

IDENTIFICATIONAL FOCUS VERSUS INFORMATION FOCUS

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This article argues that identificational focus, which expresses exhaustive identification and occupies the specifier of a functional projection, must be distinguished in language description from information focus, which conveys new information and involves no syntactic reordering. The properties of the two types of focus are established on the basis of Hungarian and English material. It is argued that the cleft constituent is the realization of identificational focus in English. *Only*-phrases are analyzed as identificational foci carrying an evaluative presupposition. The feature specification of identificational focus is shown to be subject to parametric variation: the focus operators of various languages are specified for the positive value of either or both of the features [+exhaustive] and [+contrastive].*

I will put forth two major claims in this article: first, that IDENTIFICATIONAL FOCUS (sometimes also called contrastive focus) has to be consistently distinguished from a mere INFORMATION FOCUS (or presentational focus), as it has syntactic and semantic properties that a mere information focus does not share. Second, I will show that the identificational focus itself is not uniform across languages; it is associated with different subsets of a set of semantic features.

Identificational focus and information focus are often mingled in language description, which leads to contradictory statements on focus. I identify the syntactic and semantic properties of identificational focus on the basis of Hungarian and English material, and argue that English, like Hungarian, is a language with visible identificational focus movement. The identificational focus is realized as a cleft constituent. I then discuss a special type of identificational focus: the *only*-phrase, and finally I compare the feature content of the identificational focus of Hungarian and English with the feature contents of its Italian, Rumanian, Catalan, Greek, Arabic, and Finnish counterparts.

1. A NEGLECTED DISTINCTION. The claim that two different types of focus can be distinguished—one expressing a quantification-like operation, and another merely conveying nonpresupposed information—has been present in the linguistic literature for a long time (see, for example, Halliday 1967 and Rochemont 1986), although the interpretations attributed to the two focus notions (variously called CONTRASTIVE FOCUS VERSUS PRESENTATIONAL FOCUS, NARROW FOCUS VERSUS WIDE FOCUS, or in this article, IDENTIFICATIONAL FOCUS VERSUS INFORMATION FOCUS) have not always been exactly the same.

I will apply the term IDENTIFICATIONAL FOCUS to a constituent bearing the following semantic-communicative role in the sentence:

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

Semantically, the constituent called identificational focus represents the value of the variable bound by an abstract operator expressing exhaustive identification. Syntacti-

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cally, the constituent called identificational focus itself acts as an operator, moving into a scope position in the specifier of a functional projection, and binding a variable.

If a sentence part conveys new, nonpresupposed information marked by one or more pitch accents—without expressing exhaustive identification performed on a set of contextually or situationally given entities, it is not an identificational focus but a mere information focus. Information focus is not associated with movement. An information focus is present in every sentence, but not every sentence contains an identificational focus.

Even though the existence of these focus types has been acknowledged in the literature, the distinction between them has often been neglected in actual language description. Thus, information foci have also been described as identificational operators moved into scope position in LF; or identificational foci have also been analyzed as information foci with an accidental exhaustive interpretation. The former has occurred in Tsimpli's analysis of Greek (1994), for example. In her approach, a focused argument or adjunct is always interpreted in the specifier of a left-peripheral functional projection called FP—whether it actually appears there or stands in situ, and whether or not it expresses exhaustive identification. Compare 2a and 2b.¹

- (2) a. [_{FP} **Ston Petro** [_{TNSP} dhanisan to vivlio]]
 to.the Petro lent.3PL the.ACC book
 'It was **to Petro** that they lent the book.'
- b. [_{TNSP} Dhanisan [_{VP} to vivlio STON PETRO]]
 'They lent the book **TO PETRO**.'

Even though Tsimpli translates 2a and 2b differently: the former, containing a preposed focus, as a cleft construction, and the latter, containing an in situ focus, as a simple sentence, she assigns to them identical LF representations. Both foci are claimed to occupy spec-FP; the left-peripheral focus is assumed to be moved there in syntax, and the in situ focus, in LF.

Similarly, Finnish also displays both initial focus and in situ focus, and even though Vilkuna (1994) usually translates the former by a cleft construction and the latter by an in situ emphatic constituent (see 3a, b), she analyzes both as realizations of the same operator interpreted in spec-CP. In 3a, the identificational focus is assumed to have moved into spec-CP in syntax, and in 3b, it is assumed to move there in LF.

- (3) a. [_{CP} **Annalle** [_{IP} Mikko antoi kukkia]]
 Anna.ADESS Mikko gave flowers
 'It was **to Anna** that Mikko gave flowers.'
- b. [_{IP} Mikko antoi [_{VP} kukkia ANNALLE]]
 'Mikko gave flowers **TO ANNA**.'

In Vallduví's focus theory (1992), by contrast, it is identificational focus that appears to be assimilated to information focus. He claims that focus is the material left in the VP; it is nonfocal, 'topical' material, conveying known information, that is removed by topicalization and by right dislocation—in syntax in the language type represented

¹ In 2a, b and in all the examples below, a focus preposed into a structural focus position (to be analyzed as an identificational focus) is set in bold type, whereas a focus marked merely by one or more pitch accents (to be identified as an information focus) is set in small capitals. Small caps are not meant to indicate the precise location of pitch accents though; focus constituents, e.g., the DP *ston Petro* in 2b, are set in small caps as a whole, including their necessarily deaccented subconstituents, e.g. articles. Constituents carrying presupposed information which bear pitch accents for grammatical or pragmatic-emotional reasons will not be set in small caps.

by Catalan, and in a so-called information component of grammar in the language type represented, for example, by English. In fact, Catalan also displays sentence-initial focus which, in addition to, or instead of, carrying nonpresupposed information, expresses exhaustive identification. Compare:

- (4) a. **Del calaix** la Núria (els) va treure els esperons.
of.the drawer the Núria them has taken.out the spurs
‘It was **out of the drawer** that Núria took the spurs.’
b. La Núria els va treure **DEL CALAIX** els esperons.
‘Núria took the spurs **OUT OF THE DRAWER.**’

Vallduví (1992) analyzes both 4a and 4b as constructions with a VP-internal focus; he derives 4a from a V-initial VP by the Right Dislocation of all VP-internal material, including the V, and claims that the contrast associated with 4a is a mere pragmatic inference.²

The semantic analyses of focus also often blur the difference between identificational focus and information focus. For example, Krifka (1992), representing a version of the structured meaning theory of focus, admittedly assigns the same semantic structure to both contrastive focus and presentational focus. The problematic nature of this approach becomes clear when it is applied to Hungarian, in which the two types of focus are never optional interpretational variants but are associated with distinct structural positions; compare 5a and 5b.

- (5) a. Tegnáp este **Marinak** mutattam be Pétert.
last night Mary.DAT introduced.I PERF Peter.ACC
‘It was **to Mary** that I introduced Peter last night.’
b. Tegnáp este be mutattam Pétert **MARINAK.**³
‘Last night I introduced Peter **TO MARY.**’

(Small capitals indicate information focus (see n.1) rather than the locations of pitch accents. Thus, in 5b, not only the focused **MARINAK** bears a pitch accent, the first major constituent of the predicate phrase—the particle *be*—is also assigned one by the nuclear stress rule.) The immediately preverbal focus in 5a expresses exhaustive identification; it means that of a set of individuals present in the domain of discourse, it was Mary and no one else that I introduced Peter to last night. The postverbal focus in 5b, on the other hand, merely presents *Mary* as nonpresupposed information, without suggesting that Mary was the only one of a set of relevant persons that I introduced Peter to last night. The structured meaning theory of focus would assign to both sentences the structure in 6.

- (6) ASSERT (< λx .introduced (I, Peter, x), Mary>)

The representation in 6 is partitioned into a background part, containing a version of the proposition in which the focus is replaced by a variable bound by lambda, and into a focus part. The focus is bound by an illocutionary operator, here represented by ASSERT. Ex. 6 is to be interpreted as follows: at the current point of discussion, the set of persons for whom it holds that I introduced Peter to them yesterday is under discussion, and it is stated that, among these persons, it holds for Mary that I introduced

² Vallduví and Vilkuna (1995) do not exclude the possibility of an identificational focus in A-bar position in Catalan any longer.

³ Incidentally, when a particle like *be* immediately precedes the V, they are spelled as one word. I do not follow this spelling convention here because it conceals the fact that the particle occupies a separate syntactic position.

Peter to her yesterday. According to Krifka 1992, contrastive focus and presentational focus differ (in a way he does not specify) merely in the illocutionary operator that binds them. The formula in 6 assimilates information focus to identificational focus in that it represents also information focus as a member of a set of alternatives, which, in the case of the Hungarian sentence 5b, does not correspond to native speakers' intuition.

The structured meaning approach to focus conflates the two focus types in another respect, as well. Consider a cleft identificational focus as in 7.

- (7) I have looked at all the cars that are for sale. It is a JAPANESE car that I will buy.

For the structured meaning approach, the focus part of the cleft construction introduces a set of nationalities, and it is asserted that the background part holds for the member *Japanese* of this set. However, the adjective *Japanese* represents merely the nonpresupposed information, that is, the information focus, in the sentence. The relevant set on which the exhaustive identification operation takes place consists of a set of cars (of various nationalities); i.e., the identificational focus extends over the full DP *a Japanese car*. An identificational focus can never be a subconstituent; it is a DP, expressing quantification over individuals.

In Vallduví's focus interpretation theory (1992), based on the assumption that focus is always in situ and it is nonfocal material that is moved, focusing never affects the truth conditions of the sentence. The focus carries the new information: that which the hearer is instructed to enter into his knowledge store. Hence the focusing of a constituent does not add to the semantic content of the sentence; it figures only in the information packaging. Whereas this approach correctly described the focus in 5b, for example, it fails to capture the relevant semantic properties of the focus of 5a.

