel az emeletre a tűzifát, és [ő] gyújtott be a fürdőszobai vaskazánba, hogy amikor fölkelek, legyen meleg fürdővizem. (E&H, p. 24)
 - E.: It was András, our former coachman, he of the reverie-inspiring biceps. [András] was the one who polished the linoleum in my room by skating on waxed brushes, [the one] who brought the firewood upstairs, [who] lit the fire in the cast-iron stove in the bathroom so I could have warm water for my bath when I got up. (E&H)
- c. H.: 1950-ben, miután apám boltját államosították, [Üveges Lajost] nevezték ki... (E&H, p. 11)
 - E.: When my father's business was taken over by the state in 1950, [Lajos Üveges] was named manager. (E&H)
- d. H.: Voltam a piacon is: minden más, [traktorok és teherautók] verték fel a port, a fiatalok motoron rohangáltak. (E&H, p. 23)
 - E.: I go to the market place too. Nearly everything is different there now: [trucks and tractors] stirring up dust, the young scooting around on motorcycles. (E&H)
- (6) presents an extremely interesting batch of data. In (6a) the cardinality of the contextually

defined set is one, its member, az ostoros fiatalember (the fellow with the whip), is exhaustively identified. In standard, out of context analysis the predicate part of this sentence would be treated as presupposed, and the focusation of the pre-verbal/clefted element would convey new information, i.e. that the predication is valid solely for the member(s) denoted by it. Here, the situation is different, however. The function of the focusation is to anticipate a new event that is a consequence of the predication (i.e. the fact of shooting), which is entirely new; it is only the focused element that has been introduced into the context earlier. Thus, although it is true that exhaustive identification takes place in (3a), a presupposition based analysis (that of Onea's) fails, since it would make the wrong prediction. (3b) is another sample that supports the hypothesis. Here, the cardinality of the set defined by the context, (i.e. the first sentence) is one again, its member is *András*. In the sentences that follow this member is identified exhaustively (with the concomitant contrastive reading) by means of pre-verbal foci in the source text and clefts in the translation. In presuppositional terms similar (6b) is similarly problematic. In (6c) pre-verbal focus is used again in the source text, and thus we would expect that the translation will contain a cleft sentence. Interestingly, however, it seems that the passive construction serves as a suitable alternative. The reason for this choice might be that preposed elements are salient, and consequently are suitable for an identificational function. This observation further weakens the suggested strict parallelism between pre-verbal focus and clefts. Obviously, prosody would have to be taken into consideration, as well, in a more comprehensive account: since passive sentences are possible with a placement on the post-verbal element ('manager – in the present case), too, it is only passives with initial main stress that might be accepted as an alternative to clefts to express the intended meaning. In (6d) we find that whereas exhaustivity, or perhaps more importantly contrast, is explicitly marked in the Hungarian source text, where modern means of transportation are selected from the set of means of transportation in general (or contrasted to older ones), in the English translation it is an inference that has to be made pragmatically; no explicit reference is made to exhaustivity. (6) demonstrates, thus, that whereas there is a parallelism between the two constructions at hand, it is also true that either the constructions can be used for different purposes than what has earlier been predicted (3a) and (3b), or the same semantic effect can be achieved by the use of different constructions (6 d) and (6c) in the two languages.

It has been pointed out in connection with (5b) that focus, or at least the structures associated with it, can have a role that has not been mentioned in the generative analyses outlined in section 4. In my view, (5b) provides an example of an alternative function of the Hungarian pre-verbal focus construction properties: in a number of cases the construction at hand is used to refer to entities whose presence is *salient*, or whose role will be of considerable importance later in the text. It is a crucial observation that there are numerous cases where not clefts, but in-situ, intonational foci or other unmarked constructions are translated into pre-verbal Hungarian focus constructions! Consider (7).

