

Identifying inferences in focus*

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Abstract

Conventional approaches to ‘the syntax-semantics interface’ concentrate on matching static syntactic structures directly to semantic forms. This fails to account for the possibility that underspecified and/or procedural meaning may be grammatically encoded, creating observed truth-conditional interpretations only via inferential processes. Here I argue that the Hungarian ‘focus position’ provides evidence for the latter kind of analysis, pointing also to a move away from abstract syntactic structures to an incremental parsing-based analysis of linear word strings. This perspective is further supported by comparison with the English *it*-cleft, which appears to show similar truth-conditional effects but is demonstrably different on other levels.

1 The FP phenomenon and conventional analysis

Kehler (2002: 1) points out that the following quotation, from the psychologist Abraham Maslow, seems to have some relevance for modern linguistics: “I suppose it is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail” (Maslow 1966: 15-16). In this article, I suggest that the analysis generally afforded to the Hungarian ‘focus position’ constitutes a case study of the problem described in this quotation. Specifically, linguists, under the influence of assumptions such as those of Montague and even Grice, have wielded the tools of hierarchical syntactic representations and truth-conditional semantics almost exclusively and have assumed that these can and should be related to each other directly. A fresh look at the ‘focus position’ phenomenon shows (i) that this kind of conventional syntactico-semantic analysis is unsustainable and (ii) that this follows from an over-simplified methodology: the effects of inferential pragmatic processes must be investigated as a prerequisite to identifying the semantic contribution of the relevant parts of the grammar. Comparison with the English *it*-cleft construction, which shows a similar relationship to truth conditions but demonstrably covers a different range of meanings, supports this argument. This has consequences for the very nature of the grammar itself, since it proves to be the case that crucial inferences are drawn on the basis of the particular kind of expression found in a certain position at a certain point in parsing a Hungarian sentence. This calls for the adoption of a model of grammar that provides partial representations of meaning as they are constructed in the course of processing.¹

1.1 Syntax: the ‘focus movement’ analysis

The basic ‘focus position’ (henceforth FP—intended here as a theory-neutral label) phenomenon is illustrated in the contrast between (1a), a so-called ‘neutral sentence’ (i.e. one conveying a simple positive assertion with a ‘topic>comment’, or ‘broad focus’, information structure), and (1b), which is said to show the use of FP.

- (1) a. *János meghívta Mari.*
 János VM.called Mari.ACC
 ‘János invited Mari.’
- b. *János MARIT hívta meg.*
 János Mari.ACC called VM
 ‘It’s Mari who János invited.’

As (1b) shows, the putative focus position is located to the immediate left of the tensed verb and its use appears to result in an ‘exhaustive’ or ‘identificational’ reading of the expression that appears there, of much the same kind as is conveyed by the use of the *it*-cleft construction in English.² The use of this position is accompanied by the postposing of any ‘verbal modifier’ (VM) element, such as the so-called ‘verbal prefix’ *meg* in (1).³ This apparently arbitrary structural effect might appear to be evidence in favor of dealing with FP as a strictly syntactic matter and this appears to have been the conclusion drawn by the majority of analysts. Given a syntactic operation that appears to relate to a certain kind of interpretation, the analysis of FP seems clear enough in the context of contemporary linguistic theory: certain expressions move to a special pre-verbal position, FocusP—possibly accompanied by verb movement which ‘strands’ any VM, as in Bródy (1990)—where they are interpreted with respect to an ‘exhaustivity’ operator at LF.⁴ Thus, syntactic and semantic structures are simply matched; there is no place for inferential pragmatic processes to have any influence on the relationship between linguistic structure and its interpretation.

However, there is another way to analyse the postposing of VMs in the presence of focused expressions. The complementary distribution of these elements in the immediately pre-verbal position could be due to their both seeking to fill a single position, characterized by strict left-adjacency to the tensed verb. If this were the case, it would follow that the semantic contribution of this position must be highly underspecified, its observable effects (such as the exhaustive/identificational reading of pre-verbal foci) being in part derived by inferential processes. Something of the kind can be found in the earlier work of É. Kiss (1987, 1994), but this kind of ‘single position’ analysis ran into a number of criticisms which appear decisive in the context of conventional syntactico-semantic assumptions (see, for example, Farkas 1986, Piñón 1992, Dalmi 1998 and the summary in É. Kiss 2002, 83ff.). This kind of analysis has been resurrected in recent, unpublished work by É. Kiss (2003, 2004; see also É. Kiss 2005a, 2005b), in which she proposes the replacement of FocusP by a PredP position that can host either foci or VMs. Though it is not clear that this avoids all of the syntactic objections previously raised to ‘single position’ analyses, I believe that É. Kiss is correct to identify pre-verbal foci as being in an essentially predicative position—indeed, this is the analysis that I argue for independently in Wedgwood (2005). However, the latter work goes further than É. Kiss’s PredP idea, by proposing that not only pre-verbal VMs and ‘focused’ items are occupants of this predicative position, but so are main verbs in ‘neutral’ sentences that do not contain a VM. Clear evidence for this comes from sentences containing tensed auxiliary verbs and infinitival main verbs, as in (2). The important thing about these sentences is that the main verb is morphologically free of the expression of tense and therefore able to vary in its position relative to tense. Under these circumstances, main verbs prove to be in complementary distribution with VMs and foci, with respect to pre-auxiliary position.

