Comparing English and Hungarian Focus

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1 Introduction

1.1 Aims

The main concern of this contribution is Focus in Hungarian. The first section reviews the arguments in Roberts (1998) that Hungarian Focus does not encode a discourse function that is independent from the discourse function of intonationally marked Focus in languages like English (contra É.Kiss (1998) and Vallduví and Vilkuna (1998)). According to Roberts, the basic discourse function of Hungarian Focus concerns question–answer congruence: the constituent in the Focus position corresponds to, or is congruent to, the *wh*-phrase in the question that the sentence is an answer to (on question–answer congruence see von Stechow (1991) or Rooth (1996)). That is, Hungarian Focus is seen as a special, more constrained case of 'Intonational' Focus, in that it marks exhaustive answers only. The first half of the paper also includes a systematic comparison between English and

Hungarian Focus as regards such 'structural' properties as association with only, scope and binding, Weak Crossover, NPI licensing, and so on. The second half of the paper is devoted to a DRT-based analysis of Hungarian Focus, using some of the properties uncovered in the first part as benchmark.

This paper can be seen as an attempt to represent some of the semantic components that distinguish Hungarian Focus from intonational Focus. Accepting the conclusions of a syntactic proposal in Horvath (2002), Hungarian Focus is 'decomposed' into the contribution of intonational Focus (the introduction of alternatives and a Focus–Background division) and a covert maximality operator. As in Horvath, the presence of the maximality operator is argued to be responsible for many of the distinctive properties of Hungarian Focus. As a consequence, the paper makes the claim that Hungarian Focus can be given a formal analysis that is a compositional combination of 'English' Focus semantics and the contribution of a covert maximality operator. Accordingly, a DRT-based analysis of Hungarian Focus is proposed, a principled modification of a DRT-based framework for English Focus (Kamp (2004)).

Another aim of the analysis is to see how a recent version of DRT (Genabith, Kamp and Reyle (t.a.)) can be exploited to account for crosslinguistic differences in the semantic properties of focusing. This comparative work raises a number of architectural questions concerning the status of presuppositional and Focus-related information and its relationship to the representation of 'ordinary', non-Focus and non-presupposed information.

As regards its genre, this article is a hybrid: the primary concern in the first section is the abstract discourse function of Focus. The tacit aim of this section is provide empirical arguments for the analysis, by showing that what has become known as Hungarian Focus is in fact the possibly compositional combination of English type Intonational Focus and exhaustivity. Section 2 is a comparative survey of Hungarian and English Focus, following the discussion of English Focus from Rooth (1996). The aim of this part is to make precise what operator-like properties characterise Hungarian Focus (with respect to Crossover, scope, binding, negative polarity licensing, and so on). Section 3 provides a DRT-based analysis of Hungarian Focus. The long-term goal of this analysis is to provide a framework for the project of investigating two problems posed by the interactions of Hungarian Focus with other elements in the sentence (negation and the word corresponding to *only*).[1] That is to say, this article is part survey, part 'foundational', and, as such, it was intended to be kept simple, not raising more questions than it could reasonably be expected to answer. Nevertheless, it contains a few observations and unanswered questions that do not fit this general tenor. They have been included (at the risk of not achieving full coherence) because they seem interesting and intriguing enough to be made public — in the hope of eliciting feedback and discussion.

1.2   Basic Hungarian Data

This part is an overview of the main data on Hungarian Focus. The data show that there is a fundamental difference between Hungarian and English type Focus, detectable first and foremost in the optionality of Hungarian Focussing. This difference would first suggest that there is little point to a comparative formal analysis of the two. Now the aim of this paper is precisely to provide such an analysis. The arguments for such a move will become apparent in this and the following section.

Before the data can be presented a note on terminology is in order. It is unfortunately almost inevitable that the term *Focus* will be highly ambiguous in this paper (as it has been in the literature over-all). *Focus* in this paper can designate (*i*) a certain discourse function (marking/establishing question-answer congruence), (*ii*) intonational marking in English (and Hungarian) to express this function, (*iii*) the constituent so marked; (*iv*) the distinguished syntactic position in Hungarian; (*v*) the particulars of its semantics, (*vi*) the constituent that fills this position... The underlying assumption with this usage seems to be that there is a single underlying Focus syntactic feature and/or discourse function.[2] I do not agree with this view, so the ambiguous use of the term *Focus* will be due either to laziness or to trusting that the surrounding context will make things clear.

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[1]These problems have been sketched in Bende-Farkas (2005a) and Bende-Farkas (2005b).

[2]This impression may be further reinforced by the same subscript F in Hungarian and English examples alike. This label is intended to be context-sensitive, as in examples from each language it is to designate the kind of Focus (intonational vs syntactic) typically associated with that language.

(And trusting that the reader is familiar with this variety of notions.) The distinction that I do agree with can be characterised as follows (paraphrasing Roberts (1998)):

- 'Information Focus': marking question–answer congruence and evoking a set of contextually salient alternatives, usually by prosodic prominence. Sometimes this kind of Focus will be called prosodic Focus or English type Focus.[3]

- 'Operator Focus': introducing contextually salient alternatives, marking question–answer congruence and exhaustivity. The so-marked constituent denotes the sole maximal entity that has the property expressed by (roughly) the rest of the sentence. Operator Focus is typically marked by syntactic means (the Focus constituent of Hungarian, clefting in English), although prosody is also involved.

In Hungarian (as in several other languages, cf. É.Kiss (1995)) Focus-marking is primarily syntactic. Focus-marking in Hungarian also has a prosodic component. Constituents in the syntactic Focus position receive so-called eradicating stress (Kálmán and Kornai (1989)), so that the prosodic profile of the entire sentence with Focus will be different from that of a sentence without Focus. (This is illustrated in example (2) on page 4.) In addition, Hungarian has English-type, purely prosodic Focus — this issue will be introduced later.

Hungarian has a distinguished preverbal Focus position; it is not an adjunction position, i.e. there can be at most one preverbal constituent labelled as Focus.[4] (1) shows a 'typical' pair of sentences: as an answer to question (1a), the English sentence (1b) has an intonationally marked constituent *in situ*, that corresponds to, or fills, the information gap of the *wh*-phrase. The corresponding Hungarian sentence contains a constituent (*Mari-t*) fronted to an immediately preverbal position. A notable feature of (1) is the postverbal position of the verbal prefix *meg*. In unmarked Hungarian sentences prefixes precede the verb (and are compounded with it). Focus 'demotes' such prefixes to a postverbal position, as it were. The positioning of the prefix serves as a diagnostic for the syntactic Focus status of a given constituent.[5]

(1) a.   Whom did you invite?
     b. **E.:** I invited [Mary]$_F$.
     c. **H.:** [Marit]$_F$ hívtam meg.
              [Mary-Acc]$_F$ invited-1Sg Prefix

The pair in (1) suggests a match between intonational (English-type) and syntactic (Hungarian-type) Focus marking, at least where question–answer congruence is concerned. This is not a full match, however: a later example will show that Hungarian Focus can be used in exhaustive answers

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[3]The contrast-marking function of Focus will be by and large ignored in this paper.

[4]Exception: questions. *Wh*-phrases in Hungarian occur preverbally, arguably in the same Focus position, or something very much like it. It is possible to have several *wh*-phrases preverbally, and to have exactly one Focussed expression followed by several *wh*-phrases:

(i) a.   [Marit]$_F$ ki szereti?
          [Mary-Acc]$_F$ who loves+Def3Sg?
          "Who loves [Mary]$_F$?"
     b.   [Marit]$_F$ ki mikor látta?
          [Mary-Acc]$_F$ who when saw+Def3Sg
          "Who saw [Mary]$_F$, and when?"

If there are several non-interrogative Focus-marked constituents in a sentence, only one can be preverbal, the rest will be postverbal:

(ii) a.   *[János]$_F$ [Marit]$_F$ szereti
           [John]$_F$ [Mary-Acc]$_F$ love+Def3Sg
           Int. : "[John]$_F$ loves [Mary]$_F$"
      b.   [János]$_F$ szereti [Marit]$_F$
           (és nem [Péter]$_F$ [Katit]$_F$)
           "[John]$_F$ loves [Mary]$_F$
           (and it is not the case that [Peter]$_F$ loves [Cathy]$_F$)"

[5]On the syntax of Hungarian word order, verb movement and prefix movement cf. e.g. É.Kiss (1994), Koopman and Szabolcsi (2000) or Szabolcsi and Brody (2003).

only, and is therefore employed only in a proper subset of all the cases that involve (intonational) Focus-marking in English.

The basic prosodic fact which is overlooked when a full match is assumed between Hungarian and English Focus is that in English type languages Focus marking is not optional, but it *is* optional in Hungarian. In English every sentence contains at least element with maximal prosodic prominence (nuclear stress), and, consequently, every answer to a question contains at least one Focus-marked element (that corresponds to the *wh*-phrase of the corresponding question, or to part of it). Hungarian Focus-marking (or Focus movement) on the other hand is optional: not all Hungarian sentences contain a prosodically maximally prominent element, and then, obviously, not all answers to a question contain a constituent in the Focus position (the first example of a Hungarian sentence without Focus is (2c) below). That is to say, the presence of Focus in English is unmarked, whereas in Hungarian Focus movement, if not marked, is at least one of the alternatives that the speaker can choose from when answering a question.

(2c–d) below show two ways of answering the same question in Hungarian, with or without Focus. The shared meaning component for these two sentences is that an ex-convict in a red shirt has been found. (2c), the Focus-less sentence has so-called *even* prosody according to Kálmán and Kornai (1989): the main intonational phrases receive equal prosodic prominence. (Prominence here is marked with the sign ´.) In (2d) only one element receives prosodic prominence (the common noun *fegyenc* 'convict', marked in capitals), the rest of the sentence is non-prominent in terms of prosody. It is as if the prominence of Focus took away, or 'eradicated' the marking on other constituents (hence Kálmán and Kornai's term *eradicating*).

(2)   a.   Whom did they find?
      b.   They found an ex-convict in a red [shirt]$_F$ (Chomsky (1971))
      c.   'Meg-találtak egy 'piros inges 'szökött fegyencet. — can be continued with (3)
           Pfx-found-3Pl one red shirted runaway convict-Acc.
           "They found a runaway convict in a red shirt."
      d.   [Egy piros inges szökött FEGYENCET]$_F$ találtak meg. — cannot be continued with (3)
           [One red shirted runaway convict-Acc]$_F$ found-3Pl Pfx.
           "It was a runaway convict in a red shirt that they found."

The main semantic difference between the answers (2c–d) concerns exhaustivity: (2d) is an exhaustive answer, whereas (2c) need not be exhaustive. The point is, answers to questions usually carry an exhaustivity implicature (whether in English or in Hungarian), but with Hungarian Focus exhaustivity is not an implicature. The Focus-less answer (2c) implicates exhaustivity, whereas in (2d) exhaustivity cannot be cancelled.

(3)   És egy eltévedt diákot is (meg-találtak)
      And one lost-(his-)way student-Acc too (pfx-found-3Pl)
      'And (they found) a student who had lost his way too'

That exhaustivity is not an implicature of Hungarian answers with Focus is shown by the following test: (3), containing an *NP* modified by *is* 'too', is an appropriate continuation for Focus-less (2c), but not for (2d) (unless it is understood as (self-)correction or (self-)contradiction). This test, proposed by Donka Farkas and (independently) in Bende-Farkas (2002), shows that the exhaustive listing property of Hungarian Focus does not have implicature status. (What remains to be tested is whether the exhaustivity property of Focus is asserted or presupposed.)

In Hungarian Focus-less sentences, constituents in a variety of other positions can correspond to the information gap of a *wh*-sentence, that is, their discourse function can be comparable to English Focus. Their presence in the Focus position is excluded for syntactic or semantic reasons. (These constituents may happen to contribute to exhaustive answers, but this need not be so.) For instance, the universal quantifier *minden diákunk* 'every student of ours' in (4d) simply cannot occupy the Focus position, because this position is reserved for referring expressions, indefinites and certain Focus-sensitive XPs. (Szabolcsi (1997a) contains a comprehensive characterisation of the distribution of preverbal syntactic positions in Hungarian. See also the Appendix to this paper, where

a correlation is made between *NP* types in Focus position and the different roles of Focus with each type.) (4c) and (4e-f) are not exhaustive answers and the relevant constituents contradict the exhaustivity requirement on syntactic Focusing. In (4c) this is so because of the particle *is* 'too' or the particle combination *még . . . is* 'even'. In (4e) the placement of the relevant constituent in the so-called Contrastive Topic position (typically associated with partial answers) and in (4f) the parenthetical *például* 'for instance' both signal that the sentence is to be taken as a partial answer.

(4) a. Ki bukott meg?
       Who tripped pfx? "Who flunked?"
    b. [János és Mari]$_F$/[Két diákunk]$_F$ bukott meg.
       [John and Mary]$_F$/[Two student-Poss1Pl]$_F$ tripped pfx.
       "It was John and Mary/two students of ours who flunked."
    c. (Még) Mari is meg-bukott/*bukott meg.
       (Part.) Mary too pfx-tripped/tripped pfx.
       "Even [Mary]$_F$/[Mary]$_F$ too flunked."
    d. Sajnos minden diákunk meg-bukott/*bukott meg.
       Unfortunatelyly every student-Poss1Pl pfx-flunked/flunked pfx.
       "Unfortunately, every student of ours flunked."
    e. [János]$_{CT}$ tudom, hogy meg-bukott. A többiek talán nem.
       [John]$_{CT}$ know-1Sg, that pfx-tripped. The others perhaps not.
       "As for John(B-accent), I know that he flunked. Maybe the others didn't."
    f. Hát, meg-bukott például János/; talán Mari is.
       Well, pfx-tripped for-inst. John; perhaps Mary too.
       "Well, John (B-accent) for instance flunked; perhaps Mary too flunked."

(4c) shows that Hungarian Focus is not compatible with the particles that correspond to *too* or *even*. This of course follows from the exhaustive listing property of Hungarian Focus, but I wanted to state it explicitly, for the record.

The relevant constituents in (4c–f) are not in Focus position, yet their role in answers to questions confers them one of the discourse *functions* of (English) Focus These examples have been used to argue that 'Information Focus' is a broader concept than what is conveyed by Hungarian Focus. Roberts (1998) presents further Hungarian data where the Focus position is filled, but where there is a mismatch between what actually fills that position and what constituents do in fact count for question–answer congruence. These are instances of narrow Focus within a constituent and Focus projection. The particular problem these present for Hungarian is that they involve a mismatch between what counts for question–answer congruence (i.e. what is Intonational Focus) and what actually fills the Focus position.

In the first type of case the element that marks question–answer congruence may be properly contained in the constituent in Focus position:[6]

(5) a. János [a MAGAS Tátrába]$_F$ ment el t.
       J [the HIGH Tatra-into]$_F$ went pfx t
       "John went to the HIGH Tatras"
    b. *János [MAGAS]$_F$ ment el [a t Tátrába]
       John [HIGH]$_F$ went pfx [the t Tatra-into]
       — same —

(5a–b) show a classical case of pied-piping: there is narrow (intonational) Focus on the adjective *magas* 'high', yet the entire *NP* needs to be moved, because of the usual constraints on movement.

In the second type of case the constituent in Focus position may be properly contained in the constituent with the Focus function. This is the case when Focus projects, say, from an object *NP* to the *VP* as a whole:

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[6]In (5a–b), *t* marks the trace of the *NP* and the trace of the adjective, respectively.

(6) János [a Hamletet]$_F$ olvassa a kertben, nem pedig szunyókál.
     J [the Hamlet-Acc]$_F$ read+Def3Sg the garden-in, not and snooze-3Sg
     "John is reading [Hamlet]$_F$ in the garden, and not snoozing"

(Based on Kenesei (1998))

The attentive reader may have noticed that already example (2d) was an instance of such a mismatch, and of Focus projection: the prosodically prominent element was the head *N fegyenc* 'convict', but the entire *NP* has moved to the Focus position, and Focus in fact projected to the entire *NP*. So, whatever is encoded by Hungarian Focus, one positive finding (cf. Kenesei (1998), Roberts (1998)) is that it projects, just like Focus in English (and even with the same syntactic regularities as in English — cf. Selkirk (1996) on English and Kenesei (1998) on Hungarian).[7]

The first conclusion that can be drawn from these data is that intonational Focus in English and syntactic Focus in Hungarian have distinct functions, and, consequently, at least two notions of Focus are needed: Information Focus (English) and Contrastive Focus (or Operator Focus; Hungarian).[8] Another set of data seems to reinforce this conclusion and to suggest that intonationally marked Information Focus is the unmarked option crosslinguistically. (In the sense that syntactic Focus and the discourse function(s) it expresses is more 'marked', or less of a 'default' category than intonational Focus.)