- (7) a. E.: The air was pitilessly raw and already my heart misgave me. (D/A)

 H.: Kegyetlenül csípős idő volt, és szívemet [balsejtelem] fogta el.
 - b. E.: [Two young men] came down the hill of Rutland Square. (D/G)H.: [Két fiatalember] ereszkedett le a Rutland Square dombjáról.
 - c. E.: ... you may be interested in this." He threw over [a sheet of thick, pink-tinted notepaper] which had been lying open upon the table. (SH/I)
 H.: ...talán erre is kíváncsi lesz. Azzal [egy vastag, rózsaszínű levélpapírost] nyújtott felém, amely eddig ott feküdt az asztalon. (SH/I, p. 4)

(7) presents three examples of the phenomenon that is not predicted by the hypothesis: although explicit reference (either syntactic or lexical) to exhaustivity is not motivated, since the source text does not contain a cleft,³⁷ the translators still opt for the pre-verbal focus construction in a considerable number of cases. In these instances the pre-verbal focus construction bears the semantic characteristics of topic and the syntactic characteristics of focus. As already mentioned, (7) presents examples translated from English to Hungarian. In order to provide further support for the observation at hand, I searched for pre-verbal focus constructions in the Hungarian source text and their corresponding non-cleft translations. As expected, I found numerous instances of the pre-verbal focus construction used in this function, and translated into non-cleft sentences. Two illustrative examples of this 'mismatch' are presented in (8).

- (8) a. H.: Tavasszal láttam a hídról, hogy a megduzzadt folyó szélesen rohan és [házakat] sodor magával, hogy [nagy fákat] csavar ki, és [dögöket] úsztat, hogy elmossa a [belső gátat] ... (E&H, p. 6)
 E.: In spring I watched from the bridge as the swollen river swept away [entire houses] and [uprooted large trees], watched it washing over [the dike], watched [animal carcasses] floating by. (E&H)
 - b. H.: A csendőrparancsnokságon egy [törzsőrmester] fogalmazta meg, és kopogta le nagy kezével írógépen az engedélyt. (E&H, p. 53)
 - E.: [A staff sergeant] at the gendarmerie formulated the permit and knocked it out on a typewriter with his large hands. (E&H)

³⁷ Note we have established the fact that English in-situ focus may only express exhaustive interpretation when contained in answers to *wh*-questions.

In (8) all the bracketed phrases (except for [belső gátat] – [the dike]) occupy the pre-verbal focus position in the Hungarian sentences. In (8a) these phrases are objects of the sentence, whereas in (8b) it is a subject. In the translations we see that the corresponding phrases occupy the unmarked position: the objects are located post-verbally in (8a) and the subject pre-verbally in (8b) following the general SVO English unmarked pattern. Let us now turn to how a possible definition of this alternative use can be formulated and a suitable term arrived at.

In order to clarify the motivation of the suggestion that this special occurrence is a blend of focus and topic characteristics let us cite the definition of topic provided by É. Kiss (2004, p. 9) verbatim.

(9) The topic function

The topic *foregrounds*³⁸ an individual (a person, an object, or a group of them) from among those present in the universe of discourse as the subject of the subsequent predication.

Partially, the definitions of both topic and focus hold for these special occurrences. On the one hand, the denotation of the bracketed phrases in (8) is foregrounded in each case, which is a property of topics by definition, but they are not present in the universe of discourse (note that none of the 'focused' entities were referred to earlier in the text). On the other hand, although their interpretation is exhaustive³⁹ (which would suggest their focus status) the motivation for their use is hardly their exhaustive interpretation, as their non-exhaustive, post-verbal counterparts would be equally felicitous and acceptable. The motivation for these elements to

³⁸ Emphasis added.

³⁹ The exhaustive interpretation of the relevant examples can be proven by the application of Szabolcsi's (1981) test, cf section 4.1.1.

occur in front of the verbal predicate might be to make their presence more salient, or to use É. Kiss's term, *foregrounded*. The hybrid properties of this type of construction and its typical distribution of occurrence might justify for us to identify it as a separate IS device in Hungarian. The term I find most suitable to capture the main function and use of the phenomenon is *narrative focus*.