- (2) a. *János meg fogja {hívni Mari / Mari hívni}.*
 János VM will call.INF Mari.ACC Mari.ACC call.INF
 ‘János will invite Mari.’
- b. #*János meghívni fogja Mari.*
 János VM.call.INF will Mari.ACC
 Intended: ‘János will invite Mari.’
- c. *János látni fogja Mari.*
 János see.INF will Mari.ACC
 ‘János will see Mari.’
- d. *János MARI fogja látni.*
 János Mari.ACC will see.INF
 ‘It’s Mari who János will see.’
- e. **János MARI látni fogja.*
 János Mari.ACC see.INF will
 Intended: ‘It’s Mari who János will see.’

It is a major shortcoming of many syntactic accounts of FP (including the prosodically-driven analysis of Szendrői 2003) that they fail to provide a unified basis for VM and main verb (stem) behavior when tense is attached (i) to an auxiliary and (ii) to a main verb. Basic data like those in (2a) and (2c) invite an overarching generalization regarding the positions of VMs and main verbs relative to the expression of tense, but most syntactic accounts of FP require a separate, rather unconstrained operation of ‘VM climbing’ (Farkas and Sadock 1989) to account for position of VMs just when there is a tensed auxiliary (as in (2a)).

What (2) clearly shows, in any case, is that infinitival main verbs act in parallel to VMs when tense is attached to an auxiliary. One could, of course, declare infinitival main verbs to be a kind of VM (as in Koopman and Szabolcsi 2000), but this seems rather incoherent, as well as wholly stipulative—VMs are usually thought to combine with the main verb, so it is unclear how the main verb itself could be a ‘verbal modifier’. Furthermore, the set of VMs is already quite diverse and lacking in a clear motivation for any movement to pre-verbal position; adding infinitives to this would make it lose any semblance of coherence as a class. Otherwise, we must draw the conclusion that the sentences with auxiliaries reflect the ‘real’ relationships between the different elements of the sentence. That is, the position of FP foci and VMs in ‘neutral’ sentences is not so much ‘pre-verbal’ as ‘pre-tense’, and the main verb in a neutral sentence underlyingly has this same relationship to the position of tense. In terms of linear order and adjacency, this is in fact maintained even when the main verb is finite, although the morphological dependence of verb and tense on each other adds the complication that either the tense morpheme alone or the whole tensed verb can be treated as the expression of tense. Thus, a ‘neutral’ sentence like (1a) (repeated here as (3a)) is parallel to (2a), with the VM left-adjacent to the tensed element (which in (3a) is the whole tensed main verb, the verb stem being incapable of occupying another position), while the VM-less ‘neutral’ sentence (3b) is parallel to (2c): the main verb itself is treated as being left-adjacent to the expression of tense (in this case the tense morpheme alone).

- (3) a. *János meghívta Mari.*
 János VM.called Mari.ACC
 ‘János invited Mari.’
- b. *János látta Mari.*
 János saw Mari.ACC
 ‘János saw Mari.’

The idea that ‘focused’ expressions effectively usurp what is the unmarked position of the main verb (or its associated VM) strongly supports the idea that the relevant position is in essence some form of predicative position. However, it appears from the above examples that this position is best be defined in terms of adjacency to tense, rather than as a ‘pre-verbal’ PredP projection, as in É. Kiss’s proposal. Furthermore, there is arguably a certain conceptual oddity to the PredP proposal. As is made clear below, this proposal (correctly, in my view) relies on inferences over the kind of expression found in PredP in order to determine what kind of interpretation will be derived, and is thus implicitly an account based in the process of interpretation, yet it attempts to employ purely generative methodology and analysis—notably without invoking (or even identifying the precise contribution of) a theory of pragmatics, hence lacking the benefit of any theory of inferences in the interpretation process.

In section 2, I discuss how the assumption of a certain kind of immediately pre-tense predicative position, in the context of an incremental processing-based approach to grammar and interpretation, explains the information-structural interpretations of different sentences. First, it is time to look at why the conventional view of the semantics of FP is unsustainable.

1.2 *Semantics: exhaustivity and identification in the grammar*

1.2.1 *The exhaustivity operator analysis*

As noted above, the conventional analysis of FP, which matches syntactic structures directly with semantic effects, assumes that a FocusP projection contributes an operator that adds an ‘exhaustive’ or ‘identificational’ reading to the interpretation of any material found in Spec,FocusP, the effect being very similar to the interpretation of the clefted expression in an English *it*-cleft. The fact that there are good reasons to reject the syntactic side of this conventional story (as indicated above) suggests that the semantic side cannot be this simple either: if there is a single position for foci, VMs and main verbs, then the only way to maintain a consistent semantic contribution for this position would be to make this something highly underspecified. There are also more concrete reasons to abandon the encoded exhaustivity operator analysis, as I show in this section.

It is important to note how the operator analysis has been encouraged, even enforced, by conventional but far from necessary assumptions about the relationship between linguistic structure and truth-conditional semantics (as is argued at length in Wedgwood 2005). As Szabolcsi (1981) notes, examples like (4) suggest that the interpretive effect of FP can affect truth conditions. Here the exclusion of alternatives to the denotation of the ‘focused’ expression must be taken to be part of the truth conditions of each clause; otherwise, (4) would represent a logical contradiction.

- (4) *Nem PÉTER aludt a padlón, hanem {PÉTER ÉS PÁL / AZ EGÉSZ TÁRSASÁG}*
 not Péter slept the floor.on but Péter and Pál the whole company
 ‘It isn’t Péter who slept on the floor; it’s Péter and Pál / it’s the whole company.’