(7) a. Kit hívtál meg?
         Who-Acc call-Past-2Sg Pfx
         "Whom have you invited?"
     b. [Jánost]$_F$ hívtam meg
         [John]$_F$ call-Past-1Sg Pfx
         "It is John whom I have invited"
     c. Meg-hívtam például "Jánost (Horvath (2002))
         Pfx-call-Past-1sg for-instance John-Acc
         "I've invited John, for instance"
     d. [Jánost]$_{CT}$ például meg-hívtam
         [John]$_{CT}$ for-instance pfx-call-Past-1sg
         "John (for instance) I've invited"

(7c-d) are repeated from (4), and will reappear again later. (7c-d) are partial answers to the question in (7a), as indicated by the parenthetical *például* 'for instance'. The proper name *János* serves as Information Focus, and it is intonationally (somewhat) marked, but it is not in the immediately preverbal Focus position.[9] (7c-d) serve as evidence that Hungarian too has a (more or less) purely prosodic way of marking Information Focus, which can be 'divorced' from the syntactic position of

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[7]For instance, Focus on an adjunct does not project:

(*iii*) János [a kertben]$_F$ olvas, OK: és nem a könyvtárban / OUT: nem pedig szunyókál
         John [the garden-in]$_F$ read-3Sg, OK: and not the library-in / OUT: not and snooze-3Sg
         OK: "It is in the garden that John is reading and not in the library"
         OUT: "It is in the garden that John is reading and not snoozing"

[8]Cf. É.Kiss (1998), Kenesei (1998) or Vallduvì and Vilkuna (1998).

[9]Intonational marking comes with the syntactic position in (7d), when *János* is in the so-called Contrastive Topic position. Fillers of this position have a fall-rise intonation contour, very much like a so-called B-accent (Jackendoff (1972)) in English. This intonation contour is a built-in property of Contrastive Topics, very much in the way that intonational prominence (eradicating prosody) and a rise–fall contour is a built-in property of Hungarian Focus. From the point of view of the syntax–prosody interface the interesting case is (7c), as this position does not come with a built-in intonational requirement; it is therefore the (Information) Focus status of its filler that necessitates intonational prominence. According to my intuitions this sentence is acceptable only if *János* is prosodically prominent, which is remarkable because postverbal positions in Hungarians do not usually receive prosodic prominence. Also, the sentence definitely improves when the parenthetical is inserted. According to Julia Horvath, who discusses this sentence at length in Horvath (2002), it is ungrammatical if (*i*) it lacks a parenthetical or if (*ii*) the relevant constituent is not uttered with the fall-rise intonation marking partial answers. See also comments in Roberts (1998) about other native speaker judgements.

Focus. Indeed the conclusion seems to be that prosodic and syntactic Focus-marking in fact serve to mark different dicourse functions. The question is whether the function encoded by syntactic Focus is independent from that of Information Focus (as argued in e.g. É.Kiss (1998) or Vallduvì and Vilkuna (1998)).

A closer look at the data reveals that Hungarian Operator Focus is a special case of Information Focus. One argument *against* the independence of Operator Focus and Information Focus concerns projection: as pointed out in Horvath (2002), Hungarian Focus is remarkably similar to English in situ Focus as regards the syntactic regularities that govern Focus projection (here shown in the examples on page 6). This similarity remains unaccounted for if Hungarian Operator Focus is conceived of as independent from Information Focus.

There is another argument in favour of the view that Information Focus subsumes Operator Focus concerns question–answer congruence. The point is, the filler of the Hungarian Focus position (as in (2b)) marks question–answer congruence, just like Information Focus. Since in Hungarian sentences that contain no syntactic Focus question–answer congruence can be marked by constituents in other positions, the question to ask at this point is whether these other positions can mark question-answer congruence when the Focus position is filled, or they do so only in the absence of Focus. That is, the question is whether the marking of question–answer congruence is reserved exclusively for the constituent in Focus position — **when present**. The following exchange is meant as a kind of experiment:

(8) a. Kit hívtál meg?
         Who-Acc invite-Past-2Sg pfx
         "Whom have you invited?"
     b. [Marit]$_T$ [telefonon]$_F$ hívtam meg, [másokat]$_F$ pedig [levélben]$_F$
         [Mary-Acc]$_T$ [tel.-on]$_F$ invite-Past+Def1Sg pfx, [other-Pl-Acc]$_T$ and [letter-in]$_F$
         "I've invited Mary [on the phone]$_F$, and others [in letters]$_F$"

In (8b), when taken as answer to (8a), the role of Information Focus is fulfilled by Topicalised constituents. The intended role for syntactic (Operator) Foci is to mark contrast: they are to contrast the manners in which invitations have been issued. If Operator Focus were independent from Information Focus, (8b) could serve as a congruent answer to (8a). My judgement however is that (8b) is **not** a congruent answer to (8a). If this dialogue is coherent at all, this is due to the participants' cooperative acceptance of a new question under discussion to which (8b) **is** a congruent answer. That is, dialogue coherence is rescued by covertly shifting the current question under discussion from (8a) to *How did you invite your guests?*.[10]

The conclusion from (8a–b) is that Operator Focus is a special case of Information Focus. This is further reinforced by the (default) prosodic structure of English constructions that are comparable to Hungarian Focus, viz it-clefts and pseudo-clefts. The observation (going back to Culicover and Rochemont (1983)) is that in these constructions (in the unmarked case) the clefted constituent marks question–answer congruence, and is therefore intonationally marked. That is, the clefted constituent has Information Focus status **and** has an exhaustive interpretation, as with Hungarian Focus.

(9) **Q** What did Jenna visit?
     a. It was [a private garden]$_F$ that Jenna visited.
     b. What Jenna visited was [a private garden]$_F$

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[10]A qualification: a constituent in Focus position may not be the *sole* marker of question–answer congruence, just in case the sentence answers a multiple *wh*-question.

(*iv.*) a. Ki hova ment?
             Who where-to went? / 'Who went where?'
         b. [János]$_{CT}$ [az Operába]$_F$, [Mari]$_T$ meg [színházba]$_F$
             [John]$_{CT}$ [the Opera-to]$_F$, [Mary]$_T$ and [theatre-to]$_F$
             '[John]$_{CT}$ went [to the Opera]$_F$ and [Mary]$_{CT}$ [to the theatre]$_F$'

Nevertheless, it remains a valid observation that if the Focus position is filled, it has to be (one of) the marker(s) of question–answer congruence — disregarding corrections or matters of pure contrast.

Accepting the conclusion that Operator Focus is a special case of Information Focus, the question is what processes or constraints are operative in addition to general principles of Focus-marking. For a semantic analysis, this implies (*i*) building upon an appropriate analysis of Information Focus in English and (*ii*) adding the relevant constraints in a compositional manner.

2 Comparisons

2.1 Very Briefly: Hungarian Focus and Alternatives

One property of Hungarian Focus is that it evokes a set of (contextually salient) alternatives, just like English Focus does (Rooth (1985)). The constituent in the Focus position will correspond to the maximal entity with some property P — from the set of these alternatives.

This could already be deduced from (6), where reading Hamlet was contrasted with snoozing, so these (non-)activities could be said to belong to the same set of alternatives. The obvious point is that this sentence, like the corresponding English pseudo-cleft, says that the only *contextually relevant* property of John is reading Hamlet.

Perhaps the most dramatic illustration of the need to work with a contextually restricted alternative set comes from Anna Szabolcsi (Szabolcsi (1983) — to be checked):

(10)   [Joseph Conrad]$_F$ született lengyelnek
      [Joseph Conrad]$_F$ was-born Polish-Dat
      "It was Joseph Conrad who was born Polish"

Given encyclopedic knowledge about the past and present population of Poland, (10) would be blatantly false if it said that Joseph Conrad is the only person who was ever born Polish. Another attractive property of this example is that the proper name *Joseph Conrad* facilitates the reconstruction of an alternative set even in the 'sterile' context of a linguistics paper: likely candidates are (sets of) émigré British authors or artists, or (émigré) authors/artists who made their mark in the Anglo-Saxon world, in (Western) Europe, and so on.

2.2 Focus and Presupposition

In the literature on English Focus there is a lively (and not satisfactorily settled) debate as to whether the Background in a so-called Focus-Background structure is presupposed or not (see for instance the papers debating Geurts and Sandt (2004) in the issue of Theoretical Linguistics dedicated to this matter). Hungarian Focus on the other hand triggers an existence presupposition. Accepting the assumption that Focus movement in Hungarian triggers a Background–Focus split that is comparable to the Background-Focus structure induced by English Focus, the observation is that in Hungarian the Background contains an existence presupposition. This can already be seen from (12b): (12b) is either an inappropriate retort to (12a), or it is appropriate only as a denial of the presupposition in (12a).[11] (This is to be understood in contrast with the English dialogue in (11), where **B**'s statement does not require the cancellation of a presupposition.)

(11)   a.   **A:** You know, John is in love with [Cathy]$_F$.
      b.   **B:** Wrong. He loves [no-one]$_F$.

(12)   a.   János [Marit]$_F$ szereti.
          "It is Mary John is in love with."
      b.   Nem (lehet), nem szeret ő senkit.
          Not (can-be), not loves he no-one-Acc.
          "This <u>*cannot be*</u>, he doesn't love anyone."

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[11]That (12b) is a denial of (12a) is reinforced by the fact that it improves with the addition of the modal verb *lehet* 'can be': with this version of (12b) speaker B disputes more than the claim that John loves Mary.

For the sake of orderliness, I will replicate here Mats Rooth's test for Focus and it-clefts (Rooth (1999)): (13) is Rooth's original test for English, and it at least shows a marked contrast between 'plain' English Focus and clefting. (The point of the example is that Focus, but not clefting is compatible with a preceding sentence, *I don't know*, that does not support the relevant sort of presupposition.)

(13) a. **A:** Has anyone taken my tennis racket?
      b1. **B:** I don't know. But if [Mary]$_F$ took it, you won't get it back in one piece.
      b2. **B:** I don't know. ??But if it was Mary who took it, ...

(Rooth (1999))

The corresponding Hungarian dialogue, where the answer contains (Operator) Focus, patterns with the English it-cleft.

(14) a. **A:** Elvitte valaki a teniszütőmet?
          Away-took+Def3Sg someone the tennis-racket-Poss1Sg-Acc?
          "Has anyone taken my tennis racket?"
      b. **B:** Nem tudom. # ??????? De ha [Mari]$_F$ vitte el, biztos visszaadja majd.
          Not know-1Sg. But if [Mary]$_F$ took+Def3Sg away, certainly back-give+Def3Sg later.
          "I don't know. But if it was Mary who took it, she'll certainly return it."

Finally, here is a set of traditional presupposition tests: the question test, the negation test, and the conditional test(s). It can be tested with native speakers that the sentences in (15) show the usual properties of presuppositions: the presupposition survives negation and (yes-no) questions; it survives in the antecedent of a conditional; Focus in the consequent of a conditional, can be filtered out by the antecedent.

(15) a. János [Marit]$_F$ szereti?
          "Is it Mary whom John loves?"
      b. János [nem Marit]$_F$ szereti, OK: hanem [Katit]$_F$, #nem szeret ő senkit
          "It is not Mary John loves" OK: "It is Cathy" out: "there is no-one he loves"
      c. Ha János [Marit]$_F$ szereti, a mamája örül
          "If it is Mary whom John loves, his mother is glad."
      d. Ha János szeret valakit, akkor [Marit]$_F$ szereti
          "If there is someone John loves, it is Mary he loves"

One can ask which of the known properties of Hungarian Focus has the status of a presupposition. Hungarian Focus is also said to be exhaustive, so one can ask whether this, too, is presupposed.

Usually, the property with respect to which the constituent in the Hungarian Focus position is exhaustive or maximal consists of the verb and material to the right of the verb (this has to do with the so-called Scope Principle, discussed next). In (16) below this property is reading (something) in the garden yesterday. Sometimes the property relative to which Focus is maximal will be called the Focus predicate.

(16) Minden diák [a Ulyssest]$_F$ olvasta tegnap a kertben
      Every student [the Ulysses-Acc]$_F$ read+Def3Sg yesterday the garden-in
      "For every student x: it was Ulysses x was reading in the garden yesterday"

The presuppositional status of exhaustivity, or maximality, is not straightforward to test. A possible test is the one in (17), but note that it does test for exhaustivity *as such*. As it has emerged from discussions with Hans Kamp, the infelicitousness of (17b) is not due to an attempt to negate exhaustiveness, but to the fact that the first sentence in (17b) does not provide a suitable antecedent for the presupposition of *is* 'too'.

(17) a. János [Marit]$_F$ szereti.
          "It is Mary whom John loves."
     b. ???János nem [Marit]$_F$ szereti, hanem Katit is.
          "It is not Mary whom John loves, it's Cathy too."

Exhaustivity information will be taken to be presuppositional, in spite of the lack of a decisive test. The reason for this choice is methodological: sentences with Focus constituents in Hungarian, like it-clefts in English (Percus (1997)), resemble specificational sentences with definite descriptions. In English the relative clause corresponds to the definite description, and in Hungarian it can be constructed from the Focus predicate. Like definites, these 'descriptions' can be said to have an existence and a uniqueness presupposition. According to Percus, English it-clefts contain a definite article at LF (that is spelled out in part as *it*). He argues that the following two English sentences are interchangeable:[12]

(18) a. It is John who has met Gagarin.
     b. The person who has met Gagarin is John.

   In a similar vein, the following two Hungarian sentences can be seen as interchangeable too:

(19) a. János az (a barátom), aki találkozott Gagarinnal
          John that (the friend-Poss1Sg), who(Rel) meet-Past3Sg Gagarin-with
          "John is the person/that friend of mine who has met Gagarin"
     b. [János]$_F$ találkozott Gagarinnal
          [John]$_F$ meet-Past-3Sg G-with
          "It is John who has met Gagarin"

2.3 Some More Differences: Does Hungarian Focus Involve an Operator?

This subsection presents some additional sets of data. They serve to introduce another issue, that of the operator status of Hungarian Focus. It is one of the traditional (syntactic) views on Hungarian Focus that it hosts a covert operator (É.Kiss (1987) or the papers on Hungarian from Abraham and de Meÿ (1986)). It has been posited for reasons of scope and c-command, for conveying an exhaustive listing construal to the constituent moved to Focus position and so on. That is to say, syntactic and semantic considerations alike have played a role in positing a covert maximality operator inhabiting the Focus position. This operator has sometimes been thought of essentially as the silent counterpart of *only*.[13] Here I would like to review these considerations by examining the behaviour of Hungarian Focus with respect to scope and binding, negative polarity items, Weak Crossover and crossentential pronominal anaphora.

Scope: According to conventional wisdom among Hungarian linguists, Hungarian Focus and its presupposition obey the so-called Scope Principle (É.Kiss (1994), among many other references): with preverbal positions in Hungarian linear order marks scope order. In the case of Focus, its presupposed and asserted component can both be subject to the Scope Principle. This is why there is alignment with the Scope Principle even if the Focus position is filled by a proper name. (20a-b) differ with respect to the scope of the presupposition triggered by Focus, and this results in truth-conditional differences. In (20a) the presupposition is in the scope of the universal quantifier, and the sentence presupposes that for every boy there is a unique person that that boy loves. (20b)

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[12]In this paper the 'structural' parallel between English it-clefts and Hungarian sentences with Focus will not be explored, but I would like to keep it in mind for future work. Hence these last paragraphs in the text, which do not fully fit into the main body of the paper. This exploration would not affect the technical aspects of the analysis offered here, anyway, but it would place it on a very different footing. The covert Focus operator in Hungarian would be seen as contributing two things: turning the Focus predicate into a definite description with the status of a presupposition and identifying the referent of the Focus constituent as the unique individual that satisfies that description. This view on Hungarian Focus is rather different from (*i*) simply positing a maximality operator or (*ii*) a covert counterpart of only. There are also interesting syntactic parallels, in the sense of **logical** syntax, as Hungarian simple sentences containing Focus would be seen as having a more complex internal structure than sentences without Focus.

[13]But see Kenesei, where it is rendered by means of the descriptor ι.

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presupposes that there is a unique person loved by every boy. That is, (20b) but not (20a) is compatible with a scenario where other persons are loved by some (but not all) of the boys.

(20) a. Minden fiú [Marit]$_F$ szereti.
          Every boy Mary-Acc love+Def3Sg.
          "For every boy x, it is Mary whom x loves."
      b. [Marit]$_F$ szereti minden fiú.
          [Mary-Acc]$_F$ love+Def3Sg every boy.
          "Mary is the person loved by every boy".