I will argue below that the two focus notions—identificational focus and information focus—must not be collapsed, because identificational focus has semantic and syntactic properties that a mere information focus does not share. The properties characteristic of identificational focus will be identified on the basis of Hungarian sentences with structural focus and their English equivalents, the corresponding cleft constructions.

I will argue that the identificational focus differs from information focus in the following respects:

(1) the identificational focus expresses exhaustive identification; information focus merely marks the nonpresupposed nature of the information it carries.

(2) Certain types of constituents, universal quantifiers, *also*-phrases, and *even*-phrases, for example, cannot function as identificational foci; but the type of constituents that can function as information focus is not restricted.

(3) The identificational focus does, information focus does not, take scope.

(4) The identificational focus is moved to the specifier of a functional projection; information focus, however, does not involve any movement.

(5) The identificational focus is always coextensive with an XP available for operator movement, but information focus can be either smaller or larger.

(6) The identificational focus can be iterated, but information focus can project.

2. EXHAUSTIVE IDENTIFICATION VERSUS NEW INFORMATION. The most obvious motive for the differentiation of two focus notions has been semantic: an emphatic constituent, traditionally called focus, can either perform exhaustive identification on a set of entities given in the context or situation, or simply mark the nonpresupposed nature of the information it carries. In Hungarian and similar languages displaying an identificational

focus position in the left periphery of the sentence, these two focus notions are clearly not interpretational variants but are associated with different structural positions. Exhaustive identification can be expressed only by a constituent preposed into the preverbal identificational focus slot. The constituents whose only discourse-semantic role is the marking of the novelty of the information they carry, however, have no distinguished position in the sentence; they typically appear *in situ* in postverbal position. Recall examples 5a,b, and compare also 8a and 8b.

- (8) a. Mari **egy kalapot** nézett ki magának.
 Mary a hat.ACC picked out herself.ACC
 'It was **a hat** that Mary picked for herself.'
 b. Mari ki nézett magának EGY KALAPOT.
 'Mary picked for herself A HAT.'

Sentence 8a, containing a preverbal identificational focus, would be adequate to describe a situation in which Mary chose one from among various pieces of clothing; it expresses that of the pieces of clothing present in the domain of discourse, she picked for herself a hat, and she did not pick anything else. This corresponds to the informal interpretation assigned to identificational focus in §1, repeated in 9.

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

(This characterization adopts features of the formal semantic focus definitions in Kenesei 1986, Szabolcsi 1994, Jacobs 1986, von Stechow & Uhmman 1986, Krifka 1992 and others. It shares Jacobs's, von Stechow & Uhmman's, and Krifka's claim that focusing is an operation performed on a set of comparable entities given in the context or the situation, and it adopts Kenesei's and Szabolcsi's claim that focusing involves exhaustive identification (in their terminology, 'exclusion by identification') among these entities.)

Whereas a focus in the immediately preverbal identificational focus position is invariably associated with the type of interpretation described in 9, a postverbal focus, (e.g. 8b) does not present the referent of the focused DP as a member of a set of alternative entities, and it does not express exhaustive identification among the members of such a set. Thus 8b would be adequate in a context in which Mary is a familiar participant; the action of choosing denoted by the V can or cannot be inferred from the preceding events (recall that the particle at the head of the VP is assigned a pitch accent whether or not the particle + V combination is presupposed); and the DP *egy kalapot* 'a hat.ACC' introduces new, nonpresupposed information as in 10, for example.

- (10) János és Mari vásárolnak.
 John and Mary are shopping.
 Mari ki nézett magának EGY KALAPOT.
 Mary has picked herself A HAT.

Whereas a WH-phrase (other than *miért* 'why') is always in the preverbal identificational focus position in Hungarian, it can be answered not only by an identificational focus but—less commonly—by a mere information focus, depending on whether the answer is intended to be exhaustive.

- (11) a. Hol jártál a nyáron?
 where went.you the summer.in
 'Where did you go in the summer?'

- b. *Jártam OLASZORSZÁGBAN.*
 went.I Italy.to
 'I went TO ITALY [among other places].'
- c. **Olaszországban** jártam.
 'It was **Italy** where I went.'

In 11b, the WH-phrase *hol* 'where' is given a nonexhaustive answer formulated as a postverbal information focus. If the answer is exhaustive, as in 11c, it must be put as a preverbal identificational focus.

The semantic difference between the two types of Hungarian focus constructions also holds between their English translations. (Instances of the Hungarian preverbal identificational focus have been translated by a cleft construction, and instances of a VP-internal information focus by an in situ constituent assigned a pitch accent.) The crosslinguistic correspondence of the interpretations is not an accident; I claim that the English realization of identificational focus is the cleft constituent. An IP-internal constituent bearing a pitch accent (unless it is preceded by a focusing operator such as *only*—see §8), or a topicalized constituent with a pitch accent does not share the properties of identificational focus; thus it does not express exhaustive identification. This is in accordance with the position of Rooth 1996, and, in a way, also with the claims of those denying the exhaustiveness of an English in situ focus, among them Vallduví 1992.

The claim that a noncleft constituent with a pitch accent does not express exhaustive identification in English is not based merely on intuition; it can also be confirmed by tests of exhaustive identification devised by Szabolcsi (1981) and Donka Farkas.⁴ Szabolcsi's test involves a pair of sentences in which the first sentence contains a focus consisting of two coordinate DPs and the second sentence differs from the first one only in that one of the coordinate DPs has been dropped. If the second sentence is not among the logical consequences of the first one, the focus expresses exhaustive identification. Compare 12 and 13.

- (12) a. Mari **egy kalapot és egy kabátot** nézett ki magának.
 Mary a hat.ACC and a coat.ACC picked out herself.to
 'It was **a hat and a coat** that Mary picked for herself.'
- b. Mari **egy kalapot** nézett ki magának.
 'It was **a hat** that Mary picked for herself.'
- (13) a. Mari ki nézett magának EGY KALAPOT ÉS EGY KABÁTOT.
 Mary out picked herself.DAT a hat.ACC and a coat.ACC
 'Mary picked A HAT AND A COAT for herself.'
- b. Mari ki nézett magának EGY KALAPOT.
 'Mary picked A HAT for herself.'

The Hungarian sentence and its English equivalent in 12b are not logical consequences of 12a; on the contrary, they contradict 12a. The Hungarian example and its English equivalent in 13b, on the other hand, are logical consequences of 13a. That is, the Hungarian preverbal identificational focus and the English cleft constituent in 12 pass this test of exhaustivity, but the postverbal information foci in 13 do not pass.

⁴ I do not test here the identificational focus status of constituents fronted by negative preposing, partly because the potential targets of negative preposing form such a restricted class that most tests would simply not be applicable. Because of its restricted nature, the negative preposing construction cannot be a full equivalent of the Hungarian identificational focus construction, anyway. On negative preposing, and its relation to focusing, see Culicover 1991 and Drubig 1994.

Let us also perform the test on a third type of English focus construction, that containing a topicalized constituent with a pitch accent (a so-called focus-moved constituent in the terminology of Prince 1981).

- (14) a. A HAT AND A COAT, Mary picked for herself. →
 b. A HAT, Mary picked for herself.

If 14a is true, 14b will be true, as well, that is, 14a and b are shown by the test not to express exhaustive identification.

Donka Farkas has proposed (p.c.) an exhaustive identification test involving a dialogue about a situation in which Mary picked a hat for herself.

- (15) a. A: Mari **egy kalapot** nézett ki magának.
 Mary a hat.ACC picked out herself.DAT
 'It was **a hat** that Mary picked for herself.'
 B: Nem, egy kabátot is ki nézett.
 no a coat too out picked
 'No, she picked a coat, too.'
 b. A: Mari ki nézett magának EGY KALAPOT.
 'Mary picked herself A HAT.'
 B: %Nem, egy kabátot is ki nézett.
 %'No, she picked a coat, too.'

Since the dialogue in 15 describes a situation in which Mary did pick a hat for herself, the negation of Mary picking a hat for herself can only be interpreted as the negation of exhaustivity. This interpretation is available only in the case of the Hungarian and English sentences in 15a, containing a preverbal identification focus and a cleft constituent, respectively.

This test of exhaustivity also gives a negative result in the case of an English focus-moved constituent (a topicalized constituent associated with a pitch accent):

- (16) A: A HAT, Mary picked for herself.
 B: %No, she picked for herself a coat, too.

To summarize the observations made above: the two focus functions—the expression of exhaustive identification, and the marking of the nonpresupposed nature of the information conveyed—are not merely pragmatically different variants, but are semantically distinct interpretations assigned to syntactically different phenomena both in Hungarian and in English. Exhaustive identification is a function of structural focus: of the immediately preverbal focus in Hungarian, and of the cleft constituent in English. The expression of the nonpresupposed nature of the information conveyed (information focus), however, is not restricted to a particular sentence position in either language. It is a function of constituents marked by pitch accents (and their projections, as described by Selkirk 1982).

3. DISTRIBUTIONAL RESTRICTIONS. It is well known that in Hungarian the position of identificational focus is not available for universal quantifiers, *is* 'also'-phrases, *még* . . . *is* 'even'-phrases, and the existential quantifiers *valaki/valami* 'somebody/something' (see É. Kiss 1987). These types of constituents are also barred from the main clause of the English cleft construction.

- (17) a. Mari **egy kalapot** nézett ki magának.
 Mary a hat.ACC picked out herself.DAT
 'It was **a hat** that Mary picked for herself.'

- b. *Mari **minden kalapot** nézett ki magának.
 Mary every hat.ACC picked out herself.DAT
 *‘It was **every hat** that Mary picked for herself.’
- c. *Mari **egy kalapot is** nézett ki magának.
 Mary a hat.ACC also picked out herself.DAT
 ?‘It was also **a hat** that Mary picked for herself.’
- d. *Mari **még egy kalapot is** nézett ki magának.
 Mary even a hat.ACC also picked out herself.DAT
 *‘It was **even a hat** that Mary picked for herself.’
- e. *Mari **valamit** nézett ki magának.
 Mary something.ACC picked out herself.DAT
 *‘It was **something** that Mary picked for herself.’