It has been demonstrated so far, that except for the instances of narrative focus, there is parallelism between the Hungarian pre-verbal focus construction and English clefts. We have seen that apart from salience, the most important motivating factor for this parallelism is the exhaustive vs. non-exhaustive interpretational dichotomy. The fact that this distinction is indeed important is supported by another interesting observation, presented in (10). This pair of sentences demonstrates that the choice of a particular construction that would otherwise not be expected in the context can trigger some dramaturgical, or in this particular case ironic effect. If it is true that the use of a non-exhaustive construction instead of an expected exhaustive one can bring about such an effect, presumably by violating some pragmatic principle, it can be concluded that exhaustivity related interpretational factors play an important role. This may further support the suggested parallelism between clefts and preverbal foci, or at least of the parallelism of constructions that express exhaustivity in some way.

- (10) E.: He walked up and down constantly, stood by the hour at street corners arguing the point and made notes; but in the end it was [Mrs. Kearney] who arranged everything. (D/M)
 - H.: Nyargalt és érvelt, órák hosszáig utcasarkokon írta jegyzeteit egyre mocskosabb papírokra, és végül [Mrs. Kearney] elintézett mindent. (D/M)

In (10) the cleft in the original text was not translated into Hungarian with the corresponding pre-verbal focus construction;⁴⁰ a unmarked structure was used instead. The coordinating conjunction is different, as well: the original text contains the contrasting but, whereas the Hungarian text contains the non-contrasting és (and). Due to these grammatical and lexical choices, an ironic effect in the Hungarian version is brought about: in a standard case, a contrast should be made between the one who is supposed to carry out the action (i.e. arranging everything) and the one who actually carries it out. This is indeed the situation in the original text where the contrast is explicitly marked by the use of but and the cleft construction. In the Hungarian translation, however, the use of unmarked and non-contrastive linguistic means (i.e. the use of $\acute{e}s$ and unmarked word order) reduces the information status of the second coordinate to a side remark. The difference between the expected (contrastive) focus construction and the actually used unmarked construction results in an ironic effect. The fact that in the English version where the cleft construction is used such irony is not present, (and is inferred contextually at best), whereas the Hungarian unmarked way of expressing the state of affairs conveys irony, demonstrates the fact, indirectly, though, that there is a parallelism between the cleft and pre-verbal focus constructions. The conclusion is drawn indirectly, since what we presented here is the observation that the use of different constructions to describe the same propositional content has different dramaturgical effects. Consequently, corresponding structures would assign the same IS status to the relevant constituents, and hence the same dramaturgical effect would be brought about. For this reason I suggest that the above observation supports the claim that there is a parallelism between the cleft and pre-verbal focus constructions.

⁴⁰ Note, that in the pre-verbal focus construction the verbal prefix occupies a post-verbal position, which is not the case here. This sentence type is an unmarked one of the topic + comment configuration.

Finally, let us mention and important theoretical discrepancy of the formal, semantic-syntactic analyses that has become apparent after the examination of the aligned sentence pairs. All the theories in 4. heavily relied on question-answer patterns in attempting to account for the interpretational properties of identification foci. The fact that after examining hundreds of pages of text (which being novels and short stories contained a fair amount of dialogues) I did not find one instance in which an answerer used pre-verbal focus to answer a question undermines the idea that it is a suitable starting point for the analysis. Again, the criticism is not meant to invalidate the observation that a crucial characteristic of pre-verbal foci is their function to answer *wh*-questions, but to suggest that by considering question answering as the primary discourse function of foci important generalizations and findings are lost. One such finding, for example, is the case of narrative focus that cannot be explained in terms of question-answer patterns.