(21) illustrates the same point, but it presents the scope relations between Focus and quantifiers more clearly. This is because in (21a) the constituent in Focus position also has narrow scope with respect to the universal quantifier (when the third person Singular possessive suffix -a is construed as bound by the quantifier). This sentence presupposes that for every boy x there is someone that x loves, and asserts that (for every boy x) that person is x's little sister. Note that this bound reading is impossible for (21b), because the constituent in Focus position cannot be bound by the quantifier. This sentence can only have the reading that presupposes that there is a unique person loved by every boy, and asserts that that person is somebody's little sister.

(21) a. Minden fiú$_i$ [a kishúg-á$_i$-t]$_F$ szereti.
          Every boy$_i$ [the little-sister-Poss3Sg$_i$-Acc]$_F$ love+Def3Sg
          "For every boy x, it is x's little sister whom x loves."
      b. [A kishúg-á$_{*i}$-t]$_F$ szereti minden fiú$_i$
          [The little-sister-Poss3Sg$_{*i}$-Acc]$_F$ love+Def3Sg every boy
          "It is his little sister that every boy loves"

There is one exception with regard to the Scope Principle, and that is when a specific indefinite is Focus. Before presenting the relevant example, I would like to show a sentence where a non-specific indefinite is in the Focus position — in (22b) the indefinite *egy szemanta* 'a semanticist' has a non-specific construal, and it cannot outscope the conditional. In this sense (22b) is what one would expect from the workings of the Scope Principle. (22b) has an additional property, which will be discussed at the end of this subsection: the indefinite does not license the (intended) donkey pronoun in the consequent.

(22) a. If [a semanticist]$_F$ finds a kitten, he takes it home.
      b. Ha [egy szemantának]$_F$ van egy szamara, akkor ?ügyel rá.
          If [one sem-Dat]$_F$ is one donkey-Ps3Sg, then takes-care of-it
          Int.: "It it is a semanticist who owns a donkey, he takes care of it."
      c. BUT: Ha [egy ismerősöm]$_F$ kezeli a cicámat, akkor nyugodt vagyok.
             If [one acquaintance-Poss1Sg]$_F$ treats the cat-Poss1Sg-Acc, then assured am.
             "If it is a friend of mine who treats my cat I feel reassured."

The problem sentence for the Scope Principle is (22c): here the indefinite *egy ismerősöm* 'an acquaintance of mine' is specific in the sense of the speaker's having a particular individual in mind. This indefinite outscopes the conditional, so the sentence can be paraphrased as *A friend of mine, if it is he who treats my cat I feel reassured*. A question that arises at this point is whether the Hungarian Scope Principle is confined to scope-bearing elements such as determiners, the presupposition triggers corresponding to **too** and **even** and to adverbials. That is, one can further ask whether the indefinite in (22b) has wider scope than expected because what it outscopes is a connective (*ha* 'if'). But what we find is that specific indefinites in Focus can outscope universal quantifiers as well:

(23) Minden diák-o-m [egy híres színésznőbe]$_F$ szerelmes
      Every student-Poss1Sg [one famous actress-into]$_F$ in-love
      "Each student of mine, it is a famous actress he is in love with"

(23) is ambiguous, like (any one of) its English counterpart(s). It certainly has the reading where every student in question is in love with the same actress. One can therefore conclude from (23) that it is the property of Focused indefinites that they can disobey the Scope Principle, and that they can outscope connectives and determiners alike. (Examples similar to (23) can be constructed to show that indefinites in the Focus position can outscope adverbials and presupposition triggers on their left.)

A methodological conclusion from examples like (22b) and (23) is that they provide independent evidence for an in situ analysis of wide scope indefinites,[14] as an in situ analysis can be seen as a built-in requirement of semantic composition for Hungarian sentences with Focus.[15]

Binding by the Focus Variable: Hungarian Focus has been shown to participate in scope interactions — the next question is whether variables in the 'scope' of Focus can or must have bound readings. 'Bound' here is taken to mean that a variable is linked in some manner to the Focus constituent in the 'skeletal' representation of the Focus frame, or in the question that the sentence answers. For instance, the pronoun *he* counts as 'bound' by *John* in the sentence *John$_{Fi}$ was betrayed by the woman he$_i$ loved*, as an answer to the question *Who$_i$ was betrayed by the woman he$_i$ loved?*[16] The pronominal elements in the Hungarian examples below (the possessive suffix *-e* in (24a) and the Dative pronoun *neki* 'to him' in (24b)) **can** have bound readings in this sense, but this is by no means obligatory.[17]

(24)   a.   [Jánost$_i$]$_F$ árulta el a szerelm-e$_i$
              [John-Acc$_i$]$_F$ betray-Past+Def3Sg Pfx the love-Poss3Sg$_i$
              "It was John$_i$ who was betrayed by the woman he$_i$ loved"
    b.   [János$_i$]$_F$ értette a kérdést, amit feltettek neki$_i$
              [John$_i$]$_F$ understand-Past+Def3Sg the question-Acc, that-Acc pose-Past-3Pl to-him$_i$
              "It was John$_i$ who understood the question he$_i$ was asked"

Negative Polarity items: English *only* has been routinely subjected to NPI tests, to check whether it indeed involves a $MON \downarrow$ function, and, if it does, what kind of function that is. The likely candidates are negation outscoping an existential quantifier (Geach (1962), Geurts and Sandt (2004)), or the inverse of *all* (Horn, most recently in Horn (2003)), as schematised in (25) below. (25a–b), although logically equivalent, make different predictions concerning NPI licensing. If **only** corresponds to negation outscoping an existential quantifier, it is expected to license NPIs both in the Background and in the Focus; if it corresponds to a universal quantifier, then NPIs are expected only in the Background part.

(25) $\mathcal{O}\varphi \cong$
    a. $(\varphi\wedge)\neg\exists\psi.[\psi \wedge \psi \neq \varphi]$ Geach, Geurts and van der Sandt
    b. $(\varphi\wedge)\forall\psi.[\psi \rightarrow \psi = \varphi]$ Horn

There is little dispute about the fact that *only* licenses NPIs in the Background or Focus–Frame (here shown in (26)).

(26)   a.   Only [Freda]$_F$ has any money.
    b.   Only [Freda]$_F$ budged an inch
    c.   Only [Freda]$_F$ has (as much as) a red cent to her name

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[14]This can be a Choice Function or a Skolem Function analysis, cf. Reinhart (1997), Winter (1997) or Kratzer (1998b). See also Bende-Farkas and Kamp (forthcoming).

[15]An in situ analysis for wide scope Focussed elements is a requirement in that (in preteoretical terms) it would be odd to treat the trace or other place holder of a moved element as Focussed (cf. Rooth (1995)). That is to say, it would be inedequate to analyse (22b) as interchangeable with the (representation of the) informal paraphrase given earlier, viz *A friend of mine, if it is he who treats my cat I feel reassured*.

[16]The question of such bound readings goes back to Chomsky (1976), cf. Rooth (1996). Recently this issue has been revived in the work of Irene Heim, Angelika Kratzer, Arnim von Stechow and others, cf. Heim (2005), Kratzer (1998a) or von Stechow (2005).

[17]Actually, the bound reading seems to be preferred for (24a), but this is for stylistic reasons. This sentence, with this word order, is a stylistically awkward answer to the question without a bound reading, viz to *Who$_i$ was betrayed by the woman John$_j$ loved?*

According to Geurts and Sandt (2004), however, *only* (occasionally) licenses NPIs in the Focus-marked constituent as well, which is unexpected if *only* is taken to be the converse of *all*. In the examples they cite (these are actually due to Horn himself (from Horn (1996)), who admits they are counterexamples to his claim). In these examples *only* modifies definite *NP*s, and the NPIs are embedded in relative clauses within these *NP*s:[18]

(27) Only the students who had ever read anything about polarity passed.

For the purposes of this paper it is, I think, sufficient to categorise English *only* as a robust NPI licenser in the Background part and as an occasional NPI licenser in the Focus part.

If Hungarian Focus does indeed involve a covert operator comparable to *only*, it would be expected to resemble *only* as regards NPI licensing. But the finding is that Hungarian Focus on its own is not an NPI licenser.

The sentences in (28) show that NPIs in the Background are not licensed:

(28) ??? [János]$_F$ volt **valaha (is)** Párizsban/tud **egy kicsit is** teniszezni
       [John]$_F$ was ever (even) Paris/can play a little-Acc even tennis-Sfx-Inf
       "It is John who has ever been to Paris/who can play even a little tennis"

Examples with negative polarity items in the Focussed constituent are harder but not impossible to generate (regardless of their grammaticality status). In the following sentences the Focus constituent contains a kataphoric pronoun that is linked to the relative clause, and that relative clause will contain the negative polarity item whose licensing is at issue:

(29) a. ∗János [azzal]$_F$ táncolt, aki **valamit is** értett a menüetthez
          John [that-with]$_F$ danced, who[rel.] **anything too** understood the minuet-to
          "It was with the person who knew the tiniest bit about the minuet that John danced"
      b. ∗János [azt]$_F$ választotta, amelyik **egy fabatkát is** ér
          John [that-Acc]$_F$ choose-Past+Def3Sg, which[rel] **one wooden-cent-Acc too** is-worth
          "It is the one worth a red cent that John chose"

Another syntactic configuration to test NPI licensing within the Focus constituent is with so-called participial phrases:

(30) ???János [az angolul **valamit is** tudó titkárnőt]$_F$ választotta
       John [the English-md **something-Acc too** know-Pres.Part. secretary-Acc]$_F$ choose-Past+Def3Sg
       "It is the secretary who spoke the tiniest bit of English that John chose"

I know of one kind of case when an NPI in the Focus constituent is licensed in Hungarian. This is when it might be called self-licensing, in that it contains the negative particle *sem*.[19] Obviously, *sem* licenses the NPI it associates with. Expressions with *sem* (of which NPIs in the direct scope of negation are a proper subset) are Focussed 'by default' (cf. Surányi (2002)), so it is not surprising to see an NPI+*sem* expression in the Focus position, as in (31). It is obvious, however, that such cases are not revealing with regard to the licensing possibilities of Focus itself. (So it is mainly for the sake of a more complete check-list that they have been mentioned.)

(31) Ez a megoldás [fabatkát sem]$_F$ ér.
       This the solution [wooden-cent-Acc SEM]$_F$ is-worth
       "This solution is not worth even a red cent"

Unlike Focus on its own, Hungarian *csak* 'only' does license negative polarity items, both in the Background and in the Focus constituent:

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[18]There is a lively dispute on NPI licensing and *only* in the dedicated issue of Theoretical Linguistics; it is between Geurts and Sandt (2004) and Beaver (2004).

[19]*sem* is a merge of *is* 'too', 'even' and *nem* 'not', and in these contexts has the meaning 'not even'.

(32) a. [Csak János]$_F$ volt **valaha (is)** Párizsban
[Only John]$_F$ was ever (even) Paris-in
"It is only John who has ever been to Paris"

b. [Csak János]$_F$ ért **egy kicsit is** az asztrofizikához
[Only John]$_F$ understand-3Sg a little-Acc even the astrophysics-to
"It is only John who knows the tiniest bit about astrophysics"

(33) a. [Csak az a diák]$_F$ ment át, akinek **a legkisebb fogalma is** volt a polaritásról
Only that the student went through (pfx), who-Dat the tiniest notion-Poss3Sg IS
was the polarity-about
"Only those students passed who knew the tiniest bit/anything about polarity"

b. [Csak azt]$_F$ válaszd, ami **bár hajítófányit is** ér
Only that-Acc choose-Imp+Def2Sg, which[rel] at-least red-cent-Acc even worth
"Choose only that which is worth (even) a red cent"

The findings do not support the presence of a covert function with Hungarian Focus that is *MON* ↓ in any of its arguments: to repeat, Hungarian Focus without *csak* 'only' is not a good licenser of negative polarity items.[20]

Weak Crossover:

Hungarian Focus shows Weak Crossover effects, shown in (36), just like English Focus in (34) (cf. Rooth (1996) on English and Horvath (2002) on Hungarian). Weak Crossover is one of the standard tests for (covert) operators and quantifiers, yet I take (36) and (37) to be inconclusive.

(34) a. If he$_i$ loses his$_i$ keys John$_i$ gets [upset]$_F$
b. ??If he$_i$ loses his$_i$ keys [John$_i$]$_F$ gets upset
c. ???If he$_i$ loses his$_i$ keys it is John$_i$ who gets upset

(35) ???Her father told John that he has [a niece]$_F$

(36) a. Ha elveszíti a kulcs-á$_i$-t,   János$_i$ dühös.
If lose+Def3Sg the key-Poss3Sg-Acc,   John angry.
"If he$_i$ loses his key,   John is$_i$ angry."
b.   ???[János$_i$]$_F$ dühös.
     [John$_i$]$_F$ angry.
     it is John$_i$ who is angry."

(37) ???A témavezető-je$_i$ azt mondta, hogy [Mari$_i$]$_F$ kapott jelest
The supervisor-Poss3Sg$_i$ that-Acc said+Def3Sg, that [Mary$_i$]$_F$ received A+-Acc
"Her$_i$ supervisor said that it was [Mary$_i$]$_F$ who received an A+"

The heuristic value of (36) is diminished, because English Focus also shows Weak Crossover effects (as in (34) and (35) above), and the operator status of English Focus has not been satisfactorily established.[21] The conjecture is that there *is* some kind of variable binding involved, with Hungarian Focus at least, but it is different from the standard binding mechanisms seen with quantifiers.

Pronominal anaphora:

In Hungarian a constituent in Focus position does not readily license cross-sentential pronominal anaphora, modulo certain discourse relations. English seems to have no such prohibition, but it is

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[20]Sentences like (28) are acceptable as what might be termed as echo-answers to questions that themselves contain NPIs. In English this would involve question–answer pairs like the following: *Who has ever been to Paris? [John]$_F$ (has ever been to Paris.)*

[21]According to Hans Kamp (p.c.) there is a variation in the acceptability of (34b). If it answers the question *Who$_i$ gets upset if John$_j$ loses his$_j$ keys?* it is felt to be better than when it answers *Who$_i$ gets upset if he loses his$_i$ keys?*. That is to say, the 'bound' status of the pronoun (in the sense of Chomsky (1976)) is, of course, relevant here.

interesting to note that English it-clefts resemble Hungarian Focus in this respect — this is seen from the contrast between (38b) and (38c).[22]

(38) a. János [egy énekesnőbe]$_F$ szerelmes. #Kedvenc szerepe a Donna Elvira.
         John [one singer-into]$_F$ is-in-love-with. Favourite role-Ps3Sg the D. E.
         "It is a singer whom John loves. Her favourite role is Donna Elvira."
    b. John is in love with [a singer]$_F$. Her favourite role is Donna Elvira.
    c. It is a singer whom John loves. ?Her favourite role is Donna Elvira.

Pronominal links to Hungarian Focus are possible if the continuation stands in a certain discourse relation to the Focussed antecedent:

(39) a. János [egy énekesnőbe]$_F$ szerelmes.
         John [one singer-into]$_F$ is-in-love-with.
         "It is a singer John is in love with"
    b. [Tőle]$_F$ kapja az operajegyeket (Szabolcsi p.c.)
         [From-3Sg]$_F$ receive+Def3Sg the opera-ticket-Pl-Acc
         "It is from her that he recevies his opera tickets"
    c. Tegnap [moziba]$_F$ vitte, ma meg [színházba]$_F$
         Yesterday [cinema-to]$_F$ take-Past+Def3Sg, today and [theatre-to]$_F$
         "It is to the cinema that he took her yesterday; today it was the theatre"

The sentences in (39b–c) contain pronominal elements (the 3rd Person Singular suffix on the particle *-től* 'from' and on the verb *visz/vitte* 'take/(he) took (her)') that have the Focus of sentence (39a) as antecedent. Sentence (39b) serves as an evidential link to (39a): John's getting his opera tickets from the singer in question serves as evidence of their relationship. (39c) on the other hand stands in an Elaboration relation to (39a): going to the theatre and to the cinema elaborate on John's courtship. That is, both sentences are about the issue of John's relationship. By contrast, the infelicitous continuation in (38a) is not about John's relationship It involves a shift in Topic from the relationship to the person involved, so it cannot be said to elaborate on the initial issue. Instead, it can be seen as a change in issue (however minor and subtle).

These sentences have been discussed in such detail to help clarify what the contrast between (38a) and (39) is indicative of. In isolation, (38a) might be explained by the presence of a covert quantifier — but this leaves the acceptable anaphoric links in (39) unexplained. It is possible therefore that the ±licensing of pronominal anaphora by Hungarian Focus has to do with discourse structure: it is as if pronominal links are licensed in sentences that stand in a subordinating discourse relation to the sentence containing the antecedent.[23] Or, in terms of the theory of discourse structure in Roberts (1996), these sentences have to be related in some way to the question under discussion that the antecedent sentence is an answer to. That is to say, the sentences in (39) can be seen to answer questions that are subordinate to the question that (39a) answers.