According to conventional semantic assumptions, including those of Gricean pragmatics, truth-conditional meaning must be derived compositionally by the grammar (and, conversely, pragmatically inferred meaning can only be non-truth-conditional). In this case, the analyst has no choice but to force a syntactic representation to map directly onto the appropriate semantic representation. Consequently, the grammar can be required to have a certain form, whatever the side-effects of this may be, in terms of abstraction away from the observable evidence of surface forms. Thus, examples like (4) demand an analysis whereby there is a distinct FP position which grammatically encodes its ‘exhaustive’ interpretation, as Szabolcsi (1981) argues. Hence, an exhaustivity operator of roughly the form in (5) is often associated with FP.

- (5) $\lambda x [\lambda P [P(x) \ \& \ \forall y [P(y) \rightarrow y = x]]]$

However, as will be shown below, this analysis is quite unsustainable. Hence, it seems that quite fundamental assumptions of conventional linguistic analysis can determine empirically inaccurate results.

Fortunately, we need no longer be forced onto this paradox: good reasons have been independently advanced for rejecting the crucial problematic assumptions regarding the relationships of syntax, semantics and pragmatics. As argued at length by ‘post-Gricean’ analysts like Sperber and Wilson (1986/95), Récanati (1993), Carston (2002), there is no basis for the assumption that inferential pragmatic processes cannot influence truth-conditional meaning; on the contrary, there is copious evidence that this happens regularly. Well-worn examples include the likes of (6a): Carston (2002: 222ff.) argues compellingly that the various temporal and causal meanings associated with conjunction cannot be encoded in any way, yet they can come under the scope of logical operators—in this case disjunction—and as such demonstrably affect truth conditions (just as in (4)). Similarly, the downward-entailing reading of the numeral in (6b) clearly enters into truth-conditions, but this reading is not generally accepted as being encoded in the lexical semantics of numerals (for good reasons; see Carston 1998, Horn 1992).

- (6) a. Either he left her and she took to the bottle or she took to the bottle and he left her.
 b. Kim can eat 2000 calories a day and not put on weight.

The precise contributions to truth conditions made by a wide range of open-class lexical items are also regularly dependent on inferences drawn in context—consider *flat* in *Holland is flat* or *raw* in *This steak is raw* (as a sincere complaint) versus *Steak tartare is made with raw beef*. Relevance theorists also emphasize that the process of reference assignment constitutes a form of inferential contribution to truth conditions and that this process is most coherently analyzed as being driven by the same principles of context-dependent, relevance-oriented inference that account for conversational implicatures and thus are independently needed in any complete theory of language understanding (Sperber and Wilson 1986/95: 183ff.).

There is thus, at the very least, room for wide-ranging, theoretically consequential debate regarding the nature of the relationships between linguistic structure, truth-conditional meaning

and inference. Still, there is little sign in the mainstream syntactic or semantic literature that anything but the most direct mapping between syntax and semantics is regularly considered.⁵ This is perhaps because of the potentially far-reaching consequences of considering the role of extra-grammatical inferential processes in the construction of meaning. As argued at length in Wedgwood (2005) and hinted at below, Hungarian FP provides an example of how the very nature of syntax is called into question once one accepts that the mapping from linguistic structure to semantic representation may be quite indirect. After all, if encoded meanings are not what we have hitherto tended to assume, the structures that we must posit to convey them are unlikely to be the same.

In the absence of any antecedently determined assumption that it must involve direct grammatical encoding of exhaustivity, the interpretation of Hungarian FP immediately begins to look like a prime candidate for pragmatic explanation. The exhaustive interpretation of asserted material is predictable in terms of what is known in the Gricean tradition as ‘quantity implicature’: in essence, hearers will usually assume that the speaker has mentioned every relevant piece of information, so can infer on the basis of this general communicative principle alone that any contextually relevant alternative to a given assertion is in effect communicated to be untrue.⁶ Since the phenomenon of conversational implicature shows some such pragmatic mechanism to be independently necessary, an explanation of FP based on this mechanism, and consequently reducing the burden of explanation on the grammar, would be particularly parsimonious on a broader theoretical level.

If this is the appropriate explanation of the interpretation of the FP construction, then this construction must in effect only encode a simple assertion—one that involves a rich ‘background’, hence involving a ‘narrow focus’ on a particular expression, but nevertheless just an assertion, with no intrinsic exhaustivity or other associated semantic operator. Is there any evidence for this? There is, although the fact that this evidence pertains to FP is often obscured in practice. This evidence comes from question-answer sequences. Despite the impression given in the literature by the regular translation of FP sentences with *it*-clefts, FP constitutes the only felicitous response to a *Wh*-question like that in (7), an example adapted from Horvath (2000: 201).

- (7) *Kit hívtak meg?*
 ‘Who did they invite?’

Jánost (hívták meg).
 János.ACC invited.3PL VM
 ‘(They invited) János.’

If the significance of this kind of example has been missed in the past, this may be simply due to the fact that all ‘given’ material would normally be elided in answer to a *Wh*-question, as indicated by the parentheses in (7). This means that the FP construction, with its characteristic postposed VM, is not usually observed in such contexts. Nevertheless, native speakers agree that the only possible full sentence answer in such a context would be the FP construction, as seen in this example of Horvath’s.