5.2.4. Conclusion

We have demonstrated a number of examples that supported the hypothesis in 5.2.1.: English clefts and Hungarian pre-verbal foci correspond to each other, especially when explicit reference to exhaustivity is made (4), or when precise interpretational aspects are of import (5a), (6a) and (6b). I attempted to support the claim by comparing translated English and Hungarian texts. Also, it has been shown that dramaturgical effects can be brought by through violation of pragmatic principles if not the expected construction is used (10): different constructions used in the same context have different pragmatic results. The success of this intentional 'mismatch' by the translator points towards the tendency that clefts and pre-verbal foci are indeed parallels. Other observations, however, suggest that the parallelism is purely a tendency, but not a strict rule. In (6) we have seen that other constructions like the passive

(6c), or purely pragmatic inference (6d) are also suitable for triggering the intended interpretation. It was also pointed out that the pre-verbal Hungarian focus construction is used in numerous instances when exhaustive interpretation is not motivated, or is not salient (5b), (7), (8). In these cases (except for (5b)) the parallel sentences in the English (translated or source) text did not contain cleft constructions, but exhibited the unmarked SVO pattern. We argued that this type of Hungarian pre-verbal focus construction use shows a hybrid function of topic and focus, therefore, it was proposed that this is a particular Hungarian IS device. I suggested that this particular hybrid function of pre-verbal focus construction should be named narrative focus. The realization that narrative focus is a type of focus whose semantic characteristics, and discourse function differs from the pre-verbal focus type proper revealed the fact that by restricting the analysis to question-answer pairs important observations are lost. Thus, other discourse functions have to be considered, as well, to arrive at a more complete theory of focus. Based on the above observations I conclude that although the claim about the parallelism between the constructions at hand is valid, this parallelism is not as strict as the formal syntactic-semantic based accounts would suggest. On empirical grounds, through the examination of aligned sentences from literary works, I claim that the English cleft construction *can* correspond to the Hungarian pre-verbal construction.

5.3 Summary – the empirical tests

In chapter 5. two empirical investigations have been presented with the aim to critically assess the results of formal semantic-syntactic accounts. The first section (5.1), psycholinguistic investigation (Kas & Lukács, 2012), examined focus interpretation in Hungarian subjects. According to its results subjects accepted focus sentences in non-exhaustive contexts which weakens the claim that the interpretation of focus is exclusively exhaustive. It has also been

found that focus interpretation in the subjects correlated with the number of focus marking features which suggests that the generativist idea of a binary [+/- exhaustive] feature should be reformulated. The second section (5.2), an attempt of my own, examined the parallelism between the Hungarian pre-verbal focus and English clefts on the basis of translated literary texts. I have found that although there is a strong tendency that clefts correspond to the Hungarian focus type, in certain cases the intended reading can be achieved in alternative ways; for example, by the use of passives or by pragmatic inference. The examination of the aligned sentences revealed an occurrence of the Hungarian-type focus that has not been mentioned by any of the above discussed accounts. This type has the hybrid characteristics of topic and focus, and has been termed as narrative focus.

6. Summary

The aim of the present work was to provide a comparison of two central notions of information structure in English and Hungarian: topic and focus. I also attempted to give an overview of several analyses of the notions at hand, and to propose suggestion as to how theories of focus can be developed. The outlined theories made two central claims: 1. a principled distinction must be made between two types of focus (the one that expresses contrastivity – *identificational* or *operator focus* and the one that does not – *information* or *insitu focus*), 2. the Hungarian pre-verbal identificational focus and the English cleft construction are parallels which is the consequence of their semantic properties (as most explicitly formulated in É. Kiss (1998)). The common semantic characteristic of the two constructions at hand is that both of them exhaustively identify a set of entities from a larger, contextually defined set for which the predication holds. Another central aim, hence, was the examination of the validity of this claim. Before summarizing the results a brief outline of the

issues discussed in the present work is provided.

First, in chapter 2., the term information structure was defined as a universal property of languages which is used for the packaging of information: information has to be packaged according to the needs of the current communicational act. The realization of this function differs cross-linguistically; and can be achieved through syntactic, prosodic or lexical means. Second, in chapter 3., a discussion on topic and focus was given. Both topic and focus are defined as syntactic objects, i.e. constituents. It has been established that topic refers to an entity for which the predicate is valid, but it is not to be confused with the grammatical subject of the sentence. Its function is to foreground an individual from those that are present in the universe of discourse (É. Kiss, 1998). Focus has been more extensively discussed. According to general definitions its function is to contrast, or emphasize (new) information; or in more technical terms to present non-presupposed information (Chomsky, 1971, Jackendoff, 1972). It has been also pointed out that a special characteristic of focus is its ability to express contrast; the discussion of this aspect created the basis of the central distinction between the two types of focus that was thoroughly examined in later chapters. Other, semantic, pragmatic and prosodic aspects were also presented and the basic properties of the Hungarian-type pre-verbal focus were outlined.