On this view the intended anaphoric connection in (38a) is not possible because the continuation in that sentence is not subordinated to the first clause.

In sum, Hungarian Focus has not shown clear operator-like behaviour. Its scope interactions indicate that it is a scope-bearing element. Hungarian Focus has tested positive for Crossover and 'Focus-bound' reading of pronouns, just like English Intonational Focus: this calls for a new notion of binding that encompasses 'binding' by Focus.

The failure of Hungarian Focus to properly license negative polarity items indicates that its representation should involve neither universal quantification nor negation. As the following subsection

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[22]The English and Hungarian indefinites in (38) are to be understood as non-specific. If speakers intend to refer to particular individuals by means of these indefinites, and this is recognised by hearers, pronominal anaphora does indeed become possible. For instance, the sequence in (38c) is fully acceptable if the identity of the person loved by John is an established fact, and the new information contributed by the first sentence is that this person is a singer.

[23]This is the realm of Rhetorical Structure Theory (Mann and Thompson (1987)) or Segmented DRT (Asher and Lascarides (2003)); that is to say, a proper analysis of these phenomena is way beyond the scope of this paper. Yet these puzzles are sufficiently intriguing, I think, to warrant mention.

will show, what a Hungarian sentence containing Focus resembles is a specificational sentence: the main discourse referent in the Background is identified with the discourse referent contributed by Focus, and the Background itself resembles a definite description. (This will be made formally precise in Section 3.)   If a quantifier is a relation between semantic objects then Hungarian Focus can be seen as a quantifier in this very abstract sense, as can be said to express a relation between parts of a structured semantic representation, the Background and the Focus. On this view all Focus–sensitive particles, including *too* or *even*, can be conceived of as quantifiers, and cleft constructions too can be said to correspond to a tripartite structure similar to that induced by Focus. The observation that the data are suggestive of so far is that, with the exception of *only* and adverbs of quantification, perhaps Hungarian Focus is the one that comes closest to a quantifier in the usual sense. The remaining question is, of course, what factors are responsible for the enhanced quantifier-like properties of Hungarian Focus.

2.4   Hungarian Focus and Association with Only

Hungarian Focus has often been said to incorporate some covert version of only. (Only and too in a sans serif font stand for an operator in the semantic representation corresponding to the English words *only* and *too*, respectively.) This subsection takes a step back (temporarily setting aside the findings of the preceding subsection), and examines the relationship between Hungarian Focus and the particle *csak* 'only'. The main issue is whether overt *csak* is superfluous, a mere audible spell-out of the Focus 'operator'. A subsidiary issue is the locality of the relation between *csak* and Focus. As in the preceding subsection, the starting-point will be the behaviour of English Focus. First the syntactic issue of ±local association with only will be examined, and this will be followed by a discussion of whether an overt expression expressing only is redundant.

Before the main data can be discussed, the notion of Focus Phrases as associates of Focus-sensitive operators needs to be introduced. It has been argued in Drubig (1994) and Krifka (1996), Krifka (t.a.) that only in fact associates with expressions, so-called Focus Phrases, that may properly contain the Focus-marked expression (and that this is independent from the phenomenon of Focus projection). One of the main arguments comes from examples like (40) (MIT class notes by Irene Heim and Kai von Fintel, cited in Krifka (1996)):

(40)   a.   Only $[my]_F$ mother sends cookies.
   b.   Only $[[my]_F$ mother$]_{FP}$ sends cookies.

(40) says that the only person who sends cookies is the speaker's mother, not that the speaker is the only person whose mother sends cookies. The difference between the two readings becomes apparent when we consider alternative sets that contain the speaker's siblings. In such a situation the speaker's mother may be the only person with the relevant property, but it will be true of all the speaker's siblings that only *their* mother sends cookies.

On the Focus Phrase view Focus serves to establish a primary alternative set, and through this to restrict the domain of only. In the case of (40), Focus is seen to provide a set of people and only to quantify over these people's mothers.

It can be argued that Hungarian *csak* associates with Focus Phrases as well, since (40) can be duplicated in Hungarian:[24]

(41)   [Csak az ÉN mamám] küld csomagot
   [Only the I mummy-Poss1Sg] send package-Acc
   "Only $[[my]_F$ mother$]_{FP}$ sends care packages"

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[24]The exact bracketing and labelling in (41) is quite complex: The constituent moved to the preverbal Focus position is *az ÉN mamám* 'my mother', so it could be labelled as F or F_O (Operator Focus). The intonationally most prominent part of this constituent is *én* 'I' — it has Information Focus status, so it could be labelled with F_I. *Csak* 'only' can be assumed to be adjoined to the *DP* 'my mother'. According to most current theories of Hungarian syntax the *DP csak az ÉN mamám* 'only MY mother' occupies the Specifier position of *FocP*, headed by a F^0 head. It is therefore tempting to attach the label F_0 to the *DP containing csak* as well. Things become simpler if the intonationally prominent element is marked as F and the *DP* (without *csak*) is labelled *FP*.

What we see in (41) is in fact a case of pied piping: what would correspond to the Focus Phrase (the entire *NP*) has been moved to Focus, but the intonationally marked element is the pronoun *én*. As in the English case, quantification is over mothers.

Given that Hungarian Pied Piping examples like (41) were among the original motivating factors for the syntactic proposal in (Drubig (1994)) this example does not come as a surprise. The Dr. Svenson example (43a) below will be more interesting: On my understanding of one version of this sentence the role of syntactic Focus in the subordinate clause is to provide an indirect restriction of *csak* in the matrix clause.

It is well-known that the 'association' of English Focus with *only* need not be local, in that *only* can associate with a Focus-marked constituent across syntactic islands. ('Association with Focus' will be a descriptive term here, without any theoretical assumptions about the role of Focus in the interpretation of *only*.) That is, (42a) can mean that Bill is the only person such that Dr. Svenson will complain if he doesn't finish his job.

(42) a. Dr. Svenson will only complain if [Bill]$_F$ doesn't finish his job
      b. Dr. Svenson will only complain when [Bill]$_F$ leaves the lights on.

(Rooth (1996))

In Hungarian however *csak* 'only' has to combine with Focus locally. That is to say, *csak* in (43a) cannot associate with the proper name *Bill* in the subordinate clause. It can only associate with *akkor* 'then', which is a kataphoric pointer to the conditional clause. That is to say, the 'real' Focus and the associate of *csak* in the matrix clause of this example is the entire conditional clause:[25]

The sentence means that the only situation when Dr. Svenson gets angry is when Bill is lazy. The conditional itself may optionally contain a Focussed element, as marked with F_2 in parentheses, but the associate of *csak* in the matrix clause will invariably be the entire subordinate clause.[26]

(43) a. Dr. Svenson [csak akkor]$_{F_1}$ dühös, [ha [Bill]$_{(F_2)}$ lusta]$_{F_1}$
          Dr. Svenson [only then]$_{F_1}$ angry, [if [Bill]$_{(F_2)}$ lazy]$_{F_1}$
          "Dr. Svenson is angry only if [[Bill]$_{(F_2)}$ lazes about]$_{F_1}$"
      b. *#Dr. Svenson [csak dühös]$_{F_1}$, ha [Bill]$_{(F_2)}$ lusta
          Dr. Svenson [only angry]$_{F_1}$, if [Bill]$_{(F_2)}$ lazy
          Out: "Dr. Svenson is angry only if Bill lazes about"
          OK: "Dr. Svenson is [only angry]$_{F_1}$ if Bill$_{(F_2)}$ lazes about"
          (e.g. he does not write a letter of complaint to the dean)

[25]The 'official' Focus in the matrix clause of (43a) is of course the pronoun *akkor*, the local associate of *csak*. The impression that the entire subordinate clause serves as Focus can be accounted for with the help of the right mechanism for forward reference, by resolving the link between the pronoun and the subordinate clause. It is my conjecture that such a mechanism is necessary for a proper analysis of (43a), i.e. the content of the subordinate clause needs to be copied into the Focus slot of the representation.

Whether the associate of a resumptive pronoun inherits the discourse function of the pronoun is an interesting problem of its own. In the Hungarian case at hand the presence of the pronoun is a rescue strategy, as finite clauses can hardly ever occupy the Focus position. It is clear therefore that in this case the pronoun and its associate have the same discourse function. A somewhat different case has been discussed in Frey (2002), where it is shown that the resumptive pronoun in German Left Dislocation (Linksversetzung) constructions has a Topic discourse function. Frey argues further that the dislocated constituent 'inherits' this function, even when it can serve another function, i.e. when it is the Focus of a sentence. An example of this kind is (v) below, when it answers the question *Wen mag jeder?* 'Whom does everyone like?'.

(v)   [Den Hans]$_{FT}$, [den]$_T$ mag jeder
      [The Hans]$_{FT}$, [that-Acc]$_T$ like-3Sg everyone
      "Hans everyone likes"

[26]Example (43b) is included in order to show that *csak* has to have something adjacent to it with which it can associate. In a sentence that lacks the kataphoric pronoun in Focus position, such as (43b), *csak* associates with the adjective *dühös* 'angry', and the sentence says that Dr Svenson's only reaction to Bill's laziness is getting angry. One of the points concerning (43b) is that in Hungarian it is simply not possible to have *csak* adjoined to an empty Focus position that forms a chain with a (Focus) constituent elsewhere, so that *csak* can be seen to associate with that constituent via the chain. This is why the Hungarian counterparts of English sentences like (42a-b) are strings that are 'reanalysed' with *csak* associating with whatever constituent there is to its right.

If the proper name *Bill* in the subordinate clause of (43a) is Focussed, the sentence *can* mean that Bill is the only person whose laziness makes Dr. Svenson angry. But this is not because *csak* associates with *Bill*, as in the English case. Rather, this is because the Focus in the subordinate clause serves the same purpose as Focus in Focus Phrases: it constrains, indirectly, the domain of only.[27]

On my view *csak* in (43a) *invariably* associates with the entire conditional clause, which serves as a Focus Phrase (the brackets should be re-labelled accordingly), irrespective of whether the subordinate clause contains Focus or not. Accordingly, the sentence invariably answers the question *When is Dr. Svenson angry?*. On the Focus-less variant of the conditional clause the set of alternatives is not restricted (explicitly), so one might find such alternative propositions as *When his assistant leaves the lights on*, and so on. In the variant where *Bill* is in the Focus position of the subordinate clause the set of alternatives gets restricted by the condition *if x is lazy*, where x ranges over alternatives to *Bill*. This is supported by the observation that the Focus in the subordinate clause no longer has the exhaustive listing property: the sentence does not say that the only occasion when Dr. Svenson is angry is when Bill is **the** person who is lazy.[28] Rather, the role of Focus on *Bill* is to introduce alternatives (to Bill) and to thereby restrict the domain of alternative propositions that only ranges over. The loss of the exhaustive reading for the Focus in the subordinate clause is a problem for any bottom-up method of semantic composition that takes information structure into account; in this paper, too, it will be set aside as a matter for further research.

Semantics: whether *csak* 'only' is superfluous.

The presence of *csak* 'only' in Hungarian is something of a puzzle: if Hungarian Focus expresses exhaustive listing on its own, an operator like only seems to be superfluous. Only either should not be present with Focus at all, or it should be merely the audible spell-out of (some component of) Focus.

That is to say, the following are expected to be equivalent (pace implicatures and other discourse-related issues):

(44)   a.   János [Marit]$_F$ szereti.
              "It is Mary whom John loves."
       b.   János [csak Marit]$_F$ szereti.
              "It is only Mary whom John loves."

There are at least four pieces of evidence, however, that *csak* is not redundant, not counting the difference in negative polarity licensing that was discussed in part 2.3. One piece of evidence comes from identificational or specificational sentences of the form $[XP]_F$ *is* YP, where YP carries a uniqueness presupposition. In such Hungarian sentences *csak* XP_F is not interchangeable with XP_F:[29]

(45)   a.   [Moszkva]$_F$ Oroszország fővárosa
              [Moscow]$_F$ Russia capital-Poss3Sg
              [Moscow]$_F$ is the capital of Russia
       b.   ??[Csak Moszkva]$_F$ Oroszország fővárosa
              ??[Only Moscow]$_F$ Russia capital-Poss3Sg
              ??[Only Moscow]$_F$ is the capital of Russia

The contrast between (45a,b) clearly shows that *csak* 'only' is not merely a semantically void phonological addition to Hungarian Focus. What is also remarkable about this example is that Hungarian Focus behaves like English Focus here — which also suggests that, although Hungarian Focus ex-

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[27]To be fully precise, in (43a) the subordinate clause is the Focus Phrase. In case the subordinate clause contains no Focus, the clause will also serve as the Focus. In case the clause does contain Focus, the role of this embedded Focus will be comparable to narrow Focus on the (possessive) pronoun in (40) and (41).

[28]That is, Dr. Svenson can get angry if Bill and Peter both happen to be lazy.

[29](45b) is acceptable on a scalar reading, e.g. when there is a scale of prestige associated with Russian cities.

presses exhaustive listing, its representation should not be based on the representations of only from the literature.[30]

The second piece of evidence has to do with contradicting expectations (in dialogue), and is discussed in Balogh (2005):

(46) a. Ki-**k**-et hívtál meg?
          Who-**Pl**-Acc invite-Past-2Sg pfx?
          "Whom have you invited?" (Speaker's expectation: several people invited)
      b. [Csak János-t]$_F$ hívtam meg
          [Only John-Acc]$_F$ invite-Past+Def1Sg pfx
          "It is only John (and not more people that) I've invited"

In the exchange in (46), the questioner assumes or expects that at least two persons have been invited, as indicated by the plural suffix **-k** on the *wh*-word *ki* 'who'. (In Hungarian the unmarked number is the Singular. The presence of the Plural suffix **-k** is marked, and the suffix is (almost) never redundant.) The presence of *csak* in the answer serves to contradict the expectation of the question, *csak* effectively meaning 'not more than'. That this is so is supported by the case when *csak* is **not** felicitous: this is when the question lacks any implication of the expectation that more people satisfy the property queried. In simple terms, if the *wh*-phrase **ki** 'who' lacks any number marking, the question offers no clues concerning the speaker's expectations, and an answer with *csak* is therefore inappropriate (disregarding certain kinds of scalar readings, as with (45b)):

(47) a. Ki-∅-t hívtál meg?
          Who-Acc invite-Past-2Sg pfx?
          "Whom have you invited?" (No expectation expressed)
      b. #[Csak Jánost]$_F$ hívtam meg
           [Only John-Acc]$_F$ invite-Past+Def1Sg pfx
          "It is only John (and not more people that) I have invited"

The third piece of evidence is provided by sentences with multiple Foci:

(48) Q: Ki mit olvasott?
          Who what-Acc read? / "Who read what?"
      a. [János]$_F$ olvasta [a Ulyssest]$_F$
          [John]$_F$ read-Past-+Def3Sg [the Ulysses-Acc]$_F$
          "JOHN read ULYSSES" (No-one read anything else)
      b. [Csak János]$_F$ olvasta [a Ulyssest]$_F$
          [Only John]$_F$ read-Past-+Def3Sg [the Ulysses-Acc]$_F$
          "Only [John]$_F$ read [Ulysses]$_F$"
          (John is the only person such that it was Ulysses he read.
          The others may have read different books.)
      c. [Csak János]$_F$ olvasta [csak a Ulyssest]$_F$
          [Only John]$_F$ read-Past+Def3Sg [only the Ulysses-Acc]$_F$
          "Only John read only Ulysses"

If *csak* were merely the audible spell-out of Hungarian Focus, the answers in (48) should be all be equivalent, but they are not. (48a) alone is an exhaustive answer to the question under discussion. (48b) says that John is the only person such that it is Ulysses that he read. The sentence leaves it open whether Ulysses was read by others as well (and what the others read). (48c) on the other hand implies that the others in the alternative set have all read Ulysses **and** something else. (I take this sentence to mean that John is the only person who read only Ulysses and nothing else.)

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[30]Examples like (45) are discussed in É.Kiss (2001). Bende-Farkas (2005b) is a first study of the scenarios and contexts when (45b) **is** acceptable, even without a scalar (prestige) reading. Work on this issue will be resumed after the present paper has been finished.

The fourth piece of evidence for the non-redundancy of *csak* comes from negation. In Hungarian negated Focus is not interchangeable with the combination negation + *csak* + Focus. This is like English it-clefts: *it is not Mary* cannot be subsituted for *it is not only Mary*.