The Hungarian examples 17b–e, containing a universal quantifier, an *is* ‘also’-phrase, a *még...is* ‘even’-phrase, or a *vala-* ‘some-’-phrase in their immediately preverbal focus position, are all ungrammatical. (In the grammatical versions of these sentences, the universal quantifier or *also/even*-phrase would occupy a quantifier position between the topic and the identificational focus, whereas the *vala-* ‘some-’-phrase would stand in topic position or inside the VP.) The English equivalents of these sentences display a similar restriction: universal quantifiers, *even*-phrases, *also*-phrases (except for certain contexts), and *something/somebody* cannot occur as cleft constituents, the English realizations of identificational focus. This appears to be semantically motivated.

In the framework of Stowell & Beghelli 1994, universal quantifiers (and presumably *also*- and *even*-phrases, as well) have a [+distributive] feature, which must be checked in the specifier of a DistP. In Szabolcsi’s focus theory (1994), these types of constituents are excluded from the identificational focus position because it can only accommodate group-denoting quantifiers. The incompatibility of the semantic role of these operators with that of identificational focus is most obvious in Kenesei’s framework (1986), in which the semantic operation performed by the identificational focus is characterized as ‘exclusion by identification’. If the relevant set on which a universal quantifier operates is that specified by its restrictor, a universal quantifier performs identification WITHOUT exclusion. So do the additive particles *also* and *even*: in the case of *even John laughed*, the *even*-phrase identifies a member of the relevant set of persons for whom the predicate holds without excluding any members for whom it does not hold.

A cleft *also*-phrase appears to be acceptable precisely in a context where it can be understood to identify a member of a relevant set in addition to one or more members identified previously as such for which the predicate holds, with the rest of the set still excluded. This is what happens in the conversation in 18, about the men present at a certain party.

- (18) A: Bill danced with Mary.
 B: No, it was Sam that danced with Mary.
 C: It was also John that danced with her.

B identifies Sam as the member of the set of men present at the party who danced with Mary, excluding the rest of the men. C adds John to the man identified by B, excluding everybody but Sam and John.

Some-phrases are also inherently incapable of expressing exclusion; if *somebody* in *somebody laughed* operates on a set of persons at all, it certainly does not exclude a subset of them as such that did not laugh.

Whereas universal quantifiers, *even*-phrases, and *also*-phrases (except in special contexts) are barred from identificational focus position, they can have the properties of information focus: they can convey nonpresupposed information, and can bear a pitch accent.

- (19) a. Kiket hívtál meg a születésnapodra?
 who.PL.ACC invited.you PERF your birthday.to
 'Who did you invite to your birthday?'
 b. MINDEN KOLLÉGÁMAT meg hívtam.
 every colleague.my.ACC PERF invited.I
 'I invited EVERY COLLEAGUE OF MINE.'
 c. EGY SZOMSZÉDOMAT IS át hívtam.
 a neighbor.my.ACC also over invited.I
 'I called over ALSO A NEIGHBOR OF MINE.'

Some-phrases, on the other hand, cannot function as information foci, either; they appear to be inherently incapable of bearing a pitch accent.

English foci left in situ or preposed via topicalization, which were claimed above not to be identificational foci, are not expected to be affected by the distributional restrictions observed in the case of identificational foci. Indeed, universal quantifiers, as well as *also*- and *even*-phrases can freely occur as in situ prosodic foci; and *also*-phrases and *even*-phrases can undergo topicalization with pitch accent assignment as well. Compare:

- (20) a. It was ***everybody/?also John/*even John** that Mary invited to her birthday party.
 b. Mary invited EVERYBODY/ALSO JOHN/EVEN JOHN to her birthday party.
 c. ALSO JOHN/EVEN JOHN/***EVERYBODY** Mary invited to her birthday party.

There is also further distributional evidence indicating that a topicalized constituent with a pitch accent, that is, a so-called focus-moved constituent, is not an identificational focus: *only*-phrases, which are obligatorily realized as identificational foci in Hungarian and many other languages, cannot undergo this kind of focus movement.

- (21) ***Only JOHN**, Mary invited to her birthday party.

To summarize: identificational focus, realized as an immediately preverbal constituent in Hungarian, and as a cleft constituent in English, is subject to distributional restrictions; it cannot be constituted by a universal quantifier, by *something/somebody*, by an *even*-phrase, or by an *also*-phrase (except for special contexts). Information focus, on the other hand, is exempt from most of these distributional restrictions. (*Something/somebody* cannot function either as an identificational focus or as an information focus.)

4. SCOPE. The identificational focus occupies a scope position both in English and in Hungarian; it marks the sentence part following it and c-commanded by it as the scope of exhaustive identification. This becomes particularly transparent when exhaustive identification enters into a scope relation with other operations. As predicted, exhaustive identification has narrow scope with respect to an operator c-commanding the identificational focus, and has wide scope with respect to an operator c-commanded by the identificational focus. Consider first two Hungarian examples.⁵

⁵ I do not consider here operators in left dislocation, marked by a special falling-rising intonation, which always have narrow scope with respect to a subsequent operator, and stressed postverbal operators, which are claimed in É. Kiss 1991 to occupy a prefocus scope position at S-structure, and to undergo stylistic postposing in PF.

- (22) a. Minden fiú **Marival** akart táncolni.
 every boy Mary.with wanted to.dance
 'For every boy, it was **Mary** [of the relevant persons] that he wanted to dance with.'
- b. **Marival** akart táncolni minden fiú.
 'It was **Mary** [of the relevant persons] that every boy wanted to dance with.'

Ex. 22a describes a ballroom situation in which every boy wanted to dance with one of all the girls present, and did not want to dance with anybody else. In this case, universal quantification takes scope over exhaustive identification. Ex. 22b, on the other hand, describes a situation in which Mary was the only one of all the girls present in the ballroom that every boy wanted to dance with (the other girls may have been asked for a dance by smaller subsets of all the boys present). In this case, exhaustive identification takes scope over universal quantification.

Consider also an English example.

- (23) It is always **Mary** that every boy wants to dance with.

The exhaustive identification associated with the cleft constituent *Mary* is in the scope of the universal quantifier *always*, and takes scope over the universal quantifier *every boy*. Accordingly, the sentence means that on every relevant occasion, of all the relevant girls (those present on that occasion) it is Mary and no one else that all the boys want to dance with. (At the same time, there may be other girls who smaller subsets of boys want to dance with.)

An information focus as such, however, cannot enter into a scope relation with a clause-mate operator (more precisely, its scope possibilities are independent of its status as information focus). The only interpretation of the Hungarian sentence and its English equivalent in 24b is the one in which the universal quantifier takes scope over the whole sentence.

- (24) a: A: Kikkel akartak táncolni a fiúk?
 who.PL.with wanted to.dance the boys
 'Who did the boys want to dance with?'
- b. B: Minden fiú táncolni akart A SZÉPSÉGGIRÁLYNŐVEL.
 every boy to.dance wanted the beauty queen.with
 'Every boy wanted to dance WITH THE BEAUTY QUEEN.'

Ex. 24b does not express exhaustive identification (it may be true in a situation in which some or all of the boys wanted to dance with more than one person); i.e. the sentence contains no operator that could enter into a scope relation with the universal quantifier. The information focus represents the nuclear scope of the universal quantifier, with the presupposed part of the sentence moved into the restricting clause, as in 25.

- (25) 'For every x, x a boy and x wanted to dance with someone, x wanted to dance with the beauty queen.'

An identificational focus binds a variable in its scope; an information focus does not. An identificational focus, therefore, is expected to display a weak crossover effect. This effect can, indeed, be observed in the case of cleft constituents (see 26a) but a similar effect is also attested in sentences containing a mere information focus (see 26b).

- (26) a. ??It was **to a boy_i** that his_i mother spoke t_i.
 b. ??His_i mother spoke TO A BOY_i.

Since the emphatic constituent in 26b is not a variable-binding operator, the unacceptability of 26b under a coreferent reading cannot be a weak crossover effect. It must be ruled out because the referent of *a boy* is first referred to by the unstressed pronoun as an individual already present in the domain of discourse, and then it is introduced by the information focus as new information. Notice that the equivalent of 26b is also unacceptable in Hungarian, a language without the usual weak crossover effect.

- (27) a. [_{FP} **Egy fiút**_i szólitott [_{VP} meg t_i az pro_i anyja]]
 a boy.ACC spoke PERF the mother.3SG
 ??‘It was **a boy**_i that his_i mother spoke to.’
 b. [_{VP} Meg szólitott az pro_i anyja EGY FIÚT_i]
 ??‘His_i mother spoke TO A BOY_i.’

The lack of weak crossover in 27a is derived from the assumption that the arguments in the Hungarian VP mutually c-command each other, and are generated in an arbitrary order, hence a variable in an argument position can always bind (and precede) a pronoun in the genitive specifier of a co-argument (see É. Kiss 1987).⁶

In sum, the identificational focus is an operator in scope position; the information focus is not. The identificational focus enters into a scope relation with the clause-mate operators, whereas the information focus represents their nuclear scope. The identificational focus binds a variable, and, if coindexed with a pronoun not c-commanded by the variable it binds, it displays a weak crossover effect. The information focus cannot be coindexed with a pronoun on its left, presumably for discourse-semantic reasons.

5. POSITION

5.1. THE FP PROJECTION IN HUNGARIAN. Adopting a proposal of Brody (1990, 1995), and in line with recent developments in generative theory, I assume that the identificational focus occupies the specifier position of a functional projection called focus phrase (FP). F, the head of FP, is an abstract functional head, which may have a strong V feature, triggering V-to-F movement. The complement of F is the sentence part over which the identificational focus takes scope. The presence of an FP in a clause is constrained by the focus criterion, which requires that the specifier of FP contain a +f phrase [an identificational focus], and all +f phrases be in the specifier of the projection of an F head.