In chapter 4., where formal approaches were discussed, the basic distinction between the two focus types was precisely defined: 1. the pre-verbal Hungarian focus and its parallel, the English cleft are realized in a syntactically marked structure and have exhaustive interpretation, and 2. information focus, which is syntactically unmarked and does not have exhaustive interpretation (É. Kiss, 1998 and Bende-Farkas, 2006 etc.). Also the claim that Hungarian identificational focus and clefts are parallels (É. Kiss, 1998) was introduced at this

point. In section 4.1. the findings of formal semantic-syntactic based analyses of the comparison at hand were examined, and critical suggestions have been put forward. The general aim was not to invalidate these findings, but draw the attention to new aspects of focus interpretation and use that may help the formulation of a more complete theory of the relevant concepts. I proposed, for example that 1. in question-answer pairs information focus can also receive exhaustive interpretation; 2. there are clefts containing also- and evenphrases whose semantic characteristics are different from those discussed in theories in chapter 4.; 3. quantifiers exhibit different distributional properties in Hungarian pre-verbal foci and clefts weakening thus the suggested parallelism. In section 4.2. an alternative approach (Onea, 2007) of the analysis of focus was outlined. In this account alternative semantics, presuppositional aspects, and the pragmatic principle of maximal informativity contribute to the analysis of different focus types in Hungarian. I have formulated my criticism with respect to this analysis, as well: 1. it is a favorable result of the account that with the mechanism of alternative semantics adopted from Rooth (1992) verbal elements can also be assigned a focus semantic value; 2. another important result of the analysis is that it not only enables the analysis of the pre-verbal focus construction in question-answer pairs but in other uses, as well; 3. unfortunately, a shortcoming of the theory is that it cannot handle those instances where post verbal foci get exhaustive interpretation; and finally, 4. some degree of circularity is present in this account as well as in the purely semantic-syntactic based analyses in the previous section.

In chapter 5. two empirical investigations were presented with the aim of assessing the formerly presented treatments and of finding new aspects of analysis. The first of these (5.1) was a psycholinguistic investigation of focus interpretation in Hungarian carried out by Kas & Lukács (2012). The results of this test suggested that the claims made by theories in chapter 4.

are not always valid: 1. subjects' accepted exhaustive constructions in non-exhaustive contexts at a relatively high rate; and 2. the number of focus features influenced focus interpretation. Consequently, on the one hand, new aspects of focus use and alternative contexts need to be considered, and, on the other hand the mechanism of the binary [+/- exhaustive] feature needs to be revised. In 5.2 an investigation of my own was presented. The objective of this work was to support or reject the claim about the (strict) parallelism between the Hungarian preverbal focus construction and the English clefts, and to find further occurrences with alternative semantic properties and use of the constructions at hand. The general conclusion of 5.2 is that although there is a tendency for the two constructions to parallel each other, strict parallelism does not hold for two reasons: 1. the core semantic property, i.e. exhaustivity can be expressed through alternative means (e.g. passives, pragmatic inference), and these means are not always used parallel in the two languages; 2. the constructions at hand have functions and interpretations that are not taken into consideration by the formal semantic-syntactic based accounts, i.e. these constructions are not exclusively used for expressing exhaustive identification. I have made the following observation to support the idea that the parallelism is rather a tendency, and is not as strict as formal accounts would predict: 1. in question-answer pairs post-verbal focus can get exhaustive interpretation (4.1.), (4.2.2.); 2. there are special uses of clefts where the denotation of the clefted constituent has already been exhaustively identified (it can be referred to by a pronoun with an antecedent in a previous sentence) (4.1.2.); 3. verbal elements can be focused, as well (4.2.2.); 4. there are alternatives available for triggering exhaustive interpretation, such as passives or pragmatic inference (5.2.3.); and, finally 5. an alternative use, called narrative focus, has been found in Hungarian, whose primary function does not coincide with the function of identificational focus proper. These instances of narrative focus are not translated as clefts either (5.2.3.) All these findings did not aim to invalidate the results achieved in the generative paradigm, but to point out that other semantic properties and aspects of use need to be taken into account to formulate a more complete theory of focus.