(49) a. János [nem Marit]$_F$ szereti (hanem [Katit]$_F$/hanem [Katit és Marit]$_F$).
          John [not Mary-Acc]$_F$ love+Def3Sg (but [Cathy-Acc]$_F$/but [Cathy-Acc and Mary-Acc]$_F$)
          "It is not Mary whom John loves (it is Cathy/it is Cathy AND Mary)."
          (John loves someone else and may or may not love Mary as well.)
      b. János [nem csak Marit]$_F$ szereti (#hanem [Katit]$_F$/hanem [Katit és Marit]$_F$).
          "It is not only Mary whom John loves (#it is Cathy/it is Cathy AND Mary)."
          (I.e., John loves Mary and someone else.)

What (49a) negates is that Mary is the unique greatest entity loved by John — this is compatible with Mary being *included* in this possibly non-atomic individual, e.g. if John loves, say, Mary and Cathy. But (49a) is compatible with John not loving Mary as well. (49b) on the other hand is true only if John loves Mary and someone else besides her. That is to say, Hungarian *csak* seems to behave the way that English *only* has been claimed to behave, i.e. it seems to presuppose the truth of its complement — or, at least, that John loves Mary. But then sentences that contain both Focus and *csak* present a pragmatic puzzle: on one reading they assert what they presuppose, which is supposed to be an anomaly.

3   The Analysis

3.1   Why English and Hungarian Focus

As stated in the Introduction, one of the aims of this paper is to present a semantic analysis of Hungarian (Operator) Focus that builds on a DRT-based analysis of English (Information) Focus (Kamp (2004)). So far this has been motivated by semantic and pragmatic considerations. Before one last motivating factor is introduced, the syntactic proposal of Horvath (2002), a brief summary of the arguments that have been discussed so far is in order.

Syntactic (Operator) Focus in Hungarian differs from intonational Focus in English in that (*i*) it is optional (cf. example (2)); (*ii*) when a sentence lacks a Focus constituent, question–answer congruence is marked by constituents in other positions (cf. (4)); that is to say, material in other syntactic positions can also have an Information Focus discourse function; (*iii*) the Focus constituent does not always match what has been queried: with Pied Piping it can contain the queried element (as in (5)) or it can be properly contained in the queried expression (as in the Focus Projection example (6)). These facts have been evoked in arguments for positing a discourse function for Hungarian Focus that is independent from that of Information Focus (such as *Kontrast* in Vallduvì and Vilkuna (1998)).

There are arguments however that maintain that Hungarian 'Operator' Focus is a more restricted subspecies of Information Focus. These arguments concern (*i*) the introduction of contextually salient alternatives, (*ii*) the similarity in the syntactic regularities of Focus projection and (*iii*) the marking of question–answer congruence. Upon this view Hungarian Focus marks one subclass of answers, viz exhaustive answers. A decisive example in this regard is (8), reproduced here as (50).

(50) a. Kit hívtál meg?
          Who-Acc invite-Past-2Sg pfx
          "Whom have you invited?"
      b. [Marit]$_T$ [telefonon]$_F$ hívtam meg, [másokat]$_F$ pedig [levélben]$_F$
          [Mary-Acc]$_T$ [tel.-on]$_F$ invite-Past+Def1Sg pfx, [other-Pl-Acc]$_T$ and [letter-in]$_F$
          "I've invited Mary [on the phone]$_F$, and others [in letters]$_F$"

As an answer to (50a) (50b) is a test, or experiment: Foci are there to mark contrast only, and it is material in the Topic positions that corresponds to the *wh*-word in the question. What (50b) tests is whether other constituents can have an Information Focus function if and when the Focus position

is filled. The judgement is that this is not possible: (50b) is not a congruent answer to (50a). The conclusion is that *when present*, Hungarian Focus has to mark question–answer congruence.[31]

Accepting that Hungarian Operator Focus is a more restricted subspecies of Information Focus one question is what distinctive properties it has and how these are to be represented. The differences between the two kinds of Focus relevant for a bottom-up semantic representation will have to be derived from (*i*) exhaustivity and (*ii*) the presuppositional status of the Background.

The proposal that the analysis of Hungarian Focus is a compositional combination of the analysis of English Focus and some independently motivated ingredients receives support from a syntactic argument, the proposal in Horvath (2002). According to Horvath, Hungarian Focus does not correspond to a single, unanalysed bundle of features. Some of these are assigned *in situ*, others are acquired, or added, along the way, so to speak. In particular, the feature corresponding to (English-type) Information Focus is assigned *in situ*, and can be marked solely with intonation:

(51)   Meghívtam (például) "Jánost
        Pfx-call-Past+Def1Sg (for-instance) John-Acc
        "I've invited [John]$_F$ for instance"

(Horvath (2002))

(51) (a repetition of (7c)) is a partial answer to a question like *Whom have you invited?*. The proper name *János* is left in situ, and intonationally it is slightly more prominent than the rest of the sentence (it would be less prominent if it had a different role in discourse). According to Horvath sentences with Focus in Hungarian originate in structures like (the syntactic representation of) (51). At the stage corresponding to (51) the information conveyed is on a par with what is conveyed by an English sentence with Focus on the direct object. The exhaustive listing property of 'Hungarian' Focus is 'acquired' as a result of merging with a covert exahustivity operator and the movement of this merged constituent to a designated preverbal position. Only, that position is not said to host a covert *Focus* head that attracts the relevant constituent and checks its *Focus* feature (contra Brody (1990) or Brody (1995) among many others, including Horvath's own (earlier) work — Horvath (1986)). Rather, according to Horvath, the head whose relevant feature drives the entire process serves to attract the maximality operator. The constituent with the Operator Focus function moves along with the operator, since it is a (possibly independent) property of this covert operator that it is sensitive to prosodic Focus, i.e. it is claimed by Horvath to require a Focus-marked element in its c-command domain.

According to Horvath movement occurs because the exhaustivity operator needs to check its operator feature. This is because on Horvath's view what is grammaticalized in Hungarian is not Operator Focus but exhaustivity (possibly divorced from Intonational Focus): "Hungarian appears to have 'grammaticalized' the notion of exhaustive identification (in a way that results in overt movement). Furthermore, the use of this 'grammaticalized', i.e. syntactically encoded, strategy apparently takes precedence over leaving the choice of exhaustive versus non-exhaustive interpretation open for pragmatics." (Horvath (2002):201.) That is, it is no accident that (51), with Information Focus in situ, can only serve as a partial answer. The other side of this coin: a constituent with exhaustive interpretation has to be preverbal (if it is the only such constituent):[32]

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[31]Whether it is the *sole* marker of question–answer congruence is another issue, mentioned briefly in the footnote on the page containing example (*iv*) , but this does not affect the main point.

[32]The distinguished Hungarian preverbal position will still be labelled F in the examples.

(52) a. [Csak Jánost]$_F$ hívták meg
    [Only John-Acc]$_F$ invite-Past+Def3Pl pfx
    "It was only John who was invited"

  b. *Meghívták/hívták meg csak Jánost
    Pfx-invite-Past+Def3Pl/invite-Past+Def3Pl pfx only John-Acc
    Intended: same as above.

  c. *Csak meghívták/hívták meg Jánost
    Only pfx-invite-Past+Def3Pl/invite-Past+Def3Pl pfx John-Acc
    Intended: same.

According to this proposal there is one kind of Focus, viz. prosodically marked Information Focus. What has become known as 'Hungarian' or Operator Focus is the result of the interaction of Information Focus with a grammaticalized (covert) exhaustivity operator (which happens to be Focus-sensitive). The 'canonical' word order in (52a) (disregarding *csak* 'only') is the result of the following mechanisms, according to Horvath (2002): First, the *DP János(t)* is merged with the covert operator *EI* — it is hypothesised that *EI* is affixal, and *EI + János* are merged into one *DP* (*EI* acting as a new specifier for the *DP*). Second, this complex *DP* is attracted to a designated preverbal position by a covert head EI^0. This is schematised in (53b) (where the verb too is assumed to have moved and merged with the covert head EI^0).

(53) a. [Jánost]$_F$ hívták meg
    [John-Acc]$_F$ invite-Past+Def3Sg pfx
    "It is John who was invited"

  b. $[[EI\ John_i]_{Spec}\ [[EI^0\ V_j]\ [\ldots t_j \ldots t_i \ldots]_{IP}]_{EI'}]_{EIP}$

An attractive corollary of Horvath's proposal is that the locality of association with *csak* 'only' follows from the preverbal placement of material with exhaustive interpretation: The ungrammaticality of (52c), where *csak* is preverbal and the Operator Focus postverbal, is due to the postverbal placement of Operator Focus. In other words, the ungrammaticality of such sentences is not related to any (stipulated, idiosyncratic) properties of *csak* 'only'.

This paper does not offer a detailed translation procedure from a syntactic representation of Hungarian sentences. But here is a hint of what may be going on when a *DP* is combined with the operator *EI*:

In (54) as a first attempt *EI* is translated as a function from Generalised Quantifiers to Generalised Quantifiers (**Q** is a variable of type *ett*). *P* is a placeholder for the 'Focus predicate' viz the property 'constructed' from the verb and material to the right of the verb. *EI* is divided into a presupposition and an assertion part. The assertion part simply says that the *P* can be predicated of **Q** (or, equivalently in an extensional context, the set that is the denotation of *P* is in the set of sets denoted by **Q**). The presupposition part, the argument of the presupposition operator ∂ (Beaver (1992) or van der Sandt (1992)) is like a definite description: *EI* presupposes that there is a unique x in alternative set C' that has property P.

(54) a. *János'* $\lambda P.[P(j)]$
  b. *EI* $\lambda \mathbf{Q}.\lambda P.[\partial(\exists!x.[P(x) \wedge C'(x)]) \wedge \mathbf{Q}(P)]$
  c. *EI*(*János'*) $\lambda P.[\partial(\exists C'.\exists!x.[P(x) \wedge C'(x)]) \wedge P(j)]$

What (54) says is that there is a unique individual in C' with property P, and that P can also be predicated of **Q**.

There are two problems with (54). One problem is that in principle it allows any generalised quantifier to combine with *EI*. This is illustrated in (55), where the argument of *EI* is the universal quantifier *minden fiú* 'every boy'.

(55) a. (*Minden fiú*)' $\lambda P.\forall y.[boy'(y) \rightarrow P(y)]$
  b. *EI* $\lambda \mathbf{Q}.\lambda P.[\partial(\exists!x.[P(x) \wedge C'(x)]) \wedge \mathbf{Q}(P)]$
  c. *EI*((*minden fiú*)') $\lambda P.[\partial(\exists!x.[P(x) \wedge C'(x)]) \wedge \forall y.[boy(y) \rightarrow P(y)]]$

(55) should be inadmissible, because universal quantifiers cannot (normally) occupy the Hungarian Focus position. When they do, it is for correction or contrast (see also the Appendix). (55c) could be ruled out because it cannot relate the variable in the presupposition part to the term contributed by the Focused expression: the variable bound by the universal quantifier is not accessible for identification with the variable introduced in the presupposition part. The observation is that only those DPs are acceptable in the Focus position that provide an 'accessible' term (see also Szabolcsi (1997a)). This in turn entails that cases where Focus marks question–answer congruence will have a different analysis from cases where it marks corrections. (As shown in the Appendix, universal quantifiers are acceptable in the Hungarian Focus position in corrections.)

Another problem with (54) is that the translation of Focus is not restricted by the alternative set C'. (54c) says, in consequence, that there is a unique entity in C' with property P, and that John (too) has P. If C' is chosen in such a way that John is not a member of C' this is plain wrong.

(56) below presents an improvement, where EI takes individual level (type e) arguments, and where the Focus variable is also restricted to C'. In (56b) EI presupposes the existence of alternative set C' and the existence of a unique member of C' with property P. The Focus variable, y, is also restricted to C'. The assertion part simply identifies the term contributed by Focus with the unique individual (in C') that has P.

(56) a. *János'* j
      b. *EI* $\lambda y.\lambda P.[\partial(\exists C'.\exists!x.[P(x) \wedge C'(x) \wedge C'(y)]) \wedge x = y]$
      c. *EI*(*János'*) $\lambda P.[\partial(\exists!x.[P(x) \wedge C'(x) \wedge C'(j)]) \wedge x = j]$

(56) could be further improved in two ways (but this is not pursued here). First, the underlying logic should be a dynamic logic for plurals, for obvious reasons: to account for plurals in Focus and for the resolution of the alternative set. Second, (56) should be made fully compositional. By this I mean the following: in (56) the alternative set C' is introduced by the operator EI, and this is not a correct move, as alternatives are to be introduced by the Focus-marked expression itself. Thus the Focus-marked constituent ought to have a Focus translation, which would presuppose the existence of an alternative set (with the Focus-marked expression denoting a member of this set). The operator EI would then pick up this set. These amendments will be left for future work, since this paper has not aimed to provide a fully worked out fragment for Hungarian. What needs to be retained is (i) the observation that the Focus-marked expression needs to provide a term that is 'accessible' for identification with the variable introduced in the presupposition part, and, (ii) that it is possible to decompose the contribution of operator Focus so that one of the components will rely on the contribution of Information Focus.

3.2   Presupposition and Focus in DRT

The choice for a DRT-based analysis of Hungarian Focus (apart from the over-all advantages of a dynamic framework, such as the possibility to represent anaphoric and presuppositional connections) is motivated by the fact that such an analysis integrates the representation of alternative values into the 'ordinary' representation of the sentence, in a manner similar to the integration of presuppositions with assertional information. This is consonant with the Hungarian facts, where a Focus construction with a special meaning is to be composed with other elements of the sentence that retain their 'ordinary' meaning. This was already implicit in the brief formal exercise from the preceding subsection.

In the first principled formal semantic analysis (Szabolcsi (1981)) of Hungarian Focus Anna Szabolcsi devised a strategy that is orthogonal to the strategy developed for English Focus in Rooth (1985). In Rooth's Alternative Semantics every expression is assigned an ordinary and a Focus semantic value, while it receives only one translation at the level of semantic representation. The ordinary semantic value of a sentence is the usual one, and its Focus semantic value is a set of alternative propositions (this is built up compositionally from the Focus semantic values of the constituents in the sentence). This captures the intuition that in English the main contribution of Focus is to introduce (contextually salient) alternatives. In Alternative Semantics, a sentence like $[Mary]_F$ *saw Peter* receives a standard translation into Intensional Logic (which will differ from that

of *Mary saw* $[Peter]_F$ only in the placement of the label $_F$ and some meta-variables). The ordinary semantic value of the translation of this sentence is a proposition, and its Focus semantic value is the set of propositions $\{see(p)(a)|a \in C_M\}$, i.e. the set of propositions of the form *a saw Peter*, where a is an alternative to Mary.

In Szabolcsi's analysis of Hungarian it is only the Background (or Focus predicate) that is assigned a special translation, and that is integrated into the (standard) translation of the rest of the sentence. (The semantic value of a sentence is invariably a proposition; there are no Focus semantic **values** in this analysis.) For instance, the Verb Phrase from sentence (57) can be translated as in (58b). (The translation rule, couched in a Montague fragment for Hungarian, is actually much more complex, but it amounts to saying that a sentence like (57) is translated as *For all x who saw Peter, x is identical to Mary.*)

(57) $[Mária]_F$ látta Pétert
$[Mary]_F$ see-Past+Def3Sg Peter-Acc
"It was Mary who saw John"

(58) a. $(saw\ Peter)'$ $\lambda x.[see(p)(x)]$
      b. $([saw\ Peter]_B)'$ $\lambda x.[see(p)(x) \land \forall z.[see(p)(z) \to z = x]]$

Szabolcsi motivated her choice of assigning a special translation to the Background by not wanting Noun Phrases like *Mária* to vary in meaning depending on whether they are Focus or not. But she did choose to assign a special meaning to one element of what is now termed as the Background–Focus structure. — Szabolcsi could have chosen to assign a special translation to the constituent in Focus position, as in (59b) (and leave the Background intact):

(59) a. $Mária'$ $\lambda P.[P(m)]$
      b. $([Mária]_F)'$ $\lambda P.[P(m) \land \forall x.[P(x) \to x = m]]$

The assignment of a special Focus translation to one member of the Focus–Background structure and its integration with the ordinary translation of the rest of the sentence is motivated by the truth-conditional import of Hungarian Focus. An additional motivating factor is its participation in scope interactions. The DRT-based framework for the analysis of English Focus that this paper builds upon is also representational — not only because DRT in general is represenational, but for two additional reasons as well: (i) The explicit representation and contextual resolution of alternatives in pieces of discourse like *"Which of his professors did John invite?" "He invited Himmel and Erde"*. (ii) The so-called Tanglewood example in Kratzer (1991), which shows that for copying (or whatever mechanism one considers for ellipsis) one needs to mark or access Focus already in the representation language.[33]

The DRT-based analysis of Focus that this paper builds upon (Kamp (2004)) is representational, in that the Focus-Background division is encoded in the DR structure assigned to the sentence. Originally this framework was intended as a translation of Alternative Semantics into DRT, but some differences have emerged, and the resulting framework can be regarded as a hybrid between Alternative Semantics and a Structured Meaning approach to Focus. The central property of this analysis is that Focus–Background structures are represented directly as ordered triples of DRSs, and are embedded into the DRS representing the (shell of the) sentence. This facilitates operations on the DRS-es that make up the Focus–Background structure, as well as operations involving discourse referents. The interpretation of such structured DRSs yields semantic objects that are for all practical purposes equivalent to those yielded by Alternative Semantics, but the availability of a level of discourse representation allows for greater transparency and for a tighter integration with context — which, given the context-sensitivity of Focus, is an added benefit.