As a result of the ‘invisibility’ of FP in such cases, the construction tends to be associated with contexts in which the information structure of the sentence is not predetermined by a context-question. These are the kinds of contexts in which an *it*-cleft is more likely to be used in

English, to disambiguate or emphasize the information structure of the utterance. They are also the kinds of context in which a narrowly focused expression is very likely to result in a clearly contrastive reading, for pragmatically predictable reasons. Briefly, relevance-based reasoning would lead us to expect that the effort of ‘accommodating’ the rest of the sentence as background material and interpreting the focused expression in terms of this should be justified by some particular communicative effect above and beyond conveying a single proposition; on this basis, an obvious inference is that the rich background material is provided in order to evoke likely completions of the sentence (i.e. potential foci), in contrast to which the actual focus is asserted. Hence, it is not due to a special correspondence in encoded meaning that observable data involving the use of FP tend to be translatable with a cleft, but rather because of the coincidental ‘invisibility’ of FP structures in certain key contexts.⁷ That the common usage exemplified in (7) undermines the supposed parallelism of FP and *it*-clefts is shown clearly in the fact that using *It’s János that they invited* in a translation of (7) would be decidedly marked, if acceptable at all. The *it*-cleft thus appears to be significantly restricted in use compared to FP. This is predicted by the analysis outlined below, where elements of interpretation that are directly encoded in the *it*-cleft are inferred in certain contexts with the FP construction, on the basis of more underspecified encoded semantics.

The use of FP in cases like (7) is highly suggestive of a construction that fundamentally expresses something like ‘narrow focus’—that is, an assertion made with regard to a largely ‘presupposed’ event—which regularly becomes associated with exhaustive interpretation just because this is the pragmatically unmarked way to interpret such assertions. This is further supported by the fact that, just as in English, a non-exhaustive narrow focus must be specially signalled in Hungarian, using rising intonation and/or phrases like ‘among others’ (Roberts 1998, Horvath 2000). This is consistent with a pragmatic explanation of exhaustivity, but would seem oddly redundant within a system where exhaustivity were itself ‘added’ to the meanings of sentences through the use of an encoded operator and explicitly signalled through word order.

Nevertheless, since (7) does feature an exhaustive reading, albeit one that seems to be naturally explained by other means, it is not direct counterevidence to the claim that an exhaustivity operator is encoded in FP. Such counterevidence is provided by a test originally applied to the English *it*-cleft by Horn (1981), in the form of the sentence in (8a). If it were the case that the semantics of the cleft includes an exhaustivity operator, (8a) should be quite coherent, since the exhaustive meaning is precisely what is required to justify the second clause—as shown in (8b), which includes an explicit indication of exhaustivity, in the form of *only*. However, (8a) is quite clearly incoherent, so one may deduce that the cleft does not inherently convey exhaustivity.

- (8) a. # I know Mary ate a pizza but I’ve just discovered that it was a pizza that she ate.
b. I know Mary ate a pizza but I’ve just discovered that it was only a pizza that she ate.

Translating Horn’s examples into Hungarian, using the FP construction, produces exactly the same pattern of acceptability, as shown in (9). Hence, it cannot be the case that FP introduces an exhaustivity operator as a matter of structurally encoded semantics.

- (9) a. #*Azt tudtam, hogy Mari megevett egy pizzát, de most vettem észre, hogy egy pizzát evett meg.*
 That knew.1SG that Mari VM.ate.3SG a pizza.ACC but now take mind.to(VM) that a pizza.ACC ate VM
- b. *Azt tudtam, hogy Mari megevett egy pizzát, de most vettem észre, hogy csak egy pizzát evett meg.*
 That knew.1SG that Mari VM.ate.3SG a pizza.ACC but now take mind.to(VM) that only a pizza.ACC ate VM

1.2.2 The identificational operator analysis

The evidence presented in the previous section shows that exhaustivity as such cannot be the encoded semantics of any ‘focus position’, even if such a position can be justified syntactically. There is, however, another version of the hypothesis that FP encodes a semantic operator: on this view, FP does not assert the exhaustivity of the focus as such, but rather effects ‘exclusion by identification’, through the application of an ‘identificational’ operator. In essence, the FP construction is said to create a presupposition that there exists a unique (individual or sum) entity with the properties enumerated in the ‘background’ material in the sentence; the assertion made is that the denotation of the ‘focused’ expression is identified with the presupposed entity. In its simplest form, this may be represented as in (10) (see Kenesei 1986).

$$(10) \lambda x [\lambda P [x = \iota y [P(y)]]]$$

Here, the exhaustive reading of FP foci is part of the presupposition, not the assertion, which is purely identificational. The response to the *Wh*-question in (7) thus means roughly ‘The person they invited is János’, which is at least compatible with the question-answer context (though the arguments surrounding (7) regarding the redundant and unparsimonious nature of the operator analysis still apply). This reading of FP is also compatible with the data in (9) (asserting the identity of an object being plainly infelicitous when the object has already been named). To this extent, identificational semantics therefore seems to capture the data fairly well.

Does this mean that one should adopt the ‘identificational operator’ analysis? Not necessarily. To do so too quickly would be to once again fall into the trap of simply assuming that observed structures and logically characterizable meanings can be directly matched with one another—a strategy that we have already seen to feed back into an inappropriate analysis of the syntax of FP. The evidence in (2) suggests that the significance of the immediately pre-tense position goes beyond recognizable cases of ‘focusing’, hence any consistent interpretive contribution made by it must be broader than *any* semantics proposed for focused expressions. On a more philosophical level, note that while the ‘identificational focus’ account re-distributes the explanation across what is asserted and what is presupposed, it fails to address an issue that should ultimately be of more interest to linguists: what is actually encoded in the language versus what may be inferred on the basis of extra-linguistic principles. Rather than simply stating that the interpretation of FP involves a presupposition plus identification with what is presupposed, we should ask precisely where these elements of the interpretation stem from. To foreclose discussion of this question by simply assuming the given interpretation to be directly linguistically encoded as such is to ignore a whole spectrum of other possibilities.