⁶ A referee claims that this explanation of the marginality of 26b does not extend to cases in which the indefinite noun phrase is replaced by a name, as in (i).

- (i) ??His_i mother spoke to John_i.

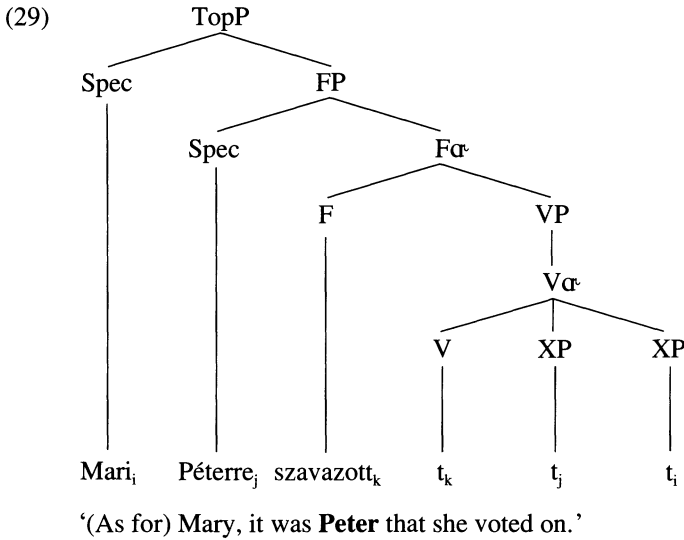
Consequently, the nonavailability of the intended reading of (i) must be a weak crossover effect. This would mean that the possibility of analyzing TO JOHN and other instances of English prosodic focus as identificational foci, moved to scope position in LF, cannot be completely excluded. Contrary to the referee, I interpret (i) as describing a situation in which the referent of *John*, although present in the universe of discourse, has not occurred yet in the domain of discourse. In such a situation, (i) represents the same type of oddity as 26b does: the referent of *John* is first referred to by an unstressed pronoun as old information, and then it is introduced by the information focus as new information. However, the Hungarian data do not support my explanation (hence they lend indirect support to the reviewer’s claim). In Hungarian, where there is no weak crossover effect, the equivalent of (i) is almost fully acceptable.

- (ii) (Hallom, hogy Péterrel beszélt az anyja.)
 hear.I that Peter.with spoke his mother
 ‘I hear that his mother spoke to Peter.’
 És beszélt az pro_i anyja JÁNOSZAL_i!
 and spoke his mother John-with
 ‘And his_i mother spoke TO JOHN_i!’

In the Hungarian sentence, the focus projection dominates the VP, and can be dominated by quantifier projections and topic projections. Spec-FP is filled by identificational focus movement, which can also transgress a clause boundary.

- (28) a. [_{VP} Szeretném [_{CP} ha [_{FP} Péterre_i szavaznátok t_i]]]
 I.would.like if Peter.on voted.you
 'I wish it was **Peter** on whom you voted.'
- b. [_{FP} Péterre_i szeretném, [_{CP} t_i ha szavaznátok t_i]]]
 Peter.on I.would.like if voted.you
 'It is **Peter** on whom I would like you to vote.'

The phonologically empty F head of the Hungarian FP is lexicalized by V movement into it, as in 29, for example.



The assumption of V-to-F movement ensures the adjacency between the identificational focus and the V attested in Hungarian (and many other languages). V-to-F movement also accounts for the apparent complementary distribution of the verbal particle and the identificational focus in preverbal position, illustrated in 30.

- (30) a. Mari fel hívta Pétert.
 Mary up called Peter.ACC
 'Mary called up Peter.'
- b. Mari Pétert hívta fel.
 'It was **Peter** that Mary called up.'

If we assume V-to-F movement, as represented in 31, we are not forced to place the verbal particle, playing an aspectual operatorlike role in the sentence, in identificational focus position (as I did, for example, in É. Kiss 1987); we can assign it to the specifier of an AspP projection between VP and FP, or simply to spec-VP.

- (31) a. Mari [_{VP} fel [_{V'} hívta Pétert]]
- b. Mari [_{FP} Pétert [_{F'} hívta; [_{VP} fel t_i]]]

5.2. THE FP PROJECTION IN ENGLISH: THE CLEFT CONSTRUCTION. I claim that the focus projection can also be present in the English sentence; it is realized in the form of a cleft construction, with the cleft constituent occupying spec-FP.

The analysis of the English cleft construction as an FP is not motivated by semantic

considerations alone (by the intention of associating the 'exhaustive identification' interpretation with an invariant position across languages). The cleft construction so far has had no plausible, unproblematic derivation; it still represents an unsolved syntactic problem.

The first detailed account of the cleft construction in the generative framework was put forth by Akmajian (1970). He derived the cleft construction from a pseudo-cleft sentence with a headless relative clause in subject position, via cleft extraposition.

- (32) a. [_{CP} who is sick] is me →
 b. *t_i* is me [_{CP} who is sick]_{*i*}

This analysis cannot solve the derivation of cleft constructions of the type in 33.

- (33) It was to John [_{CP} that I spoke]

Ex. 33 has no possible source; the structure from which it could be derived is illegitimate.

- (34) * [_{CP} that I spoke] was to John

According to Chomsky (1977), the cleft constituent and the clause subordinated to it represent a type of topic construction, involving WH-movement. His analysis could be represented in current terminology as follows:

- (35) a. It is [_{CP?} *me_i* [_{CP} *who_i* \emptyset [_{*i*} is sick]]]
or
 b. It is [_{CP?} *me_i* [_{CP} \emptyset _{*i*} that [_{*t_i*} is sick]]]

Chomsky claims that the type of cleft construction that proved to be problematic for Akmajian's analysis is derived by adverbial preposing into topic position.

- (36) It was [_{CP?} to John_{*i*} [_{CP} *t_i* that I spoke *t_i*]]

What remains unclear in Chomsky's analysis is why topic preposing, which normally does not involve either visible WH-movement or a visible complementizer, is accompanied by one or the other in this case.

Emonds (1976) proposes to handle the problem posed by 33 by modifying Akmajian's account. In Emonds's version of the theory, the cleft constituent is focus-moved out of the extraposed relative clause prior to extraposition. The cleft construction in 33 has 37 as its source.

- (37) [that I spoke to John] was

In the first step of the derivation, an NP or PP is removed from the clause by a transformation called focus placement. When an NP is removed, a pronoun can optionally be left behind. Ex. 38 shows the possible outputs.

- (38) a. [that I spoke to him] was John
 b. [that I spoke to] was John
 c. [that I spoke] was to John

If 38a is derived, a WH-feature is attached to the NP or PP dominating the pronoun, and the WH-phrase is fronted.

- (39) a. [who I spoke to] was John
or
 b. [to whom I spoke] was John

Finally, the relative clause undergoes cleft extraposition. Cleft extraposition performed on the various intermediate structures yields the following S-structures:

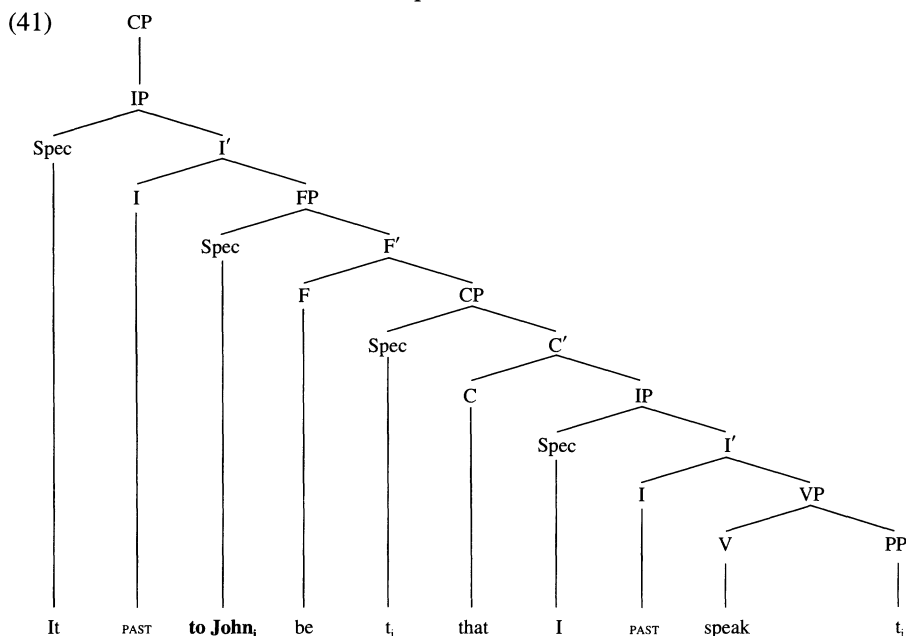
- (40) a. It was John who I spoke to.
 b. It was John to whom I spoke.

c. It was John (that) I spoke to.

d. It was to John that I spoke.

The problem with this set of derivations is that it is highly stipulative; the initial structure is unlikely, and the rightward movement rule focus placement is not independently motivated.

The analysis of the cleft constituent as an operator in spec-FP eliminates the problems attested in the derivation of the cleft construction. Under the assumption that the cleft constituent is an identificational focus in spec-FP, 33 has the structure in 41.



The analysis in 41 can be derived from the independently motivated FP theory in Brody 1990 and 1995 at the cost of a single additional stipulation: it has to be assumed that the F head of a focus projection does not subcategorize a VP in every language; in some languages, for example English, it takes a CP complement.