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[33]Kratzer's original example is the following: *I only went to* $[Tanglewood]_F$ *because you did.* Here *only* has to range over properties of the form *x went to a because you went to a*, where *a* ranges over alternatives to *Tanglewood*. That is, the domain of *only* cannot contain properties of the form *x went to a because you went to b*, and Alternative Semantics cannot exclude these.

The representation of Focus in this framework resembles that of presuppositions (van der Sandt (1992), Kamp (2001) or Genabith et al. (t.a.)), in that it involves a so-called preliminary representation that requires further processing. Typically, such processing is triggered by Focus-sensitive operators (or a covert illocutionary operator *ASSERT* in the case of free Focus, cf. Jacobs (1984), Krifka (1992)). Focus is assumed to introduce an alternative set (this is presupposed information), and additional processing can lead to contextual resolution of this piece of information. To illustrate with an example, a sentence like (60a) is represented as (60b).

(60) a. John is in love with $[\text{Mary}]_F$.

b. $\left\langle \{ P_{John}, P_{Mary}\} , \left\langle \begin{array}{|l|} \hline C'\ \alpha \\ C'(m) \\ C'(\alpha) \\ m \# \alpha \\ \hline \end{array}, \left\langle \begin{array}{|l|} \hline s\ \beta \\ n \subseteq s \\ s: love(j, \beta) \\ C'(\beta) \\ \hline \end{array}, \boxed{\beta = m} \right\rangle \right\rangle \right\rangle$
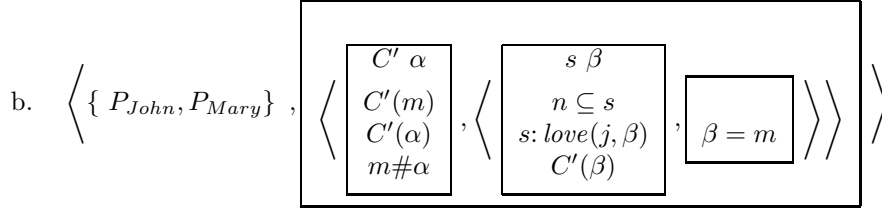
The sentence at this stage is represented as a so-called preliminary DRS (Genabith et al. (t.a.)), i.e. an ordered pair $\langle \mathcal{K}_1, K_2 \rangle$, where $\mathcal{K}_1$ is a set of presuppositions (here it consists of the presuppositions triggered by the proper names *John* and *Mary*). The second member of the pair is the assertional part; in this case it contains the Focus-Background division. This division corresponds to a triple $\langle \mathcal{R}, \langle \mathcal{B}, \mathcal{F} \rangle \rangle$. $\mathcal{R}$, the 'restrictor', introduces the alternative set C', and serves as a restriction on the other two members of the triple. C' is said to contain the referent(s) of the Focus-marked expression and at least one other member. (# is mereological distinctness, subsuming $\in$ and $\subseteq$.)[34]

$\mathcal{B}$ is the Background, or Focus-frame, and corresponds to a set of propositions of the form *John loves β*, where β, a discourse referent unspecified for plurality or atomicity, is chosen from C'

$\mathcal{F}$ corresponds to Focus. It can be seen as another set of propositions of the form *John loves β*, with the additional requirement that β equal m, the discourse referent contributed by the Focus-marked constituent.[35] Focus-sensitive operators take the triple $\langle \mathcal{R}, \langle \mathcal{B}, \mathcal{F} \rangle \rangle$ as arguments.

It can be seen that this is a hybrid representation between Rooth's Alternative Semantics and a Structured Meanings approach (Krifka (1993), Krifka (1996), von Stechow (1991), among others). It resembles the Structured Meanings approach in that alternatives are of the same type as the Focus-marked constituent and the Focus–Background division is represented in the DRS-language. But (60b) preserves one of the core properties of Alternative Semantics in that the arguments of Focus-sensitive operators are uniformly sets of propositions.

A more complex example follows in (61), involving interactions with anaphora resolution and presuppositions triggered by the Focus-sensitive operator *too*. Assuming that (61a) is a continuation of (60a), we want the Focus-marked expressions *Mary* and *Cathy* to evoke the same set of alternatives. Also, the presupposition triggered by *too* will be resolved to (60a) (there is a person distinct from Cathy whom John loves, and it is Mary).

(61) And (he is in love) with $[\text{Cathy}]_F$ too.

Assuming that *too*, like *only*, is Focus-sensitive, it can be taken to express a relation between the Focus semantic value and the ordinary semantic value of its complement. Or, in terms of the

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[34]A fully accurate version of (60b) would have involved a covert illocutionary operator *ASSERT*, taking the Focus-frame–Focus structure as its argument, in a manner analogous to the Focus-sensitive operator $\mathcal{T}$ contributed by *too* in (62) and (63) below. Since the *ASSERT* operator is mostly vacuous, it has been omitted from (60b).

In (60b) the representation of the restrictor is simplified. In a fully accurate representation it too would be split into a presupposition and an assertion part, with the alternative set discourse referent C' and the 'other' discourse referent α introduced in the presupposition. The assertion part would contain the information that the discourse referent contributed by the Focus-marked expression also has property C'.

[35]In this case $\mathcal{F}$ corresponds to a singleton set of propositions, so it is not quite clear why it should be taken to correspond to a *set* of propositions. The need for this comes from cases when the Focus-marked constituent is a plural (on a distributive reading).

DRT-based analysis of Focus presented here, this relation holds between the Focus-DRS and the Focus frame (the set of propositions $P(\beta)$, where P is obtained by λ-abstraction over the Focus term (say, α), and β is in the alternative set of α). In this setting, *too* asserts that $P(\alpha)$ is true, and presupposes that there is a β distinct from α in the set of alternatives that makes P true.

Assuming that sentence (61) follows (60a) in discourse, a DRT-representation of these two sentences allows not only the resolution of the presupposition triggered by *too*, but also the identification of the alternative sets evoked by the two Foci.

At this point it is important to recall a relevant property of presupposition resolution in DRT: it involves a series of operations on discourse representations, starting from a so-called preliminary representation that typically contains unresolved material, and optimally terminating in a final representation that contains no free discourse referents. Ultimately, a representation containing a Focus-frame–Focus structure can also be reduced to an 'ordinary' representation, by justifying the alternative set presupposition and by eliminating the Focus-frame DRS, or by embedding it in the structure contributed by a non-vacuous Focus-sensitive operator.[36]

In the case of (61), assuming that it is uttered in the context of (60a), the initial stage is shown in (62), and the pre-final stage in (63). (A full representation of these two sentences involves in fact the merge of (62) with the representation (60b) of the first sentence. The reader is trusted to envisage this complex DRS.)

(62) $\left\langle \{\, P_{Cathy}, P_{he} \,\}\ ,\ \mathcal{T}\left(\left\langle \begin{array}{|l|} \hline C''\ \alpha' \\ \hline C''(\alpha') \\ C''(c) \\ c\#\alpha' \\ \hline \end{array} \left\langle \begin{array}{|l|} \hline \beta'\ s' \\ \hline n \subseteq s' \\ C''(\beta') \\ s'\!:love(j,\beta') \\ \hline \end{array}, \begin{array}{|l|} \hline \beta' = c \\ \hline \end{array} \right\rangle \right\rangle \right) \right\rangle$

(62) is a preliminary DRS whose presupposition set contains the presupposition for the proper name *Cathy* and that for the pronoun *he*. The assertion slot contains the Focus–Focus Frame division that now serves as the argument of the Focus-sensitive operator $\mathcal{T}$ contributed by *too*. This operator has not been 'unpacked', so at this stage there is no information about the presupposition it triggers.

(63) $\left\langle \left\{ \left\langle \left\{ \begin{array}{|l|} \hline C''\ \alpha' \\ \hline C''(c) \\ C''(c) \\ c\#\alpha' \\ \hline \end{array} \right\}, \begin{array}{|l|} \hline \beta'\ s' \\ \hline C''(\beta)\ \ n \subseteq s' \\ s'\!:love(j,\beta') \\ \beta' \neq c \\ \hline \end{array} \right\rangle \right\}, \begin{array}{|l|} \hline c\ u\ s'' \\ \hline Cathy(c) \\ u = j \\ n \subseteq s'' \\ s''\!:love(j,c) \\ \hline \end{array} \right\rangle$

(63) shows the stage where the proper name and pronominal presuppositions have been resolved, and the operator $\mathcal{T}$ has been 'unpacked'. (63) follows conventional wisdom about the contribution of *too* (in other words it is not intended to take a stand as to the proper analysis of this particle): *Too* is taken to contribute a presupposition to the effect that John loves someone who is not Cathy. The additional ingredient here is that this someone has to be from the alternative set triggered by Focus. (63) does not represent the final DRS stage: The alternative set C'' can be identified with C', the alternative set introduced by Focus in the preceding sentence, and β' can be identified with Mary (this identification is possible in virtue of their membership in the same set $C'(= C'')$. The point of showing both (62) and (63) was to stress that DRS-es that correspond to presupposed content or those that represent the Focus-frame are routinely merged with other DRS-es, resulting in a reduced representation. In particular, such reductions are possible even if these DRS-es are the arguments of Focus-sensitive operators.

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[36]It is an open question whether the Focus-frame is 'consumed' and thus rendered inactive by Focus-sensitive operators, or whether it needs to remain accessible for further operators. There is a significant amount of evidence that the same Focus-frame–Focus structure can be accessed by several operators (cf. Krifka (1992) or Riester (2003)). An instance of such multiply-accessed Focus would be *In St. Petersburg officers always escorted only [ballerinas]$_F$*. At this point however it is not clear (*i*) when this has to be so and (*ii*) what the relevant constraints and regularities are. In this paper I will just assume that a Focus-frame–Focus structure can be reduced to an ordinary representation, much in the same way that presupposition justification leads to simpler and simpler structures.

3.3 Hungarian Focus in DRT

The DRT-based analysis of Hungarian Focus proposed in this paper builds on the representation of English Focus presented in the preceding subsection. That is, the representation of the sentence will contain a preliminary structure partitioned into Restrictor, Background and Focus. Only, the Background representation will be said to have the status of an existence presupposition. In addition, abstraction will be used to convey exhaustivity.

Focus-Background structures for Hungarian can be embedded within complex DRS conditions. This will be the case when such structures are within the scope of a quantifier, as in (20), repeated here with a slight variation as (64a):

(64) a. Minden fiú [Mariba]$_F$ szerelmes.
          Every boy [Mary-into]$_F$ in-love
          "For every boy x, there is a unique maximal entity α_x that x is in love with,
          and α_x is identical to Mary"
      b. [Mariba]$_F$ szerelmes minden fiú
          [Mary-into]$_F$ in-love every boy
          "It is Mary whom every boy loves"

In (64a–b) the presupposition triggered by Focus is involved in a scope interaction with the quantifier *minden* 'every'. In (64a) *minden* has scope over the presupposition, so part of the sentence's meaning is that for every boy there is a unique greatest entity that boy is in love with. Focus then identifies that entity with Mary. In (64b) the presupposition scopes over *minden*, so part of the meaning of *this* sentence is that there is a unique greatest entity loved by every boy. Thus (64b) can be true if there is someone else who is loved by some, but not all, of the boys; (64a) is false on this scenario.[37] In English it is less clear whether such ambiguities are systematic and whether they should be explicitly represented:[38]

(65) a. Every student is in love with [Mary]$_F$
      b. Every student loves [Mary]$_F$ too.

Returning to the basic issue of representing Hungarian Focus in DRT the first thing to note that there are a variety of options. The simplest option, which is noted here merely for the sake of providing a convenient point of departure, is to lump together the presupposition(s) triggered by Focus with the other presuppositions of the sentence. Thus the representation of the simple sentence (66) would be according to the following schema: $\langle \{P_j, P_m, P_{C'}, P_{\exists!}\}, \alpha = m \rangle$. This corresponds to a DRS with a single set of presuppositions; this set contains the proper name presuppositions, the alternative set presupposition ($P_{C'}$) and the presupposition that there is a unique greatest entity that is loved by John ($P_{\exists!}$). The assertional part merely identifies the Focus variable α with Mary. It is easy to see, however, that things are not this simple: this way of representing things does not do justice to the fact that Focus is a special presupposition trigger; moreover, there is no clue in this schema that we have to do with a Focus frame–Focus structure here, not to mention the fact that the scope-bearing nature of Focus has been totally ignored (as the presupposition of Focus has been placed on a par with triggers from syntactic positions that could in principle outscope the

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[37]To be fully accurate: the presuppositions of both sentences are compatible with the boys being in love with several people. In that case a group will satisfy the existence and maximality presupposition. So, on the scenario that every boy is in love with a group of people, (64b) will be false if (*i*) Mary is not in each of these groups or (*ii*) Mary is not the only person who is in each of these groups. (*i*) corresponds to, say, every boy being in love with two (different) Hollywood actresses, and most, but not all, of the boys being in love with Mary as well. (*ii*) holds when, for instance, every boy is in love with his high school flame, with Mary and with Sue.

[38]The English Passive sentence [*Mary*]$_F$ *is loved by every boy* has a scopal structure comparable to that in (64b): here the universal quantifier is made part of the Focus–Background structure. So English surface syntax can help disambiguate scope relations that involve Focus–Background structures, beside disambiguating better-studied quantificational or presuppositional structures. But the fact remains that in an English sentence with unmarked word order such as (65a) these relations are not marked explicitly.

presupposition of Focus.)[39] So, clearly, the presupposition(s) of Focus may need to be embedded deeper in a nested structure. This nested structure would be quite simple to build, as the Scope Principle makes things rather transparent at the syntax–semantics interface for Hungarian.

(66) János [Mariba]$_F$ szerelmes.
        John [Mary-into]$_F$ in-love
        "It is Mary John is in love with."

A structure that provides several levels of embedding is (67) as a representation of (66). Its complexity is motivated by the need to provide sufficient depth for more complex scope relations.

(67)
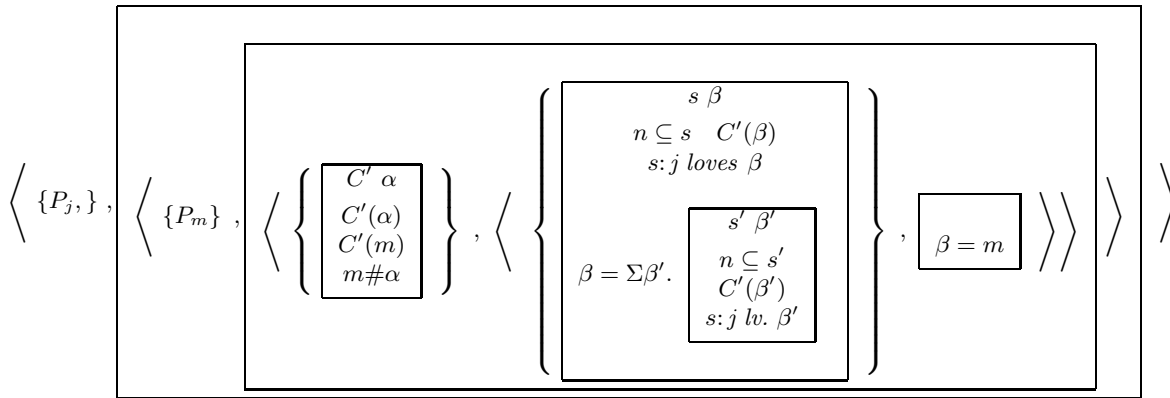
(67) is a nested structure, where preliminary DRS-es are embedded in a DRS. First of all, the proper name presupposition P_m for Focus is introduced one level deeper than that for the Topic *John*. For proper names it is irrelevant at what level their presupposition is introduced. If, however, Focus contained a bound variable, nesting becomes relevant (two examples are shown in the footnote example (*vi*)). Another feature of (67) is that it contains an ordered triple very similar to a Focus-frame–Focus structure used in representing English intonational Focus. The representation in (66) differs from the 'English' case in that the Background has the status of a presupposition: it is presupposed that there is a unique greatest entity β that satisfies the Focus predicate. Following standard practice in DRT (Kamp and Reyle (1993)) the choice of the Greek letter indicates that this referent can be either an atom or a plural discourse referent. This does not contradict the uniqueness/maximality requirement imposed by Focus. This requirement can be satisfied by atoms as well as individual sums (which may in turn have non-atomic parts). In this respect this component of the meaning of Focus is like the definite article (which is free to combine with singular or plural N's) or the relative pronoun *what* in free relatives (*what I read was Hamlet and the Sonnets*).