The reasons why we should instead actively investigate this question are plain from even a superficial comparison of FP with the English *it*-cleft construction. Intuitively, and on the basis of certain tests (see É. Kiss 1998 and section 3, below), these constructions can have similar truth-conditional effects, which in both cases could be captured in terms of identificational semantics ((8) and (9) show both to be incompatible with encoded exhaustive semantics but compatible with an identificational analysis). Therefore, if we were to follow the naïve methodology of simply matching structures to truth-conditional interpretations, we should assume the same identificational meaning to be directly encoded in both constructions. However, the situation within English shows this to be inadequate. This is so because the meaning space occupied by the Hungarian FP construction spans meanings conveyed by both the *it*-cleft and unmarked sentences containing purely phonological focus, as shown in the case of (7) (see also Wedgwood 2005: 127). Thus, if we are to assume an identificational operator for FP, we would presumably have to assume one for not only the *it*-cleft but also for English phonological focus. This is not something that most analysts would countenance, especially given the considerable efforts that have gone into demonstrating a distinction between these focusing strategies within English (see in particular É. Kiss 1998)—in any case, we clearly want any analysis to draw *some* difference between them. The problem does not arise once one accepts that inference plays a part in determining observed interpretations: linguistic phenomena that encode different underlying semantics can come to express similar meanings under certain conditions—i.e. when the communicative usefulness of the underlying semantics in each case points to a certain kind of interpretation. Indeed, there may be more than one kind of encoded semantics that regularly results in a reading like ‘identificational focus’.⁸

Once this is recognized, it seems rather significant that the *it*-cleft involves quite overt indicators of identification with a presupposed entity: after all, this construction is based around the use of the copular verb with a pronominal subject. This pronoun is not a canonical ‘full’ pronoun, and is often labeled ‘expletive’, but, as numerous authors have pointed out, it maintains many of the properties of full, referential pronouns, among which are notably those relating to definiteness and hence the ‘presupposition’, in one sense or another, that some uniquely identifiable entity exists (e.g. Bolinger 1972, Borkin 1984, Hedberg 1990, 2000, Geurts and van der Sandt 2004 and, within a Dynamic Syntax analysis, Cann to appear). Several of these authors point out that the clefting *it* is regularly interchangeable with demonstrative *this* and *that*, while expletive *it* with weather and raising verbs is not. Geurts and van der Sandt also note that the necessarily neuter pronoun of the cleft is the same one that appears in all identificational copula sentences, as shown in examples like *Guess who I saw at the swimming pool? {It / *He} was Alfred Tarski!* Whatever analysis one might give this pronoun in terms of word category membership, it is clear that it maintains the properties of pronouns that interest us here: their definite/presupposed nature. Thus, in connecting this pronoun to an individual-denoting expression (the ‘clefted’ expression) through the copula verb, the *it*-cleft does indeed encode identificational semantics, overtly and compositionally (exactly how—i.e. the choice between the various possible views of the identificational copula—is immaterial to the present argument). The FP construction, on the other hand, contains no such overt indication of an essentially identificational interpretive process. Nor does it contain any correlate of the iota operator in (10), in the form of any determiner-like element or a nominalization of the ‘background’ material in the sentence (cf. an arguably determiner-like or relativizing particle found in a focusing construction in Malagasy; Paul 2001⁹).

Taken together, the above observations suggest that the FP construction requires an analysis that produces an ‘identificational’ reading more consistently than English phonological focus does, but not necessarily via the direct encoding of identificational semantics, which appears more appropriate in the case of the overtly identificational and still more pragmatically restricted *it*-cleft. Such an analysis can be provided by treating the FP construction as just one manifestation of a pre-tense position whose semantic effect is to trigger a certain kind of predicative procedure. This has the distinct advantage of accommodating the syntactic observations made in section 1.1, regarding the positions of main verbs, VMs and foci relative to tense. An analysis of this kind is outlined in section 2.

To summarize this section, while identification does seem a more appropriate notion than exhaustivity to use in *describing* the semantic effects associated with the FP construction, it is not correct to deduce from this that an identificational operator is grammatically encoded in the ‘focus position’. Instead, it seems that the directly encoded semantics of FP is something less highly specified, but something that regularly leads via inferential processes to an ‘exclusion by identification’ reading.

2 A ‘main predicate’ position in an incremental account

The aim of this section to show how the identificational reading associated with the FP construction is a straightforward result of applying a certain kind of predicative procedure to non-verbal expressions. Furthermore, the assumption that this procedure applies to any expression found left-adjacent to tense in Hungarian also explains the readings of sentences in which a verb or VM occupies this position. In other words, the identificational reading is the result of how different kinds of expression interact with an underspecified procedural semantics associated with this position (which is notably defined in terms of linearity and adjacency).

There are a number of ways to explain why applying a predicative procedure to non-verbal expressions should result in an ‘exclusion by identification’ reading. One way is outlined by É. Kiss (2004), in her discussion of her PredP approach. É. Kiss argues that the kind of expression that regularly produces the relevant reading in FP, such as a definite or specific indefinite NP, cannot be a predicate in the conventional sense—i.e. it is not property-denoting—so can only fulfil the requirements of a PredP position as a ‘specificational predicate’. Following Huber (2002), É. Kiss describes this as follows. The specificational predicate denotes a set whose function is to specify the members of another set: that denoted by the subject of predication (i.e. the rest of the sentence). The ‘subject’ set gets an existential reading because a set whose members can be listed is evidently a set that exists. The act of specifying implies exhaustive listing, hence this kind of predication implies ‘exclusion by identification’.