Recall that in Brody's focus theory, the phonologically empty F head of the focus projection needs to be lexicalized by a V, which triggers V-to-F movement. If the F head is complemented by a CP, as in English, the complementizer blocks V-movement into F; hence F is filled by the expletive V *be*, which is subsequently moved into the matrix I. The matrix *it* is an expletive.⁷

I claim that the PP *to John* has been moved from under the embedded VP into spec-

⁷ Meinunger (1996) has, independently, arrived at a similar analysis of the cleft (and the pseudo-cleft) construction. Adapting the multilayered analysis of the left periphery of the sentence proposed by Rizzi (1995), he places the cleft constituent in the specifier of a FocP dominating CP. The copula, serving to host the agreement morphology triggered by the focused constituent, occupies Top, whereas *it* is an expletive in spec-TopP. The wh-constituent in spec-CP coindexed with the cleft phrase may serve to signal the preposed nature of the cleft constituent, and/or the incompleteness of the CP following it. Meinunger argues for the monoclausal analysis of the cleft construction on the basis of the following arguments, among others: (i) the LF of a cleft construction is monoclausal; (ii) a focusing particle in the main clause of a cleft construction can be associated with an element of the subordinate clause (see Drubig 1996); (iii) a cleft constituent shows connectedness effects; (iv) whereas in a complex sentence, it is always the tense of the main clause that determines the tense of the subordinate clause, in a cleft construction it is the other way round: the tense of the copula depends on that of the embedded V (unless it is a default present tense).

FP through spec-CP. The constituent in spec-FP can also be base generated, and linked to a corresponding WH-pronoun in the embedded CP at LF. In both cases, the cleft constituent is predicted to display connectedness effects (see Cinque 1990), which is borne out. It can, for example, be bound by the embedded subject, as in 42.

- (42) a. It is **herself** that/who Mary trusts the most.
 b. It was **a picture of herself** that/which Mary gave to John.

In case the identificational focus is a subject, whose movement into spec-FP would lead to an ECP violation, the latter strategy (base generation of the identificational focus in spec-FP + WH-movement of the corresponding WH-pronoun into spec-CP) is chosen. Subsequently either the WH-phrase or the complementizer undergoes regular deletion.

- (43) a. It is **me_i** [_{CP} who_i \emptyset [_{IP} t_i is sick]]
or
 b. It is me_i [_{CP} \emptyset _i that [_{IP} t_i is sick]]

Notice that the base-generation strategy accounts for the fact observed by Akmajian (1970) that the embedded verb does not agree in person with a first person or a second person cleft subject.

In case the identificational focus is a PP, which cannot be coindexed with an appropriate WH-pronoun, only the movement strategy of focusing, represented in 41 above, is available.

As shown in §§2–3, an emphatic constituent in situ does not have the properties of an identificational focus. At the same time, it was also assumed that *only*-phrases function as identificational foci (presumably *only* lends them a +f identificational focus feature). Apparently, *only*-phrases can, but need not, move to spec-FP visibly. I suppose that the satisfaction of the focus criterion can be put off until LF (after spell-out) if the identificational focus feature of the given constituent is visible/audible in PF anyway. The situation seems to be parallel with that described in Arabic by Ouhalla (1994), where identificational focus movement into spec-FP must take place visibly in syntax unless the identificational focus feature is morphologically marked.

If an *only*-phrase in situ indeed undergoes identificational focus movement in LF, it is also expected to land in spec-FP. Apparently, LF movement to spec-FP does not require the lexicalization of the F head. Alternatively, we could adopt the proposal in Drubig 1994, according to which the landing site of LF focus movement is the specifier of the pol(arity) phrase identified between CP and IP by Culicover (1991). This position can host an *only*-phrase also at S-structure/PF.

- (44) He thinks [_{CP} that [_{PolP} only wine does [_{IP} John allow Mary to drink]]]

If spec-PolP is a possible landing site for a type of identificational focus at S-structure/PF, it must be a possible landing site for it at LF, as well.

Unlike an identificational focus, a constituent marked as information focus does not have a designated structural position in the sentence. Although in many languages, among them Hungarian and English, declarative sentences are judged to be more natural if new information follows presupposed information (see Varga 1981 on Hungarian, Rochemont & Culicover 1990 on English, and Hetzron 1975 on various European and African languages), information focus can, in fact, stand anywhere.

Summarizing the main claims of §5: the identificational focus occupies the specifier position of a functional projection called focus phrase both in Hungarian and in English. Whereas in Hungarian the complement of the abstract F head is a VP, in

English, it is a CP, and the construction is known as the cleft construction. Information focus, on the other hand, has no designated structural position in the sentence.

6. SYNTACTIC CATEGORY. The fact that the identificational focus occupies spec-FP entails that it must be an XP, and the fact that in most cases it gets into spec-FP by focus movement entails that it must be a major XP, whose movement does not violate subadjacency. Examples like 45a, in which only a subconstituent of the phrase in spec-FP is emphatic, nevertheless, raise the suspicion that the constituent filling spec-FP is perhaps not always coextensive with the identificational focus. Perhaps the identificational focus function can also be restricted to a mere subconstituent, with the matrix phrase pied-piped into spec-FP. Consider also, however, the answer to 45a:

- (45) a. [_{Spec-FP} A JÁNOS **autója**] volt a leggyorsabb?
 the John's car was the fastest
 'Was it **JOHN's car** that was the fastest?'
 b. Nem, [_{Spec-FP} A **PORSCHE**]
 'No, it was **THE PORSCHE.**'

Although the nonpresupposed part of the Hungarian question and its English equivalent in 45a is, indeed, *János/John*, a subconstituent of the DP in spec-FP, this only means that *János/John* is the information focus of 46a. The person asking 46a wants the exhaustive identification operation performed on a set of cars, instead of a set of persons, as is indicated by the possibility of answering 45a by 45b. That is, the constituent functioning as the identificational focus is the whole matrix DP *a János autója/John's car*.⁸

In focus theories such as those of Rooth 1985, and Jacobs 1983, which deny the existence of focus movement, and hence, the relevance of subadjacency for focusing, the a, b, c, and d members of the set of sentences in 46 have different subconstituents focused (those in small caps). The semantic differences of the sentences are derived from the difference in the syntactic category of their focus.

- (46) a. János [_{Spec-FP} EGY **angol könyvet**] kapott ajándékba.
 John one English book.ACC got as.present
 'It was **ONE English book** that John got as a present.'
 b. János [_{Spec-FP} egy **ANGOL könyvet**] kapott ajándékba.
 'It was **an ENGLISH book** that John got as a present.'
 c. János [_{Spec-FP} egy **angol KÖNYVET**] kapott ajándékba.
 'It was **an English BOOK** that John got as a present.'
 d. János [_{Spec-FP} egy **ANGOL KÖNYVET**] kapott ajándékba.
 'It was **an ENGLISH BOOK** that John got as a present.'

In fact, each of the sentences in 46 states that of a set of relevant entities, it was an English book that John got as a present; that is, *egy angol könyvet* 'an English book' is identified as such of which the predicate exclusively holds in each case. In other words, the variable bound by the identifying operator has the same value in 46a, b, c, and d alike. What the sentences differ in is the set of relevant entities presupposed from which *an English book* is singled out. Given that *an English book* represents a subset of a different set in each sentence, the complementary subsets excluded through its exhaustive identification will also be different. In the case of 46a, it is presupposed that John got an indeterminate number of English books as a present; hence *EGY angol könyvet* / *ONE English book* is identified from among the members of a set consisting of

⁸ For a similar view see Drubig 1994.

sets of English books of different cardinality. In the case of 46b, it is presupposed that John got a book in an indeterminate language as a present; *egy ANGOL könyv/an ENGLISH book* is identified from among the members of a set of books in various languages. In 46c, it is presupposed that John got an English item as a present; that is, the relevant set a subset of which *egy angol könyv/an English BOOK* represents is a set of English products. In 46d, the relevant set whose is identified as *egy ANGOL könyv/an ENGLISH BOOK* cannot be reconstructed on the basis of the given sentence alone.

The meaning differences between the sentences in 46, deriving from the different positions of information focus within the identificational focus, are presuppositional. The different locations of nonpresupposed information within the identificational focus lead to the reconstruction of different domains for the identification operation. Nevertheless, the sentences in 46 share the same identificational focus: they display the same value of the variable bound by the semantic focus operator, represented by the same expression in spec-FP. The assumption made above that the identificational focus must be a phrase whose movement into spec-FP is subject to subjacency can be maintained.

In fact, the category of the identificational focus must be further constrained: *that*-clauses, infinitival clauses, VPs, and predicative NPs/AdjPs must also be excluded as identificational foci.

- (47) a. *János [_{spec-FP} [(*azt*), **hogy Mari elkésik**]_i] súgta nekem t_i.
 John that.ACC that Mary is.late whispered me
 *‘It was **that Mary would be late** that John whispered to me.’
- b. *János [_{spec-FP} [**minden évben egy új autót venni**]_i] akart t_i.
 John every year a new car.ACC to.buy wanted
 *‘It was **to buy a new car every year** that John wanted.’
- c. *János [_{spec-FP} [_{VP} **megnézni a filmet**]_i] fogja t_i.
 John to.see the film will
 *‘It is **see the film** that John will.’
- d. ??János [_{spec-FP} [_{AdjP} **fáradt**]_i] volt ritkán t_i.⁹
 John tired was seldom
 *‘It was **tired** that John was seldom.’

Kenesei (1994) suggests that the Hungarian 47a, and presumably 47b as well, are unacceptable for a phonological reason: the identificational focus and the V following it are required to form a phonological phrase, which cannot transgress a sentence boundary. This explanation does not appear to extend to the English examples, even though they show a similar distribution of grammaticality. The reason for the unacceptability of some, or perhaps all, of the sentences in 47 may in fact be semantic: perhaps clauses, VPs, and predicative phrases cannot function as identificational foci because they do not denote individuals, which serve as the primary domain of quantification. As Szabolcsi 1983 and Szabolcsi and Zwarts 1993 argued, the identificational focus must quantify over an unordered set of distinct individuals because such Boolean operations as complement formation, which is a crucial element of the exhaustive identification operation made up of the identification of a subset and the exclusion of the complementary subset, can take place only in the case of unordered sets. (Section 8 of this paper will restrict

⁹ *Ritkán* ‘seldom’ has been added to the sentence to ensure that *fáradt* ‘tired’ occupies spec-FP, instead of its usual surface position: spec-VP (or spec-AspP). *Ritkán* has an inherent +f feature, and can be kept out of the preverbal identificational focus position only by another identificational focus in spec-FP—see the discussion of exx. 51–53.

the validity of this claim, allowing identificational focus also to quantify over scales, which are partially ordered sets.)