References:

Bende-Farkas, Á. (2006). Comparing English and Hungarian Focus. (Unpublished). Retrieved from http://semanticsarchive.net/Archive/jNkNzYzO/hunfocus.pdf. IMS Stuttgart University

Chafe, W. (1976). *Givenness, contrastiveness, definiteness, subjects and topics*. In Li, C. (ed.) Subject and Topic. New York: Academic Press. 27 – 55.

Chomsky, N. (1971). Deep Structure, Surface Structure and Semantic Interpretation. in D. Steinberg, & L. Jakobovits (eds.) *Semantics: An Interdisciplinary Reader in Philosophy*, Linguistics and Psychology. Cambridge: Cambridge University Press. 183-216.

Chomsky, N., & Halle, M. (1968). *The Sound Pattern of English*. New York: Harper and Row.

É. Kiss, Katalin. (1998). Identification and Information Focus. Language (74): 245 – 273.

É. Kiss, Katalin. (1999). Új magyar nyelvtan – Mondattan. Budapest: Osiris Kiadó.

É. Kiss, Katalin. (2004). The Syntax of Hungarian. Cambridge: Cambridge University Press

Erteschik-Shir, Nomi. (2007). *Information Structure – The Syntax-Discourse Interface*. Oxford: Oxford University Press

Büring, Daniel. (2005). *Semantics, Intonation and Information Structure*. Retrieved from http://semanticsarchive.net/Archive/GQ0YjgxM/buring.information.structure.v2005.pdf.

Halliday, M. A. K. (1967). *Notes on transitivity and theme in English: Part 1*. Journal of Linguistics (3): 37 – 81.

Jackendoff, R. (1972). *Semantic Interpretation in Generative Grammar*. Cambridge, Massachusetts: MIT Press.

Kas, B., & Lukács, Á. (2012). Focus Sensitivity in Hungarian Adults and Children. To appear in Acta Linguistica Hungarica.

Kálmán, L. & Kornai, A. (1989). Hungarian Sentence Intonation. in H. van der Hulst, & N. Smith (eds.), *Autosegmental Studies on Pitch Accent*. Dotrecht: Foris. 183 – 195.

Kálmán, L. (ed.) (2001). *Magyar leíró nyelvtan – Mondattan I.* Budapest. MTA-ELTE Elméleti nyelvészet szakcsoport.

Kenesei, I. (1986). On the Logic of Word Order in Hungarian. in W. Abraham & S. e Mey (eds.), *Topic, Focus and Configurationality*. Amsterdam: Benjamins. 143 – 159.

Kenesei, I. (2005). Focus and Identification. Retrieved from http://www.nytud.hu/kenesei/publ/keneseifocusmay.pdf

Krifka, Manfred. (1992). A Framework for Focus-sensitive quantification. in Baker, C & Dowty, D. (eds), *Proceedings of the Second Conference on Semantics and Linguistic Theory*. Columbus: Ohio State University.

Krifka, Manfred. (2006). *The Origin of Topic/Comment Structure, of Predication, and of Focusation in Asymmetric Bimanual Coordination*. Bellagio, Italy: Nascent Language Conference, Rockefeller Foundation. (October 4 - 6).

Krifka, Manfred. (2008). *Basic Notions of Information Structure*. Acta Linguistica Hungarica. 55 (3-4): 243 – 276

Miller, J. (2006). Focus. In Brown, K. (ed.) *Encyclopedia of Language and Linguistics* Amsterdam: Elsevier Ltd.