This account seems to capture an important insight. It gives a basic sense of how predication and the identificational reading of FP may be related, as long as one accepts that specification is a kind of predication. In so doing it suggests a particular relationship between the interpretations of foci and VMs (which É. Kiss takes to be primarily predicates over the internal argument of the verb) and thereby facilitates a ‘single position’ analysis of their syntactic behavior. However, in appealing simply to a special operation of ‘specificational predication’, É. Kiss gives only a partial explanation of how and why this particular reading arises from the application of some general predicative procedure to particular kinds of expression. In effect, É. Kiss describes the existence of two distinct procedures, predication and specification, and argues that some expressions cannot undergo the former. What is not clear from her account is exactly

in what sense these two procedures have a common basis significant enough for them to share a common syntactic expression. É. Kiss’s ‘specificational predication’ is, on the face of it, a quite distinct operation, notably differing from the kind of predication that she associates with VMs in the fact that the latter are argued to be predicates over internal arguments, whereas the ‘specificational’ operation associated with focusing identifies the members of a set denoted by the entire rest of the sentence. Hence, simply referring to two procedures that could be termed ‘types of predication’ does not in itself unify the interpretation VMs and foci. Without a clearer common basis to these operations, this account is very close to being a recreation of the ‘identificational operator’ analysis—i.e. in effect stipulating the specificational interpretation of certain kinds of expression when they appear in the relevant position. Furthermore, É. Kiss’s analysis at best only brings together foci and VMs, whereas the evidence presented in section 1.1 suggests that any unified account of these should also deal with ‘pre-tense’ main verbs.

In any case, the direction of explanation appears to be wrong. É. Kiss relies on the idea that expressions like definite NPs cannot have a standard predicative interpretation, but according to quite mainstream views within semantics, this is not the case. For example, the ‘type-shifting’ operations defined by Partee (1987) allow for the possibility that expressions like NPs are in effect ambiguous regarding their type specification. The operation that changes generalized quantifiers into $\langle e, t \rangle$ predicates is known as *BE*; alternatively, if one assumes a shift from type $\langle e \rangle$ to $\langle e, t \rangle$, the relevant operation is Partee’s *ident*; as a result of applying these operations, the contribution of *Mari* in FP would be as in (11a) or (11b).

- (11) a. $BE(mari'_{\langle e, t, t \rangle}) : \lambda x [mari' (\lambda y [y = x])]$
 b. $ident(mari'_{\langle e \rangle}) : \lambda x [x = mari']$

The forms of (11a,b) are immediately suggestive of an identificational reading and it is easy to see why: being said to ‘have the property of being Mari’ is plainly equivalent to being identified with Mari, when *Mari* refers to a unique individual in a model. Hence, asserting that the predicate $mari'_{\langle e, t \rangle}$ applies to some entity amounts to identifying that entity with the individual known as Mari.

In roughly the same way as É. Kiss, one might now say that a logical subject of predication is more or less by definition ‘presupposed’ to exist, so that the existential reading of the rest of the sentence could be said to follow directly from the use of an inherently specific expression as a predicate. To give more substance to this claim, however, and to make clear the precise interpretive mechanisms involved in deriving identificational readings from non-verbal elements but not typically from verbs or VMs, one must adopt the perspective of incremental processing (rather than semantic interpretation stated over representations of entire sentences). In addition to making the interpretive side more explicit, the real advantage of such a change in perspective is the ability to relate the interpretation of identificational predicates to the syntactic character of FP, as part of a broader account of pre-tense expressions. Indeed, from this perspective, the syntax and even the prosody of FP are to a great extent derived from its semantics and from pragmatic processes that are triggered thereby in the course of interpretation—as opposed to being stipulated via the use of abstract syntactic projections and features. An incremental processing-based account of this nature is presented at length in Wedgwood (2005); for reasons of space, only the broadest outline can be given here.

First, note that a pre-tense expression is not just *a* predicate; it is the predicate that determines the division of the sentence as a whole into logical subject and logical predicate. This

is something that simply assuming the existence of a PredP position does not address: if occupancy of this position were determined by a feature [+predicative], then any number of items might be expected to be attracted to it—what happens to all the predicative items that are not checked in this position?¹⁰ What appears to be required is not merely the general idea of predication, but some notion of the ‘main predicate’ of the sentence—of a kind of predication that is unmarkedly associated with main verbs, but which also describes a non-verbal predicate when it takes the rest of the sentence as its term (something that will produce an identificational and ‘narrow focus’ interpretation). Such a notion would clearly provide a suitable semantic basis for explaining why there should be a common syntactic position for verbs and narrow foci. It is also supported by the following simple but generally overlooked observation: the pre-tense element, whether verb, VM or narrow focus expression, typically initiates the focused, asserted part of the sentence. A narrow focus, uniquely, also concludes it (subsequent material being part of the ‘presupposed’ background), but this does not affect the fact that all the occupants of the immediately pre-tense position share this significant characteristic regarding the relationship between syntax and interpretation. Thus, we require some notion of ‘main predicate’ that is suitably general as to unify all pre-tense expressions to an extent, but which also predicts further effects which differentiate verbs and VMs, on the one hand, from non-verbal expressions, on the other.