The categorial constraints on the English cleft construction, described in some detail in Emonds 1976 (140–41), appear to be completely ad hoc in the frameworks of earlier approaches to clefting. None of the standard clefting theories can account for the grammaticality difference between 48a and 48b, let alone 49a and 49b.

- (48) a. *It was **a lecturer** that John remained.
 b. It was **a lecturer** that I spoke to.
 (49) a. *It's **sick** that he was.
 b. It's not **sick** that he was but **tired**.

If the cleft construction is an FP, and the cleft constituent is an identificational focus, the constraint illustrated in 48, ruling out the clefting of a predicative element not denoting an individual, is expected. As for 49, Szabolcsi (1983) argues that nonindividuals, too, can be individualized, that is presented as discrete entities, for example, by listing, in which case they become available for identificational focus movement. This is what happens in 49b, where a two-member set of properties (including *tired* and *sick*) is established as a domain of exhaustive identification.

The categorial constraints on identificational focus, requiring that it be an XP denoting an individual, have been derived from its position in spec-FP, from the subjacency condition on its movement to spec-FP, and from its function, involving quantification over a set of entities. Information focus, on the other hand, is not restricted to a particular sentence position, is not derived by movement, and does not involve quantification over a set of entities. Hence none of these categorial constraints hold. It can, for example, be constituted by a subconstituent of an XP (see 46), by a string of XPs, or by a full sentence. Consider example 50b, which is all information focus when uttered in the context of 50a.

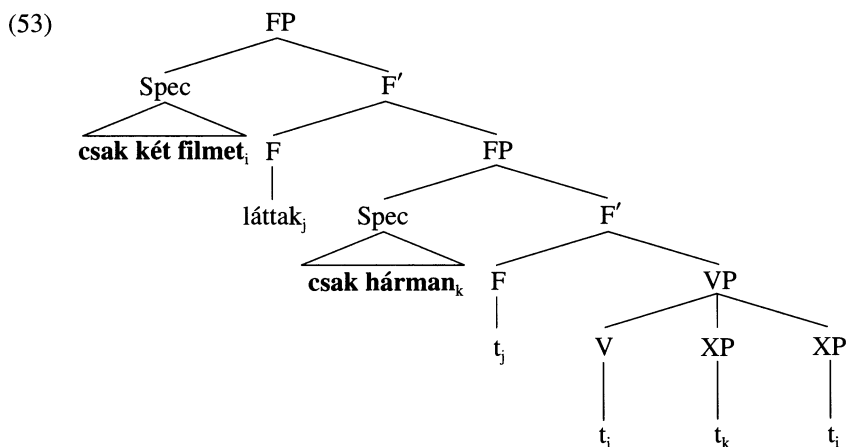
- (50) a. What happened at the race?
 b. [_{Spec-FP} JÁNOS AUTÓJA] VOLT A LEGGYORSABB.
 John's car was the fastest
 'IT WAS JOHN'S CAR THAT WAS THE FASTEST.'

7. FOCUS ITERATION VERSUS FOCUS PROJECTION. Certain types of constituents, for example arguments modified by *csak* 'only', or negative existential quantifiers (*kevés ember* 'few persons') must undergo identificational focus movement in Hungarian. Apparently, they have an inherent identificational focus feature; hence the focus criterion forces them to land in spec-FP. Whereas in English the satisfaction of the focus criterion can be put off until LF (after spell-out) if the identificational focus feature of the given constituent is visible/audible in PF, in Hungarian this option is not available. If a constituent with an inherent identificational focus feature does not undergo identificational focus movement in syntax, the sentence is sharply ungrammatical, as illustrated in 51.

- (51) a. *Két filmet [_{VP} meg néztek CSAK HÁRMAN]
 two film.ACC PERF saw only three
 'Only THREE PERSONS saw two films.'
 b. [_{VP} Csak hárman néztek meg két filmet]

When a sentence contains more than one constituent with an inherent identificational focus feature, each identificational focus after the first stands postverbally, presumably in the specifier of a lower FP, as argued by É. Kiss (1998).

- (52) Csak két filmet láttak csak hárman.
 only two film.ACC saw only three
 'It was **only two films** that **only three persons** saw.'



The verb is moved from V first to the lower F, and then to the higher F; hence the identificational focus in the lower spec-FP is licensed by a V trace, and the identificational focus in the higher spec-FP by the V itself. Because of the cyclicity of V-movement, identificational focus movement into the higher spec-FP does not violate subadjacency: the movement of the V into the lower F renders the VP boundary transparent and its movement from there into the higher F renders the lower FP boundary transparent.

Brody 1990 holds the assumption that a postverbal constituent with a focus feature is an operator in situ, which is adjoined to the identificational focus in spec-FP invisibly at LF. This possibility, however, can be excluded on the basis of scope considerations. In the case of a pair of operators, one of which is preposed into scope position, the other left in situ, the two operators have identical scopes and can be linked in either order, because, if we assume LF adjunction to the operator preposed in syntax, the two operators will mutually c-command each other. The *WH*-phrases of English multiple questions, for example, can be interpreted in any scope order, as in 54.

- (54) Who brought what?
 a. 'Tell me about each person what he brought.'
 b. 'Tell me about each object who brought it.'¹⁰

In the case of the two identificational foci in 55, however, only the preposed focus can have scope over the in situ focus:

¹⁰ Hungarian multiple questions are never ambiguous, because the *WH*-phrases are all moved in syntax. In questions requiring a pair-list answer, the *WH*-phrase interpreted as a universal quantifier is moved into a prefocus quantifier position, whereas the *WH*-phrase requiring an exhaustive answer is moved into spec-FP.

- (i) [_{QP} K_i [_{FP} mit_j hozott_k [_{VP} t_k Marinak t_i t_j]]]
 who what brought Mary.DAT
 'Tell me about each person what he brought for Mary!'
 (ii) [_{QP} Mit_i [_{FP} ki_j hozott_k [_{VP} t_k Marinak t_i t_j]]]
 'Tell me about each object who brought it for Mary!'

In 'real' multiple questions, in which all *WH*-phrases function as interrogative operators, all *WH*-phrases are moved to a spec-FP.

- (iii) [_{FP} K_i látott_j [_{FP} kit_k t_j [_{VP} t_j t_i t_k]]]
 who saw whom
 'Who saw somebody, and who was the person he saw?'

- (55) **Csak két filmet láttak csak hárman.**
 only two film.ACC saw only three
 a. 'It was **only two films** that **only three persons** saw.'
 b. *'It was **only three persons** who saw **only two films**.'

If the two identificational foci change places, their relative scope will also change to the reverse:

- (56) **Csak hárman láttak csak két filmet.**
 only three saw only two films.ACC
 a. 'It was **only three persons** who saw **only two films**.'
 b. *'It was **only two films** that **only three persons** saw.'

In English, as 57 illustrates, the iteration of the focus projection is not possible.

- (57) *It was [_{FP} to Mary_i [_{CP} that [_{IP} it was [_{FP} John_j [_{CP} that [_{IP} we introduced t_j t_i]]]]]]]

The movement of an identificational focus from the embedded VP into the specifier of the higher spec-FP is blocked because the moved constituent ought to cross at least three maximal projections: the lower IP, CP, and FP, in one swoop. The intermediate landing sites, spec-CP and spec-FP, are not available: spec-FP is filled by the lower identificational focus, and spec-CP is filled by its trace.

The phenomenon known as FOCUS PROJECTION—the optional extension of the domain of focus interpretation to the projection(s) dominating a constituent bearing a pitch accent—is possible only in the case of information focus. (For the conditions on focus projection see Selkirk 1982; for their adaptation to Hungarian see Kenesei 1993–96.) In the Hungarian sentence and its English equivalent in 58, the words bearing a pitch accent are preceded by an accent mark. The information focus can extend either over the postverbal DP, or over the VP including it, or over the whole clause. Accordingly, 58 can serve as an answer to 59a, b, or c.

- (58) [_{TOPP} Péter [_{VP} 'meg rendelt [_{DP} egy 'könyvet]]]
 Peter PERF ordered a book.ACC
 [_{IP} Peter [_{VP} ordered a 'book]]

- (59) a. What did Peter order?
 b. What did Peter do?
 c. What happened?

In 60a the information focus (the nonpresupposed part of the sentence) can be restricted to the DP occupying spec-FP (an identificational focus, expressing exhaustive identification), or can project over the whole FP. Accordingly, the sentence would be an appropriate answer to questions 60b and 60c.

- (60) a. [_{FP} [_{spec-FP} **Jelcsin**] nyerte meg az orosz választásokat]
 Yeltsin won PERF the Russian elections
 'It is **Yeltsin** who has won the Russian elections.'
 b. Who has won the Russian elections?
 c. What's new?

In sum, the identificational focus is a constituent limited to the specifier position of a functional projection; hence it can at best be multiplied by the iteration of the functional projection. Information focus, on the other hand, can extend over any sentence part marked by a pitch accent; furthermore, it can optionally also extend to the projections dominating the constituents bearing a pitch accent, under appropriate conditions.

8. *ONLY-PHRASES*. An *only*-phrase must land in spec-FP in Hungarian, so it obviously represents a special type of identificational focus. *Only* is not a sentential operator which is generated in front of the FP and is associated with the independently established identificational focus, but is a quantifierlike element adjoined to an XP, assigning to it an identificational focus feature, and causing it to undergo identificational focus movement. Evidence for this claim comes from Hungarian, where *csak* can also be stranded inside the VP, in the D-structure position of the *only* XP, as a floating quantifier. (Given that in Hungarian, postverbal constituent order is free, the D-structure position of the *csak* XP can be assumed anywhere behind the V.)