Onea, Edgar. (2007). Exhaustivity, Focus and Incorporation in Hungarian. in M. Aloni, P. Decker & F. Roelofsen (eds.) *Proceedings of the Sixteenth Amsterdam Colloquium*. Amsterdam: ILLC/Department of Philosophy University of Amsterdam. 169 – 174.

Reinhart, Tanya. (1982). *Pragmatics and Linguistics. An analysis of sentence topics*. Philosophica (27): 53 – 94.

Rooth, M. (1985). Association with Focus. (Ph.D. dissertation) Amherst: University of Massachusetts.

Rooth, M. (1992). A Theory of Focus Interpretation. in NLS1. 75 – 116.

Selkirk, E. (1995). Sentence Prosody: Intonation, Stress, and Phrasing. in Goldsmith, J. A. (ed.) *The Handbook of Phonological Theory*. London: Basil Blackwell, 550-69.

Szabolcsi, A. (1981). The semantics of topic-focus articulation. in Groenendijk, J., Jannsen, T., & Stokhof, M. (eds) *Formal methods in the study of language*. 523 – 541. Amsterdam: Matematisch Centrum.

Szendrői, K. (2005). Focus Movement (with Special Reference to Hungarian). in Evaraert, M. & van Henk, R. (eds) *The Blackwell Companion to Syntax*. Oxford: Blackwell Publishing.

Wedgwood, D. (2005). Shifting the focus. From static structures to the dynamics of interpretation. Amsterdam: Elsevier.

Zimmermann, M., & Féry, C., (Eds.) (2010). *Information Structure – Theoretical, Typological and Experimental Perspectives*. Oxford: Oxford University Press

Source of literary texts:

Konrád, Gy. (2001). *Elutazás és haztérés*. Retrieved from http://dia.jadox.pim.hu/jetspeed/displayXhtml?offset=1&origOffset=-1&filter=Konr%C3%A1d+Gy%C3%B6rgy&limit=1000&pageSet=1. Digitális Irodalmi Akadémia – Petőfi Irodalmi Múzeum.

Translation:

Tucker, J. (2002). A Guest in My Own Country – A Hungarian Life. New York: Other Press

Joyce, J. (1914). *The Dubliners*. Retrieved from http://www.gutenberg.org/files/2814/2814-h/2814-h.htm. free e-book version, latest update: 2011. Produced by Reed, D., Pietrzak, K. & Widger, D.

Translation:

Papp, Z., & Gergely, Á. (1995). *Dublini emberek*. Retrieved from http://mek.oszk.hu/00400/00415/html/dublini1.htm#d6076. Magyar Elektronikus Könyvtár

Sir Conan Doyle, A. (1887). *The Adventures of Sherlock Holmes*. Retrieved from http://www.gutenberg.org/files/1661/1661-h/1661-h.htm. free e-book version, latest update: 2011. Produced by an anonymous Project Gutenberg volunteer and Menendez, M.

Translation:

Boronkay, Zs., Nikowitz, O., & Takácsy, G., (translators). *Sherlock Holmes kalandjai*. Retrieved from http://mek.niif.hu/01700/01769/01769.htm.

List of abbreviations:

Two Gallants (Két úrfiak):

A Mother (Anya):

Sherlock Holmes (Sherlock Holmes kalandjai):	
Adventure I.: A Scandal in Bohemia (Botrány Csehországban):	(SH/I)
Adventure IV.: The Boscombe Valley Mystery (A boscombe-völgyi relytély):	(SH/IV)
VIII. The Adventure of the Speckled Band (A pettyes pánt):	(SH/VIII)
XII. The Adventure of the Copper Beeches (A vérbükkös tanya):	(SH/XII)
The Dubliners (Dublini emberek):	
An Encounter (Találkozás):	(D/E)
Araby (Arábia):	(D/A)

(D/G)

(D/M)

Elutazás és hazatérés (A Guest in My Own Country – A Hungarian Life): (E&H)