I propose that this notion can be captured in procedural semantic terms as follows: the application of the main predicate, in conjunction with the provision of some temporal anchor, creates a full propositional form. I take the definition of a full propositional form to include some of the basic semantic structure that distinguishes one eventuality from another, such as aspectual and/or argument structure. It is this that predicts the relevant difference between non-verbal expressions and verbs/VMs. In essence, the crucial point is that verbs and VMs carry semantic structure of a rich enough kind to create a full, if skeletal, propositional form, in the sense required, on their own. Thus, at the point at which a main verb is parsed and recognized to be left-adjacent to tense, an eventuality with a certain structure, as determined by the verb, is asserted to exist, and thus a propositional form is created. If, on the other hand, an NP is encountered left-adjacent to tense, no such semantic structure is introduced, merely the assertion that some individual plays a certain role in some eventuality. There is then only one way in which the requirement to perform main predication, hence to create a proposition, can be fulfilled: the appropriate structure must be found in the context. To do so in effect means recovering a presupposed eventuality, and the usual ‘narrow focus’ reading of the pre-tense NP follows.¹¹ Consider again the FP sentence (2d), repeated here as (12).

- (12) *János MARIT fogja látni.*
 János Mari.ACC will see.INF
 ‘It’s Mari who János will see.’

According to my reasoning, the interpretation of (12) underlyingly has roughly the following form: “[The assertion that Mari is the Theme of some eventuality creates a full propositional form because] Mari can be identified with *someone* in a contextually available presupposed eventuality of János seeing someone at some future time”.¹² This way of rendering the meaning of such a sentence may be unwieldy, but it shows how the use of certain expressions leads to the relevant kind of identificational reading: the part in square brackets represents part of an inferential process that converts the encoded ‘main predicate’ procedural semantics to a

proposition with communicative relevance, the part following the brackets is what gets conveyed as a result. This latter part is intuitively parallel to the *it*-cleft translation given in (12).¹³

The ‘application of the main predicate’ here is to be viewed in a particular way: as a process that occurs upon parsing the pre-tense item (possibly in conjunction with the immediately following expression of tense). This means that the relationship between linguistic structure and meaning is defined in terms of a dynamic process of building up an interpretation, not a direct mapping between static structural representations. The advantage of this unorthodox perspective lies in its direct interface with processes of inference carried out in the course of parsing and shows through in its potential to unify all the uses of the pre-tense position, thus providing a semantic correlate to the structural observations of section 1.1.

With this in mind, let us return to the case of a VM or verb in the pre-tense position and consider how the nature of these items as main predicates fits with the syntactic and prosodic character of such sentences. To take the simplest case, imagine that a simple verb—one that is not associated with a VM anywhere in the sentence—is encountered left-adjacent to tense, as in (2c) or (3b). It is thereby signalled to be the main predicate, which it does straightforwardly; for example, *lát* ‘see’ creates a propositional form wherein one entity is seer and another is seen. Neither of these entities needs to have been mentioned prior to the parsing of the verb (though one may happen to have appeared as a topic), but this kind of propositional form is still created unproblematically, since such semantic structure is inherent to the verb’s lexical semantics. Therefore, if any of the arguments of the main predicate are subsequently specified explicitly within the same sentence, this will have the effect of elaborating on a proposition that has already been established. Thus, *Marit* in (3b) asserts the identity of the entity seen in the relevant proposition (in effect replacing a pronoun-like placeholder in the propositional form created by main predication). This is crucially different to the identificational reading of non-verbal main predicate, because it merely elaborates on some part of the propositional form that is currently being asserted, whereas a main predicate expression must create a fresh propositional form by itself.

The possibility of such post-main-predicate elaborative assertion is what allows for the ‘wide focus’ or ‘topic>comment’ information structure that is associated with sentences with verbal main predicates. The idea that such ‘wide foci’ are each in fact made up of a series of assertions—main predicate followed by elaborations on the proposition established—is supported by the prosody of such sentences in Hungarian. While the strongest prominence is associated with the verb or VM in its pre-tense position, post-verbal expressions do carry weaker pitch accents (see Kálmán 1985, Rosenthal 1992, Roberts 1998). This is consistent with the view of these expressions as a series of appositive, elaborative post-main-predicate assertions and is somewhat mysterious on other accounts. Note that an incremental, parsing-based approach is key to this explanation of how word order, information structure and prosody relate to one another.

The role of any VM with respect to main predication is a complex issue, only the broadest outline of which can be given here. The key question is how a VM could be said to create a propositional form and thereby effect main predication on its own (i.e. without necessarily triggering a search for a presupposed eventuality that a VM could complete). Above, I suggested that VMs, like verbs, introduce sufficient semantic structure to create a propositional form. In fact, most of the semantic structure (in the relevant sense) of a sentence that contains a VM is derived from the combination of VM and verb, which form a complex predicate together. However, even in the most opaque of VM+V combinations, the VM makes its own recognisable,

albeit possibly quite underspecified, contribution and the nature of this is sufficient to allow for main predication by the VM. Furthermore, as shown immediately below, the main predication analysis predicts the fact that when a ‘neutral’ sentence contains a VM+V combination, it is the VM that appears in the pre-tense position, not the verb (as in (2a)).