- (61) a. János **csak Marit** hívta meg.
 John only Mary.ACC invited PERF
 'It was **only Mary** that John invited.'
 b. János **Marit** hívta **csak** meg.
 c. János **Marit** hívta meg **csak**.¹¹

What is the difference between a bare identificational focus and an identificational focus modified by *csak*? The difference is semantic: *csak* introduces an evaluative presupposition into the meaning of the sentence. It expresses that the elements of the set on which exhaustive identification is performed are ordered along a scale, and the element identified as that for which the predicate exclusively holds represents a low value on this scale (for details, see König 1991). This presupposition is particularly clear in cases like 62.

- (62) **Csak 100 dollárt** fizetett.
 only 100 dollars.ACC paid.he
 'He paid **only \$100**.'

In 61, \$100 is identified as a low value of the scale of possible sums that could, in principle, be paid.

The concept of a scale, and the evaluative presupposition associated with *only* is less obvious in the case of examples like 63 (whose *only* corresponds in German to

¹¹ *Csak* can also be adjoined to a V, presumably triggering V movement to F—as the possibility of *csak*-stranding in postverbal position shows:

- (i) a. János **csak dúdolta** a dalt, mert nem tudta a szövegét.
 John only hummed the song, because not knew its text
 'John was **only humming** the song, because he did not know its text.'
 b. János **dúdolta**, **csak** t_i a dalt, mert nem tudta a szövegét.

Csak can also be adjoined to a VP. Since in this case, the *csak*-phrase does not undergo any movement, no *csak*-floating is predicted. This prediction is borne out.

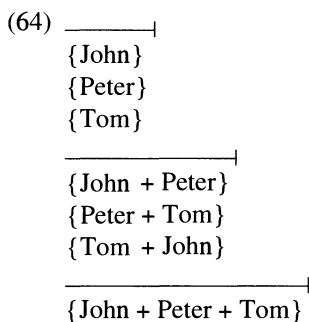
- (ii) a. János szinte semmit sem csinált egész nap, csak le vitte a kutyát sétálni.
 John practically nothing not did whole day only down took the dog to-walk
 'John did practically nothing the whole day, he only took the dog for a walk.'
 b. *János szinte semmit sem csinált egész nap, le vitte csak a kutyát sétálni.

Whereas there is some basis for attributing a syntactic identificational focus status to a V modified by *csak*—after all, it is preposed into a scope position in the head of FP—a VP modified by *csak* cannot be regarded as an identificational focus according to the criteria discussed in §2. The quantification performed in the case of a *csak* V and a *csak* VP is related to the exhaustive identification associated with an identificational focus, but is more complex. In intuitive terms, the content of the V/VP is viewed as an individual, a member of a set of relevant actions/states that could potentially hold for the person or thing named by the topic, or for the given place/time, and is identified as the only member of this set which actually holds for him/it. (For a more formal approach, see Zsámboki 1995). The contribution of *csak* is regular, to be discussed in §8.

nur, instead of the clearly evaluative *erst*), but it can, nevertheless, be pointed out.¹²

- (63) Mari **csak János** szereti.
 Mary only John.ACC loves
 'Mary loves **only John**.'

In the case of 63, the set of persons whom Mary could, in principle, love are ordered along a scale in such a way that the total set of them represents the highest value, and single individuals (like János) represent the lowest value. Thus, if Mary has three boyfriends—John, Peter, and Tom—the set {John, Peter, Tom} is at the top of the scale; the sets {John, Peter}, {Peter, Tom}, and {John, Tom} occupy intermediate positions, whereas the sets {John}, {Peter}, and {Tom} are at the bottom of the scale. The scale is derived by partially ordering all the subsets of the maximal set in such a way that a set A which properly contains a set B is ordered before B. This is illustrated in 64.



The elements of this scale are naturally not distinct (e.g., *János* represents a member of the set of relevant sets in itself, but it also forms a subset of other sets preceding it in the scale, including the total set). Szabolcsi's focus theory (1983), requiring that the elements in the domain of focus be distinct and unordered, therefore needs to be extended to account for scales also.

Actually, the twin operations performed by an identificational focus: the identification of a subset of a relevant set, and the exclusion of the complementary subset, can be interpreted not only on individuals but on scales, as well: the identification of a (nonmaximal) value of the scale for which the predicate holds entails the exclusion of the section of the scale above the given value. In the case of 63 and 64, for example, the identification of the lowest value of the scale (*János*) goes together with the exclusion of the two higher values (represented by the two-member sets, and by the three-member set, respectively) as the object of Mary's love.

This type of focusing operation, performing exhaustive identification among partially ordered, possibly overlapping elements, is not specific to *only*-phrases; it is characteristic of all scalar domains. It can be observed in the case of an identificational focus constituted by a DP containing a nonpresupposed numeral and a presupposed NP, such as in 65.

- (65) János **két könyvet** választott ki.
 John two book.ACC chose PERF
 'It was **two books** that John chose.'

¹² The possibility of extending the scalar analysis of *only* to the variant corresponding to the German *nur*, as well, is mentioned in König 1991. The motivation for assigning to the two uses of *only* similar interpretations is discussed in É. Kiss 1996.

Here, too, the identificational focus quantifies over sets of books of different cardinality. If the universe of discourse contains, say three books, the domain of identificational focus is made up of three sets containing a single book, three sets containing two books, and a set containing all three books. These sets are also partially ordered so that if a set A properly contains a set B, it is ordered before B.

Returning to *csak*, a difference between a bare identificational focus and an identificational focus modified by *csak* is that the latter cannot be combined with a ‘once only’ predicate, which cannot be simultaneously true of more than one individual. Compare

- (66) a. ***Csak Mari** volt a legszebb.
 only Mary was the most beautiful
 b. ***Csak Mari** érkezett elsőnek.
 only Mary arrived first
 c. ***Csak Mari** János anyja.
 only Mary John’s mother
 ‘**Only Mary** is John’s mother.’

This restriction falls out if we attribute to *csak* an evaluative presupposition in all cases (and also when *csak* corresponds to the German *nur*). The evaluative meaning of *csak*, suggesting that the element exhaustively identified as that of which the predicate holds represents a low one among the possible focus values, does not make sense if the predicate can only be associated with the lowest possible focus value (a single individual).

9. PARAMETRIC VARIATION IN THE FEATURE CONTENT OF IDENTIFICATIONAL FOCUS.

Whereas languages with structural focus appear to be uniform in distinguishing between a preposed identificational focus and an in situ information focus, they differ with respect to the actual feature content of their identificational focus. As I will show on the basis of a number of randomly selected languages, the identificational foci of different languages are specified for the positive value of either or both of the features [\pm exhaustive] and [\pm contrastive].¹³ Furthermore, the feature complex associated with the identificational focus can be strong (assuming the framework of Chomsky 1995), triggering obligatory focus movement in syntax, or can be optionally strong or weak, allowing focus movement either in syntax or in LF.

9.1. THE IDENTIFICATIONAL FOCUS IN HUNGARIAN AND ENGLISH. As I argued in §2, the Hungarian identificational focus, occupying spec-FP, identifies the subset of a relevant set for which the predicate holds, excluding the complementary subset for which the predicate does not; in other words, it expresses exhaustive identification. Phrases modified by the additive particles *is* ‘also’ and *még ... is* ‘even’, as well as *vala-* ‘some’-phrases presumably cannot be preposed into the position of identificational focus (see 17c–e) because their meaning is incompatible with the [$+$ exhaustive] feature of identificational focus.

The Hungarian identificational focus can be [\pm contrastive]. I regard an identificational focus [$+$ contrastive] if it operates on a closed set of entities whose members are known to the participants of the discourse (cf. also Szabolcsi & Zwarts 1993). In this case, the identification of a subset of the given set also identifies the contrasting complementary subset. In Hungarian, the identificational focus can also operate on an open set of entities; in 67b, it operates on an open set of writers. This type of focusing

¹³ Jacobs (1988) also distinguishes between these focus features, arguing that languages may use different syntactic constructions indicating the [\pm exhaustiveness] or [\pm contrastiveness] of foci.

is [–contrastive] because the identification of the subset for which the predicate holds does not result in the delineation of a complementary subset with clearly identifiable elements.

- (67) a. Ki írta a Háború és békét?
 who wrote the War and Peace
 ‘Who wrote *War and Peace*?’
 b. [_{TOPP} A Háború és békét [_{FP} **Tolsztoj** írta]]
 the War and Peace.ACC Tolstoy wrote
 ‘It was **Tolstoy** who wrote *War and Peace*.’

As discussed in §6, the Hungarian identificational focus must be preposed into spec-FP in syntax; hence its [+exhaustive] feature is strong. According to the evidence presented in §2, the English identificational focus shares the [+exhaustive] feature of its Hungarian counterpart. Like the Hungarian identificational focus, it need not be [+contrastive]; thus 67 is a felicitous dialogue in English, as well. Similarly, 68 can also be used in a context or situation that provides no closed set of explanations.

- (68) It was **because of the rain** that we arrived late.

Whereas the English identificational focus is associated with the same, [+exhaustive], [±contrastive] features as the Hungarian identificational focus, it is not always preposed into spec-FP in syntax. Recall the relevant discussion in §5: the feature specification of the English identificational focus is strong unless it is unambiguously identifiable in PF (e.g., by an *only* adjoined to it); it is optionally strong or weak otherwise.