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[39]Here is an example where the presupposition of Focus clearly needs to be nested in the presupposition triggered by a constituent on its left:

(*vi*) *a.*   János is [Marit]$_F$ szereti.
                John too [Mary-Acc]$_F$ love+Def3Sg
                Paraphrase: There is a unique greatest entity John loves, namely, Mary. It is presupposed
                that there is someone else s.t. there is a unique greatest entity this person loves and that this entity
                is identical to Mary.

        b.   A lányok is [a nagymamájukra]$_F$ emlékeznek szívesen
                The girl-Pl too [the granny-Poss3Pl]$_F$ recall-3Pl fondly
                "The girls too, it is their granny they remember fondly"

In (*vi*a) the presuppositions triggered by Focus are to be embedded into that triggered by *is* 'too'. In (*vi*b) we need multiple embeddings, since the assertion part of Focus (*x*'s granny) needs to be in the scope of the distributed plural *a lányok* 'the girls'. So, this is a sentence that presupposes first that for every girl in a given collection of girls, there is a unique individual whom that girl remembers fondly (assertion: it is the girl's granny); another presupposition is that there is a distinct group with the same property. As with (*vi*a), the presupposition of *is* 'too' takes scope over the presuppositions triggered by Focus.

From the point of view of coverage, (67) is quite adequate, as the following sub-subsection will show. What remains to be elucidated is a methodological point concerning its status in a series of DR-structures beginning with the initial preliminary representation and ending in a much reduced structure where (most) presuppositions have been justified. So, the next sub-subsection will discuss some empirical issues concerning the predictions based on (67), and the sub-subsection after that will return to the issue of what nested structures there can be in the representation of information structure and whether the procedures available for Hungarian may be different for those that are available for English.

3.3.1 Matters of Coverage

Hungarian Focus has been shown in Section 1 to be incompatible with *is* 'too' and (*még...*) *is* 'even'. It is easy to see why (67) precludes combination with *too*: the abstraction operator Σ and the presupposition triggered by *too* are simply incompatible, a representation containing both (involving the same disocurse referent(s)) would involve a contradiction.

Another property of (67) is that it correctly excludes quantifying *NP*s from occupying the Focus position, since such the DRS-conditions contributed by such *NP*s do not provide a suitable discourse referent for abstraction.[40]

(67) is also suitable for modelling the interactions of Hungarian Focus with negation. In Hungarian the negative particle *nem* can precede or follow Focus (cf. Szabolcsi (1996) or Szabolcsi (2005)):

(68) a. János [Marit]$_F$ nem hívta meg
          John [Mary-Acc]$_F$ not invite-Past+Def3Sg pfx
          "It is Mary whom John hasn't invited"
      b. János nem [Marit]$_F$ hívta meg
          John not [Mary-Acc]$_F$ invite-Past+Def3Sg pfx
          "It is not Mary whom John has invited"
      c. János nem [Marit]$_F$ nem hívta meg
          John not [Mary-Acc]$_F$ not invite-Past+Def3Sg pfx
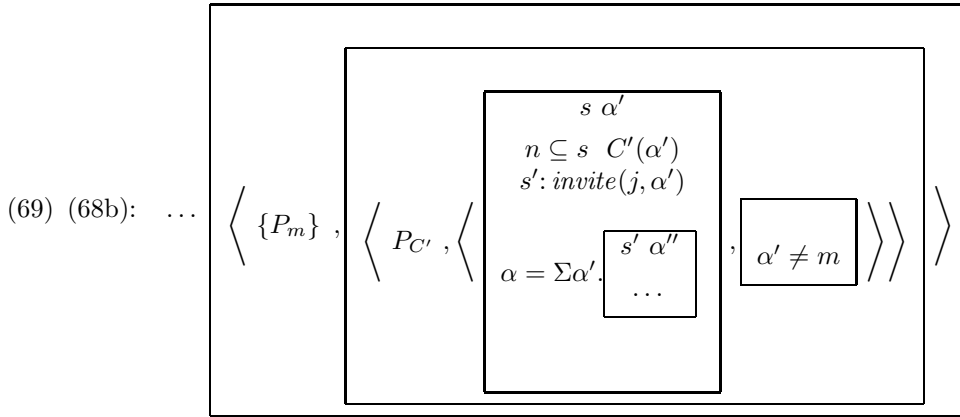   "It is not Mary whom John hasn't invited/failed to invite"

(68), by the way, supports the Focus-triggered presupposition–assertion division of sentence material that I have been operating with, viz. that the verb and post-verbal material (in most of the cases) are presuppositional, and material preceding Focus is assertional. (This can be checked by looking at what information survives negation.)

In (68a) *nem* 'not' is part of the presupposition: it is asserted that there is a unique greatest entity whom John hasn't invited. In (68b) *nem* is part of the assertion: it is presupposed that there is a unique greatest entity John has invited, and it is asserted that this entity is not Mary. In (68c) preverbal *nem* is part of the assertion, and postverbal *nem* is part of the presupposition. So, what one has here is one syntactic unit with two negative particles that do not interfere with each other. (68c) is neither a double negation sentence nor a negative concord or negative spread sentence. My conclusion is that the two negations are independent because they occur in separate, proposition-level units within the representation of the sentence.[41]

A representation of (68a) is simple to construct: the only novel feature of such a representation (as compared to (67)) is that the Focus-frame contains a negated event: it is presupposed that there is someone whom John did not invite. What merits some discussion in this paper is (68b). The question is what exactly is negated by such a sentence. (Where (68c) is concerned, a first, sketchy discussion is found in Bende-Farkas (2005a); further work is to be done after *this* paper is completed.)

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[40]In Hungarian there are several, rather marked, cases when a quantifying *NP* can in fact occur in Focus position. These are listed in the Appendix.

[41]In fact, English *not* in it-clefts behaves in the same manner, as seen from the English paraphrases of (68). The observation is that negation in the presupposition does not interact with negation in the assertion part. See also Bende-Farkas (2005a).

(69) (68b): ... $\left\langle \{P_m\} \, , \left\langle P_{C'} \, , \left\langle \boxed{\begin{array}{c} s \ \alpha' \\ \hline n \subseteq s \quad C'(\alpha') \\ s': invite(j, \alpha') \\ \\ \alpha = \Sigma\alpha'.\boxed{\begin{array}{c} s' \ \alpha'' \\ \hline \dots \end{array}} \end{array}} \, , \boxed{\alpha' \neq m} \right\rangle \right\rangle \right\rangle$

The point with (68b) is that it can be true if John has invited Mary, but she is not the only one with this property. So what is in effect negated is that Mary is identical to the greatest entity that John has invited. Indeed, (68b) can be continued with either sentence from (70a,b) (a repetition of (49a)):

(70)   (János nem [Marit]$_F$ hívta meg,)
         ("It is not Mary whom John invite-Past+Def3Sg pfx,)
   a.   hanem [Katit]$_F$
         but Cathy-Acc / but Cathy"
   b.   hanem [Katit és Marit]$_F$
         but [Cathy-Acc and Mary-Acc]$_F$ / but Cathy AND Mary"

(70b) illustrates a property of Hungarian Focus that has received little mention so far: that plurals, or groups, can also satisfy the presupposition triggered by Focus. In the case of (70b), the maximal entity invited by John is identical to the sum of Cathy and Mary. This obvious fact is recorded here to emphasise how helpful the theory of plurality has been for theories of information structure. At the time when there was no adequate theory of plurality semanticists could not explain in a principled manner why the truth of *It is not Mary whom John loves* is compatible with the truth of *John loves Mary*.
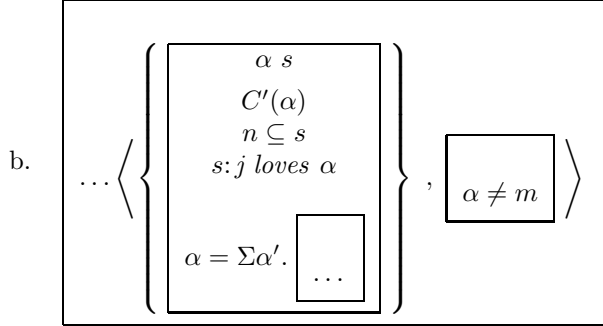
At this point one can return to the puzzle presented by example (17), repeated here as (71). (17) was originally intended as a test for the presuppositional status of exhaustivity information with Hungarian Focus. As it turns out, (17) is not an appropriate test: the oddness of (71b) as a denial of (71a) has to do with the fact that the first clause does not provide a suitable antecedent for the presupposition of *is* 'too'. To wit, (71c) (which on this scenario is intended to express the same information as (71b)) is perfectly acceptable.

(71) a.   János [Marit]$_F$ szereti.
           John [Mary-Acc]$_F$ love+Def3Sg
           "It is Mary whom John loves."
      b.   ???János nem [Marit]$_F$ szereti, hanem Katit is.
             John not [Mary]$_F$ love+Def3Sg, but Cathy-Acc too
             "It is not Mary whom John loves, it is Cathy too."
      c.   János nem [Marit]$_F$ szereti, hanem [Katit és Marit]$_F$
           John not [Mary-Acc]$_F$ love+Def3Sg, but [Cathy-Acc and Mary-Acc]$_F$
           "It is not Mary John loves, it is Mary AND Cathy"

Given these observations the question to ask now is why the first sentence of (71b) does not provide a suitable antecedent for the presupposition of too. (Given the earlier remarks on plurals and Focus it is clear why (71c) is perfectly acceptable: the sentence presupposes that there is a greatest α loved by John, and asserts that (*i*) α is not Mary, and (*ii*) α is identical to the sum of Mary and Cathy.) The reason for the inappropriateness of (71b) is that the condition on the discourse entity

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presupposed in the first sentence, i.e. exhaustiveness or maximality, contradicts a condition entailed by the second sentence.

(72) a. János nem [Marit]$_F$ szereti ('It is not Mary whom John loves'):

b.
$$\ldots \left\langle \left\{ \begin{array}{c} \boxed{\begin{array}{c} \alpha \ s \\ C'(\alpha) \\ n \subseteq s \\ s\!:\!j \ loves \ \alpha \\ \\ \alpha = \Sigma\alpha'. \boxed{\ldots} \end{array}} \end{array} \right\} , \boxed{\alpha \neq m} \right\rangle$$

(73) a. (János) Katit is (szereti) ('John loves Cathy too')

b.
$$\left\langle \left\{ P_{pro}, P_{Cathy}, \boxed{\begin{array}{c} s' \ \alpha' \\ C'(\alpha') \\ n \subseteq s' \\ s'\!:\!u \ loves \ \alpha' \\ \alpha' \neq c \end{array}} \right\} , \boxed{\begin{array}{c} s'' \\ n \subseteq s'' \\ s''\!:\!j \ loves \ c \end{array}} \right\rangle$$
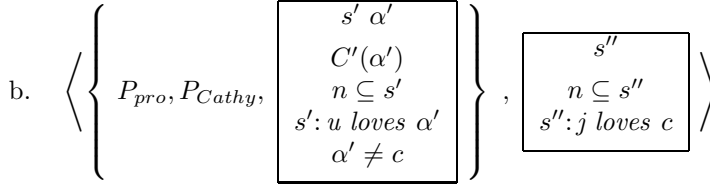
The representation of the first sentence in (71b) is (72b). This representation says that there is a greatest entity α loved by John, and α is not identical to Mary. The continuation is represented in (73b). Assuming 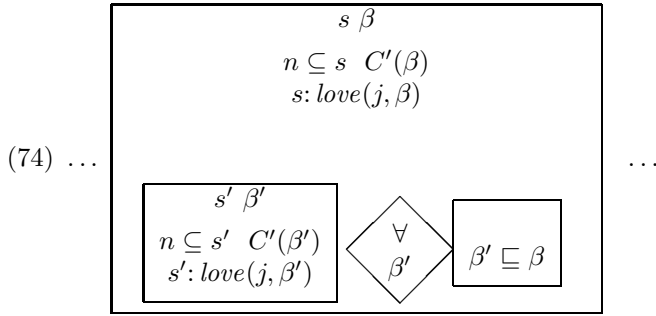that Hungarian *is* 'too' conforms to standard representations of too, (73b) asserts that John loves Cathy and presupposes that there is an α' that is not identical to Cathy, and that John loves α'. Since too triggers an anaphoric presupposition, α' needs an antecedent. The intended antecedent, the discourse referent α introduced in the Background slot of the Focus structure in (72b) cannot be linked to α', because this would contradict the assertion part of (73b). In (72b) the condition on α is that it is the greatest entity with the relevant property, whereas (73b) entails that α' is not the greatest entity with this property. It is to be noted that *Mari* is not a suitable antecedent either, because (72) doesn't say whether John loves Mary or not.[42]

If (71b) *were* acceptable, one would need a more sophisticated mechanism that could express that both Cathy and the other person loved by John (represented as α' here) are part of the maximal entity (α) that is loved by John. But such a mechanism is lacking, i.e. it is not part of the meaning of too, and (71b) is not acceptable.

One last empirical issue (with some methodological implications) is the use of the abstraction operator Σ and its possible replacement with a universal quantifier. If Σ were replaced with a universal quantifier, the Focus-frame presupposition of (67) would be represented as in (74):

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[42]Two side remarks:

1. If the Background slot of Hungarian Focus structures contained only an existence presupposition, this would not be a suitable antecedent for too either. It seems to me that some existence statements are too 'weak' to act as antecedents for too: *John is in love with someone. ???And he loves Cathy too.*

2. If Focus in (71b) were modified by *csak* 'only' then *is* 'too' *would* have an antecedent: *Mari*. But this is not surprising, and can be regarded as yet another case where Focus on its own is different from Focus modified by *csak* 'only'.

$$(74) \quad \dots \quad \boxed{\begin{array}{l} s \ \ \beta \\[4pt] n \subseteq s \ \ C'(\beta) \\ s\colon love(j,\beta) \\[8pt] \boxed{\begin{array}{l} s' \ \ \beta' \\ n \subseteq s' \ \ C'(\beta') \\ s'\colon love(j,\beta') \end{array}} \ \ \diamondsuit{\substack{\forall \\ \beta'}} \ \ \boxed{\beta' \sqsubseteq \beta} \end{array}} \quad \dots$$

(74) says that there is some β John loves, and for every β' from the alternative set loved by John, β' is part of β — the relation $\sqsubseteq$, viz 'part-of', is necessary for plurals or sums in Focus. It is easy to see how (this part of) (67) is equivalent to (74). (67) says that β is the greatest entity of which it holds that it is loved by John — the existence of such a greatest entity is guaranteed, however, if the domain of individuals is taken to be a Boolean semilattice. (One of the defining properties of such a lattice is that for any two elements x, y there is a z that is larger than x, y; or, almost equivalently, the join operation is defined for any x, y.) (74) is then entailed by (67): if β is the join of all the β's loved by John, then all these β's will be subsumed by β.

The problem with (74) has to do with its form, namely, that it relies on universal quantification to express maximality, just like one of the standard versions of only. This is undesirable after all the empirical evidence presented in Section 2. The abstraction operator Σ is more appropriate for Hungarian Focus, because it involves no commitment to, say, negative polarity licensing.

At this point one could ask whether *any* representation of maximality or exhaustivity is necessary: If one assumes that the domain of individuals has the structure of a Boolean join semilattice (an assumption needed independently for plurals, cf. Link (1983)) then any two individuals a, b will have a join c. Therefore, if it is presupposed that there is at least one individual a with property P (as with Hungarian Focus) there will also be a greatest individual, say, a_{max}, with property P. As the existence of such a greatest individual is guaranteed by the model, encoding maximality or exhaustivity in the semantic representation seems redundant. My answer to this is that the Background presupposition of Hungarian Focus is very much like a definite description that represents an issue or question in discourse. That is, '*the P*' is assumed to be present in the discourse in some form, and this is what the Background presupposition relates to. It *is* therefore to represent exhaustivity in *some* manner, and for this purpose the abstraction operator Σ is better suited than universal quantification.

Also, if the existence of a greatest entity with a given property were merely entailed information, it would be hard to explain why a Hungarian sentence with Focus cannot be followed or completed with a sentence containing an *XP* modified by *too*, in the manner of the exchange (2c)–(3). Another aspect of the problem of maximality/exhaustivity is highlighted by the following example:

(75) a. Egy borospohár eltörött az este.
          One wine-glass pfx-break-Past the evening
          "A wine glass broke last night."
      b. Mari búslakodik, mert [a nagymama pohara]$_F$ törött el.
          Mary sad-devb-sfx, because [the granny glass-Poss3Sg]$_F$ break-Past pfx
          "Mary is sad, because it was granny's glass that broke"

(76) A wine glass broke last night. It had been expensive.