9.2. THE IDENTIFICATIONAL FOCUS IN RUMANIAN, ITALIAN, AND CATALAN. Rumanian, Italian, and Catalan display a preverbal identificational focus, in addition to information focus in situ. Their identificational focus is [+exhaustive], and unlike the Hungarian and English identificational focus, it is also [+contrastive]. That is, the use of an identificational focus is possible only if the domain of identification is a closed set of individuals known to the participants of the discourse—as Göbbel 1996 showed about Rumanian. In Rumanian sentence structure, the identificational focus is claimed to be preposed into spec-PolP. As Göbbel’s following examples demonstrate, the phrase *numai pe Ion* ‘only Ion’ is formulated as an identificational focus in spec-PolP when identifying a subset of the set *pe Ion si pe Ioana* ‘Ion and Ioana’, but it can only be used as an information focus in situ when identifying a subset of the set *multi musafiri* ‘many guests’, since *multi musafiri* does not denote a closed set whose members are known to the participants of the discourse.

- (69) a. Am auzit ca i-ai invitat pe Ion si pe Ioana.
 AUX.1SG heard that CL-AUX.2SG invited Ion and Ioana
 ‘I heard you invited Ion and Ioana.’
 b. [_{PolP} **Numai pe Ion** l-am [_{VP} invitat]]
 only Ion CL-AUX.1SG invited
 ‘It is **only Ion** I invited.’
 (70) a. Am auzit ca ai multi musafiri.
 AUX.1SG heard that have.2SG many guests
 ‘I heard that you had many guests.’
 b. * [_{PolP} **Numai pe Ion** l-am [_{VP} invitat]]
 ‘It is **only Ion** I invited.’
 c. L-am [_{VP} invitat NUMAI PE ION]

Consider also an example without *only*:

- (71) a. Cine vînde cazane?
 who sells cauldrons
 b. (*)**Tiganii** vînd cazane.
 gypsies.the sell cauldrons
 ‘It is **gypsies** who sell cauldrons.’
 c. Cazane vînd TIGANII.
 ‘**GYPSIES** sell cauldrons.’

According to Göbbel 1996, 71a can be answered by 71b only if a salient set of alternatives is present in the minds of both the speaker and the hearer; otherwise 71c must be used.

The preposing of identificational focus into spec-PolP does not necessarily take place in syntax; it can also be delayed until LF. Thus 70c and 71c can be used in contexts or situations requiring an identificational focus. That is, the [+exhaustive, +contrastive] feature-complex of identificational focus in Rumanian can be either strong or weak.

In Italian, too, the identificational focus is located in the preverbal section of the sentence.¹⁴ The information focus stands behind the V; I assume, following Vallduví (1992) and others, that it is VP-internal (but Belletti and Shlonsky (1995) argue against this view). The Italian identificational focus, similar to the Rumanian one, can only be applied to a closed set of individuals known to the participants of the discourse. Thus, the *who* phrase in 72a cannot be answered by an identificational focus—unless the domain of *who* is constrained by a particular context or situation.

- (72) a. Chi ha rotto il vaso?
 who has broken the vase
 ‘Who broke the vase?’
 b. Il vaso, l’ha [_{VP} rotto MARIA]
 ‘MARIA broke the vase.’
 c. (*)**Maria** ha rotto il vaso
 ‘It is **Maria** who broke the vase.’

If, in contrast, the question requires the speaker to select an individual from a closed set of known candidates, as in 73a–b, the answer will involve an identificational focus, preposed into preverbal position either in syntax (see 73c) or in LF (see 73d).

- (73) a. L’ha rotto GIORGO, il vaso?
 has broken Giorgio the vase
 ‘Has GIORGO broken the vase?’
 b. Chi di voi due ha rotto il vaso?
 which of you two has broken the vase?
 c. **Maria** ha rotto il vaso.
 ‘It is **Maria** who has broken the vase.’
 d. L’ha [_{VP} rotto MARIA] il vaso.
 ‘It is **Maria** who has broken the vase.’

Thus, identificational focus in Italian is [+exhaustive, +contrastive], and its feature-complex can be either strong or weak.

¹⁴ According to my informant, Swiss linguist Giampaolo Salvi, the Italian identificational focus shares the immediately preverbal position of the interrogative operator, hence it must occupy spec-CP, triggering V movement into C. In Luigi Rizzi’s dialect a subject can intervene between an identificational focus and the V, which he accounts for by placing the identificational focus into the specifier of a specific focus projection, dominating FinP, and dominated by TopP (see Rizzi 1995).

As for Catalan, Bonnet (1990) and Vallduví and Vilkuna (1995) suggest that the identificational focus occupies spec-IP; information focus, though, is VP-internal. The identificational focus appears to have the features [+exhaustive, +contrastive]; so 74 is appropriate only in a context or situation that presupposes a closed set of candidates for Mother to give the keys to.

- (74) [_{spec-IP} **Al fuster**] donará les claus la mare.
to.the carpenter give.FUT.3SG the keys the mother
'It is **to the carpenter** that Mother will give the keys.'

The [+exhaustive, +contrastive] feature-complex of the Catalan identificational focus can be either strong or weak; 75, containing a focus in situ, can also be synonymous with 74, in which case its focus is preposed into identificational focus position in LF.

- (75) La mare les donará AL FUSTER, les claus.
'The mother will give the keys **TO THE CARPENTER**.'

9.3. THE IDENTIFICATIONAL FOCUS IN GREEK AND ARABIC. In Tsimpli's analysis (1994), Greek identificational focus is preposed into spec-FP position. Greek also has information focus in situ. Identificational focus is interpreted as [+exhaustive, +contrastive]; that is, 76 presupposes a context or situation in which Petro represents a subset of a closed set of persons to whom they could have lent the book.

- (76) [_{FP} **Ston Petro** dhanisan to vivlio]
to.the Petro lent.3PL the book
'It is **to Petro** that they lent the book.'

The focus in situ in 77 lacks this exhaustive-contrastive reading; consequently, the [+exhaustive, +contrastive] feature-complex of the Greek identificational focus must be strong, triggering movement into spec-FP in syntax.

- (77) [_{VP} Dhanisan to vivlio **STON PETRO**]
'They lent the book **TO PETRO**.'

According to Ouhalla (1994), the identificational focus is preposed into spec-FP, whereas information focus is left in situ in Standard Arabic, as well. The identificational focus is [+exhaustive, +contrastive]; hence a *what*-phrase not constrained by a particular context or situation cannot be answered by it; it must be answered by an information focus.

- (78) a. maadaa shariba Zaydun?
'What did Zayd drink?'
b. sharib-a Zayd-un SHAAAY-AN
drink-3M.SG Zayd-NOM tea-ACC
'Zayd drank **TEA**.'

An identificational focus is appropriate when it identifies the subset of a closed set whose members are familiar, as in 79.

- (79) **Shaay-an** sharib-a Zayd-un (laa 'asiir-an)
tea-ACC drink-3M.SG Zayd-NOM not juice-ACC
'It was **tea** that Zayd drank, not juice.'

The [+exhaustive, +contrastive] feature-complex of the Arabic identificational focus, when not marked by a focus morpheme, is strong; it must be checked in spec-FP in syntax.

9.4. THE IDENTIFICATIONAL FOCUS IN FINNISH. Vilkuna (1994) argues that the spec-CP position of the Finnish sentence is a contrastive position: it can host either a con-

trastive focus, or a contrastive topic. Vilkuna regards the two types of constituents as closely related: they both identify a subset of a closed set previously introduced into the domain of discourse; the contrastive focus exhaustively identifies the subset for which the predicate holds, whereas the identification performed by the contrastive topic is nonexhaustive. Thus 80, with *Anna* in spec-CP, is ambiguous (at least in writing).

- (80) [_{spec-CP} *Anna*] asuu täällä.
Anna lives here

Ex. 80 can be a reaction to the statement in 81a, in which case it functions as a contrastive focus, that is, as an identificational focus, carrying the features [+exhaustive, +contrastive].

- (81) a. *Kati* asuu täällä.
'Kati lives here.'
b. [_{spec-CP} *Anna*] asuu täällä.
Anna lives here
'It is *Anna* who lives here.'

The sentence in 80, with *Anna* in spec-CP, can also be (part of) the answer to the question in 82a. In that case, it functions as a contrastive topic, carrying the features [−exhaustive, +contrastive].

- (82) a. Where do Anna, Kati, and Mikko live?
b. [_{spec-CP} *Anna*] asuu täällä
'Anna, she lives here.'

Since the spec-CP position of the Finnish sentence is specified as [±exhaustive], it can also be occupied by an *also*-phrase. (Remember that Hungarian *is* 'also'-phrases are excluded from the spec-FP position, which is associated with the feature [+exhaustive].)

- (83) *Anna-kin* asuu täällä.
Anna-too lives here

The [+contrastive] feature of the Finnish identificational focus and contrastive topic appears to be strong; thus a VP-internal constituent can be [+contrastive] only if spec-CP is already filled by another [+contrastive] constituent, as in 84.

- (84) [_{spec-CP} *Annalle*] Mikko antoi KUKKIA.
Anna.DAT Mikko gave flower
'To Anna, Mikko gave FLOWERS.'

The evidence accumulated in Vilkuna 1994 indicates that the spec-CP position of the Finnish sentence can be occupied by a [+contrastive], [±exhaustive] operator. The [+contrastive] feature of this operator is strong, so movement to spec-CP takes place in syntax.

10. CONCLUSION. I have argued here that the term FOCUS is applied in the literature to two syntactically and semantically different types of phenomena, which ought to be kept apart: identificational focus, semantically an operator expressing exhaustive identification, syntactically a constituent preposed into the specifier position of a functional projection; and information focus, the carrier of new information, involving no syntactic reordering. The properties of the identificational focus were identified on the basis of Hungarian and English material. I argued that the identificational focus of the English sentence, preposed into spec-FP, is the cleft constituent. *Only*-phrases were analyzed as identificational foci carrying an evaluative presupposition, expressing exhaustive identification on a partially ordered domain (a scale) of entities. Finally, it

was demonstrated that the feature specification of the identificational focus is subject to parametric variation: the identificational foci of various languages can be specified for the positive value of either or both of the features [+ exhaustive] and [+ contrastive]. The feature specification of the identificational focus can be strong, triggering obligatory focus movement in syntax, or can be weak or strong, manifested in optional focus movement.

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