(75) is the Hungarian variant (with Focus) of (76), a well-known example from the Dynamic Semantic literature (Heim (1990)). In the English original the indefinite in the first sentence is picked up by a pronoun in the second sentence, and what is at issue is whether the pronoun imposes a uniqueness requirement on the indefinite (this requirement can be qualified as depending on — suitably restricted — context). It has not been unanimously accepted, however, that pronominal anaphora (in English) does impose such a uniqueness or maximality requirement on the antecedent, whereas the Hungarian example (75), where the anaphoric element is Focus, does carry a strong and robust uniqueness implication.

3.3.2 Procedures

At the beginning of this subsection the representation (67) (repeated here as (77)) was said to be adequate from a descriptive point of view, but it was said to require some methodological clarification.

(77)

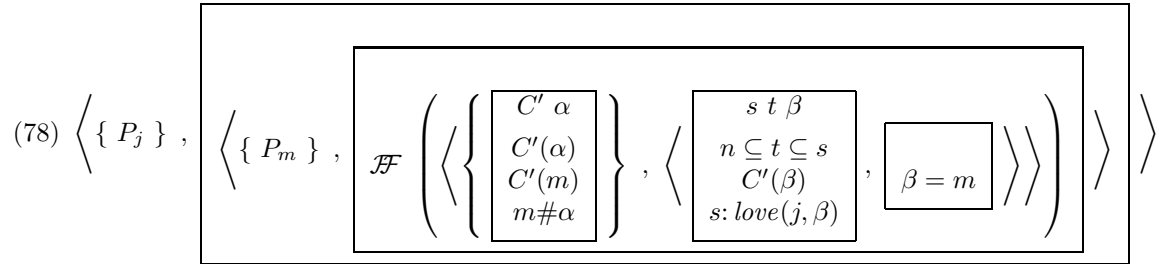$$\left\langle \{P_j,\} , \left\langle \{P_m\} , \left\langle \left\{ \boxed{\begin{array}{l} \underline{C'\ \alpha} \\ C'(\alpha) \\ C'(m) \\ m\#\alpha \end{array}} \right\} , \left\langle \left\{ \boxed{\begin{array}{c} \underline{s\ \beta} \\ n \subseteq s \quad C'(\beta) \\ s\!: j\ loves\ \beta \\ \\ \boxed{\begin{array}{c} \underline{s'\ \beta'} \\ n \subseteq s' \\ C'(\beta') \\ s\!: j\ lv.\ \beta' \end{array}} \\ \beta = \Sigma\beta'. \end{array}} \right\} , \left\langle \boxed{\beta = m} \right\rangle \right\rangle \right\rangle \right\rangle \right\rangle$$
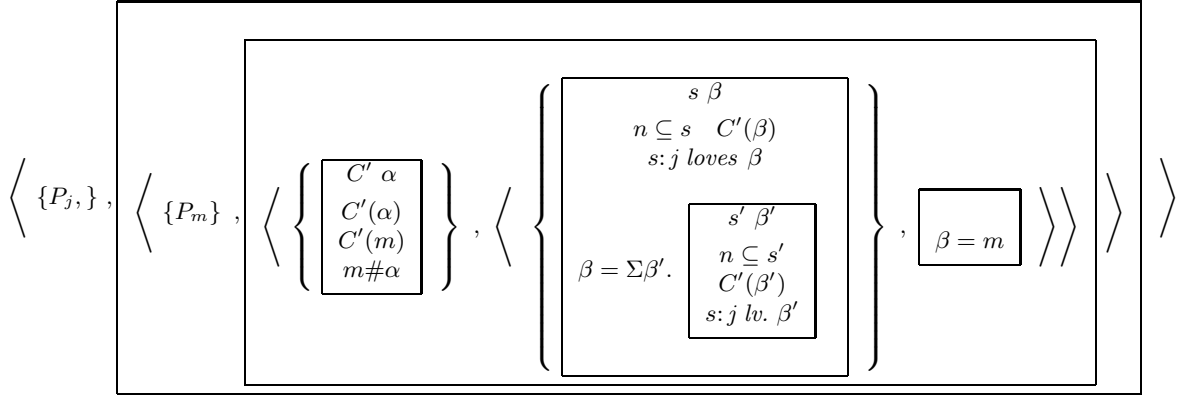
(77) follows quite closely the representation of English Focus: it too involves a restrictor-DRS (the presupposition about the alternative set C'), a Focus-frame DRS and a Focus-DRS. The main structural difference is that the Focus-frame DRS is a presupposition, not a set of propositions. (Clearly, it can be conceived of as the existential closure of the appropriate set of propositions.)

One point that needs clarification with (77) is where it comes from, so to speak. One way to derive (77) (following a suggestion by Hans Kamp, p.c.) is to say that it **is** the outcome of the interaction of (*i*) an 'English' style Focus-frame–Focus structure and (*ii*) a Focus operator $\mathscr{FF}$ that takes such a structure as input, just as the Focus-sensitive operators $\mathcal{O}, \mathcal{T}$ (only, too) take Focus-frame–Focus structures as input in the case of English. $\mathscr{FF}$ is then seen as the semantic counterpart of the covert operator *EI* from Horvath (2002). (77) is therefore taken to derive from (78); it is the representation obtained after spelling out the contribution of the operator $\mathscr{FF}$.

$$(78)\ \left\langle \{ P_j \} , \left\langle \{ P_m \} , \mathscr{FF}\left(\left\langle \left\{ \boxed{\begin{array}{l} \underline{C'\ \alpha} \\ C'(\alpha) \\ C'(m) \\ m\#\alpha \end{array}} \right\} , \left\langle \boxed{\begin{array}{c} \underline{s\ t\ \beta} \\ n \subseteq t \subseteq s \\ C'(\beta) \\ s\!: love(j,\beta) \end{array}} , \boxed{\beta = m} \right\rangle \right\rangle \right) \right\rangle \right\rangle$$

So, the source of (77) is the representation in (78): the Focus operator $\mathscr{FF}$ takes a Focus-frame–Focus representation as input, where the Focus-frame is a set of propositions, as in the English case. The contribution of $\mathscr{FF}$ is to convert the original Focus-frame into an existence presupposition, and to add a maximality condition (expressed with the abstraction operator Σ) stating that the Focus variable β is maximal with respect to the main predication expressed by the Focus-frame. This is, I believe a genuinely compositional representation of the contribution of Hungarian Focus, and one that serves to capture the intuition behind the proposal in Horvath (2002).

The structure in (77) can serve as input to one Focus-sensitive operator, viz. to only. Clearly, it cannot serve as input to too or even, on account of a clash of meanings.[43] But the point is that in principle another Focus-sensitive operator can operate on (77), in a manner similar to the multiple

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[43] I wish to stay noncommittal about the Focus-sensitive status of adverbs of quantification, for the reasons discussed in Beaver and Clark (2003). I also wish to stay noncommittal where the status of negation is concerned.

operators–one Focus examples discussed in Krifka (1992) and Riester (2003). A proper analysis of Hungarian *csak* 'only' and its interaction with Focus will be left for further research.

I would like to conclude this paper with some speculations on the operator status of Hungarian Focus. In 2.3 (as part of the discussion on Hungarian Focus licensing pronominal anaphora) it was briefly mentioned that Hungarian Focus can be regarded as an operator or quantifier in the general sense that it expresses a particular relation between two (propositional) units of semantic representation. I would like to propose, at least as a working hypothesis for future work, that this is what prevents the Background presupposition of Hungarian Focus from being fully integrated, or 'absorbed', into context. What I mean is the following: According to DRT-based theories of presupposition justification, a presuppositional DRS can, in the ideal case, be reduced, or eliminated, by (*i*) anaphora resolution, by (*ii*) accommodation or a (*iii*) mixture of the two. In the case of Hungarian Focus (at least part of) the Background presupposition is retained, for structural reasons, to provide the domain of the relevant relation. Perhaps this can be made clearer with an analogy: often, the restrictor or nuclear scope of a quantifier is made up of anaphoric material, and then this material is needed (even when in a reduced form) for structural reasons. That is to say, the justification of presuppositions preserves the tripartite structure of quantifiers.

My conjecture is that something similar may be the case with Hungarian Focus, in that the ordered pair $\langle \mathcal{B}, \mathcal{F} \rangle$ is preserved even when part of the Background presupposition is justifiable in context. A simple example to illustrate this conjecture is (79).

(79) a. Mindig csak egy pápa van/lehet
          (Always only one pope is/can-be)
          "There is always (only) one pope"
      b. (Jelenleg) [Benedek]$_F$ a pápa
          (At-present) [Bendict]$_F$ the pope
          "At present it is Benedict who is the pope"

(79b) has an existence and maximality presupposition (contributed by Focus and by the definite article) that there is exactly one person who is now pope. This presupposition can be bridged to (79a) (via existential instantiation); the alternative set contributed by Focus can also be resolved (say, to the set of candidates to the papacy). In this situation the representation of the Background-DRS for (79b) could be eliminated, along with the entire Focus-frame–Focus structure of this sentence. What would be left would be (80):

(80)
$$
\boxed{
\begin{array}{c}
u^{=1}\ s\ b\ X \\
\hline
candidate^*(X) \\
Benedict(b)\quad b \in X \\
n \subseteq s\quad s\!:\!pope(u) \\
u = b
\end{array}
}
$$

(80) says that there is exactly one person, u, who is currently the pope (the superscript $^{=1}$ abbreviates uniqueness), and that u is identical to Benedict (who is a member of a set X of (former) candidates).

The conjecture relating to the preservation of the Focus-frame–Focus structure amounts to saying that we do **not** get the reduced representation (80), even if the Background-DRS can be fully matched to contextual material. So far the main piece of evidence comes from (81b), where the existence presupposition of the Background has an antecedent in discourse.

(81) a. János szerelmes (valakibe), ezt mindenki tudja.
          John in-love (someone-into), this-Acc everyone know+Def3Sg
          "John is in love (with someone), as everyone knows."
      b. Minden diákja azt hiszi, hogy [egy énekesnőbe]$_F$ szerelmes.
          Every student-Poss3Sg that-Acc believe+Def3Sg, that-Acc [one singer-into]$_F$ in-love
          "Every student of his believes that it is a singer he is in love with"

In (81b), the existence presupposition of the Background (there is someone John is in love with) has an antecedent in the first sentence. Nevertheless, I think, this part of the Background presupposition cannot be reduced. This is supported by the lack of an attributive reading for the indefinite in (81b): this sentence does not say that every student attributes to, say, x, the person loved by John, the property of being a singer. This would be the case if the existence presupposition of Focus were resolved to the first sentence. I take the lack of an attributive reading to indicate that the discourse referent contributed by Focus is not identified with the (implicit) discourse referent from the the first sentence, but that it is identified with the discourse referent introduced in the Background presupposition.

4   A Conclusion That Is More like a Programme

What needs to be retained for further work on Hungarian Focus is, I think, the following string of observations and hypotheses:

1. The representation of Hungarian Focus involves preliminary DRS-es, like the representation of presuppositions and English Background–Focus structures. .

2. Since Hungarian Focus obeys the Scope Principle, the preliminary DR-structure for Focus can be embedded under quantificational conditions or preliminary DRS-es corresponding to presupposition–assertion structures.

3. The covert maximality operator that 'lives' in the Focus position of Hungarian is **not** the covert counterpart of only. What it resembles is a definite description.

4. The preliminary DR-structure of Hungarian Focus expresses a relation between the Background-DRS and the Focus-DRS. In this very general sense it *can* be viewed as a quantifier of some sort.

5. The entire Background–Focus structure resembles (the representation of) a specificational sentence. A first corollary: the Background or Focus predicate resembles a relative clause.

6. Second corollary: the Focus 'operator' is similar to the definite article or to a relative pronoun (in a free relative).

7. Third corollary: Hungarian sentences with Focus have a more complex internal structure at the level of (logical) syntax than sentences without Focus. Indirect evidence comes from the possibility to have two independent negative particles, one immediately preceding and one immediately following Focus, as shown in (68c), repeated here as (82).

   (82)   (=(68c))   János nem [Marit]$_F$ nem hívta meg
                      "It is not Mary whom John hasn't invited/failed to invite"

   On the analysis presented here pre-Focus *nem* contributes to the assertion part (to the Focus-DRS), and post-Focus *nem* to the Background.

   Such sentences indicate that a sentence with Focus contains two 'domains' for negation (and Negative Concord). It is a matter of further research to determine whether the licensing of negation in Hungarian can pertain to semantic representation or whether there is an underlying syntactic mechanism for it.

8. A conjecture: the preliminary DR-structure of Hungarian Focus is not reduced to an 'ordinary' DRS. This is a possibility inherent in the DRT formalism this paper has relied on (Kamp (2001), Genabith et al. (t.a.), Kamp (2004)), but, to my knowledge, the idea that languages vary as to whether they reduce preliminary structures is a novel one.

9. A further conjecture, regarding the relationship between the structures employed by Hungarian Focus and the discourse relations that sentences with Focus can enter: According to the preliminary observations in part 2.3 there are some constraints on Hungarian sentences with Focus as regards their relations with oncoming sentences in discourse. On the assumption that the representation of such sentences contains the Background-DRS as a 'reminder' to the current issue or question under discussion, it can be hypothesised that this Background-DRS plays a role in constraining discourse continuations. In other words, the Background-DRS can be taken as a bridge between sentence structure and discourse structure.

Appendix

The placement of the constituent in Focus position does not always have to do with question–answer congruence. According to my judgements, we have the following three possibilities, which correlate with *NP*-types:

1. Focus marks question–answer congruence. This is the case with proper names, definites, pronouns and indefinites (unmodified numerals or modified with a $MON \uparrow$ or non-monotone numerical modifier), i.e. with *NP* types that introduce a discourse referent.[44]

2. An item is in the Focus position 'by default'. This is the case with $MON \downarrow$ *NP*s like *kevés N'* ('few *N'*s), indefinites with $MON \downarrow$ numerical modifiers, certain *n*-words (Szabolcsi (1997a), Surányi (2002)) and certain manner adverbs (e.g. *szépen* 'nicely'). $MON \downarrow$ *NP*s, according to my observation, are weird when they would (have to) correspond on their own to a *wh*-phrase in a question:

(83) **Q:** Kit hívtál meg?
  Who-Acc invite-Past-2Sg pfx / "Whom have you invited?"
 A$_1$: ???[Kevés barátomat]$_F$
  ???[Few friend-Poss1Sg-Acc]$_F$ / "Few friends of mine"
 A$_2$: Az idén [KEVÉS embert]$_F$ hívtam meg
  The this-year-sfx few human-Acc invite-Past1Sg pfx
  "This year I've invited few people"
 A$_3$: Sajnos [csak kevés embert]$_F$ tudtam meghívni
  Unfort-ly only few human-Acc can-Past-Sg pfx-invite-Inf
  "Unfortunately I was able to invite only a small number of people"

3. A constituent is placed in the Focus position to mark contrast or corrections. The most conspicuous example involves quantificational *NP*s like universal *NP*s, *NP*s headed by *a legtöbb* 'most', and complex *NP*s built from them. The label 'conspicuous' is intended to mean that these *NP*s cannot occupy the Focus position to mark question-answer congruence; they can do so when they contain narrow contrastive or corrective Focus:

(84) a. Kit hívtál meg?
  Who-Acc invite-Past-2Sg pfx / "Whom have you invited?"
 b. Minden diákomat meg-hívtam/*hívtam meg
  Every student-Poss1Sg-Acc pfx-invite-Past+Def1Sg/invite-Past+Def1Sg pfx
  "I've invited EVERY student of mine"
  ¿'It is every student of mine that I've invited"

---

[44]Ignoring cases when there is narrow focus on, say, an adjective or some other modifier.

(85) a. Minden kutya meg-fogott egy egeret
Every dog pfx-caught one mouse-Acc
"Every dog has caught a mouse"

b. Nem [minden KUTYA]$_F$, hanem [minden MACSKA]$_F$ fogott meg egy egeret
Not every dog, but [every CAT]$_F$ caught pfx one mouse-Acc
"It wasn't every DOG, it was every CAT that caught a mouse"

c. Nem [MINDEN kutya]$_F$, hanem [minden MÁSODIK kutya]$_F$ fogott meg egy egeret
Not [EVERY dog]$_F$, but [every SECOND dog]$_F$ caught pfx one mouse-Acc
"It wasn't EVERY dog, it was every SECOND dog that caught a mouse"

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