Consider one common semantic effect of VMs: to add a terminative or resultative meaning to the verb’s semantics. One may characterize this in terms of asserting the existence of a ‘result state’ sub-eventuality. Now, a result state entails the existence of a certain kind of complex event: in Pustejovsky’s (1991) terms, a transition from a process to a result. In consequence, the assertion of the result state amounts to an assertion of the existence of the more complex eventuality and, as such, to the creation of a (highly skeletal) propositional form. In this way a VM can effect main predication without recourse to a presupposed eventuality to act as its term (in parallel to the case of non-verbal main predicates). Furthermore, it is clear that a VM creates a proposition that must be structured around a complex predicate formed out of the VM and verb. On the other hand, once a verb effects main predication, its ‘unmodified’ meaning structures the proposition, leaving no room for the subsequent creation of a complex predicate with any VM (and therefore leaving the VM uninterpretable). It follows that a VM must be main predicate in a neutral sentence; sentences in which a verb precedes its VM must involve a presupposed eventuality, with some other item acting as main predicate.¹⁴

In summary, the analysis of the position left-adjacent to tense in the Hungarian sentence as a certain kind of predicative position has the potential to unify the interpretation not only of VMs and ‘identificational’ pre-verbal foci, as in É. Kiss’s PredP analysis, but also of main verbs in neutral sentences. In so doing, it allows for a semantic analysis that fits with the syntactic observations of section 1.1. This extra step is only possible if one abandons the conventional methodology of mapping static hierarchical syntactic structures to interpretations and instead investigates the effects of inferential processes that may be triggered in the course of interpreting a string of words incrementally. Only this perspective allows one to consider the effects of all relevant processes outside the grammar and thereby to differentiate them from the meaning that is properly attributable to direct grammatical encoding.

3 The putative FP/cleft correspondence

The account developed over the previous sections dispenses with a widely-held belief: that the English *it*-cleft and Hungarian FP constructions, being very similar at some fundamental level, both contrast with cases of purely phonological focus in English (i.e. within sentences of unmarked word order). This belief is implicit in the almost universal strategy of using the *it*-cleft in translations of FP sentences and is explicitly argued for by É. Kiss (1998). It is taken to its apparently logical conclusion, given conventional assumptions about syntax and semantics, by É. Kiss (1999), with a common underlying syntax and semantics proposed for the two constructions—involving a FocusP which encodes an ‘exhaustive identificational focus’ operator.

Above, I have given reasons to reject this particular analysis and to adopt the position that the *it*-cleft and FP are not underlyingly the same, despite their frequently similar interpretive effects. Specifically, I have suggested that meaning that is directly encoded in the form of the *it*-cleft is partly the result of inference in the case of FP. Furthermore, I have argued that FP often resembles English phonological focus rather than the *it*-cleft. Nevertheless, significant evidence

has previously been adduced in favor of a common analysis of the FP and cleft constructions. It is therefore necessary to re-evaluate this evidence and to show how it fits into the kind of account that I have outlined.

First, there are the obvious superficial similarities between the constructions. Both FP and *it*-cleft are typically thought of as involving an ‘early’, accent-bearing focused expression preceding distressed ‘background’ material.¹⁵

In addition, É. Kiss (1998) makes much of tests like that in (13). The fact that the reply in (13a) is felicitous—implying contradiction yet in fact only adding information—is argued to show a directly encoded exhaustive/identificational meaning in the case of FP and its *it*-cleft translation. (13b), on the other hand, supposedly demonstrates that the same reading is not associated with English phonological focus.

(13) 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 kinézett.*
No a coat.ACC also out.picked
‘No, she picked a coat, too.’

b. A: Mary picked herself A HAT.
B: #No, she picked a coat, too.

However, this test cannot be taken to show anything so categorical. First, I have found that some native speakers query the felicity of the Hungarian exchange in (13a), without careful contextualisation. But even if this were accepted unequivocally, the apparent distinction between (13a) and (13b) is demonstrably dependent on context. For example, contrast the isolated example (13b) with the partially contextualized (14a,b).

(14) a. C: I see that Jane picked herself a coat, a scarf and a pair of gloves.
A: Whereas Mary picked herself A HAT.
B: No, she picked a coat, too.
b. C: Mary will look pretty stupid in that coat that she picked for herself.
A: Mary picked herself A HAT.
(B: No, she picked a coat, too.)

The examples in (14) illustrate how English sentences of unmarked word order, with purely phonological focus, regularly express the kind of ‘exclusion by identification’ reading that analysts have been quick to treat as being a special feature of constructions like FP and the *it*-cleft. Far from indicating a fundamental distinction between FP/clefts and English phonological focus, tests like that in (13) simply emphasize the need to look beyond the methodology of matching observed structures with observed meanings and to recognize that similar results may arise from different sources (including different kinds of grammatically encoded meaning), thanks to the inferential ingredient in the interpretation of natural languages. Given the evidence of (13) and (14), this is plainly true regarding the *it*-cleft and phonological

focus within English; my arguments earlier in this article merely claim that this is also the case (albeit in a more subtle way) with respect to the *it*-cleft and Hungarian FP.

The remaining observations that supposedly favor *it*-cleft/FP parallelism fit unproblematically into this view. My account entails that the two constructions are underlyingly different, in that one encodes identification while the other encodes a particular kind of predication, but also predicts that their effects will regularly be very similar, given the nature of the predicative reading of certain expressions. Hence, my account predicts that any material following either a clefted expression or a pre-tense non-verbal expression will have a 'presupposed' reading (in the cleft case, because of explicit identification with a presupposed entity, signalled by the copula with a pronominal subject; in the FP case, because of the inferences required to make sense of main predication by a non-verbal expression). However, unlike accounts that assume the two constructions to share encoded identificational semantics, it also predicts, without the stipulative use of syntactic projections or semantic operators, that a pre-tense main verb or VM will usually be followed by further asserted material. Hence, what is recognized as the FP construction does appear to bear a close syntactic resemblance to the English *it*-cleft, but this masks the fact that other, superficially quite different Hungarian sentences involve a common pre-tense position with a common underlying interpretation. The 'semantics of FP' is thus of necessity more general than the encoded identificational semantics of the *it*-cleft.¹⁶

4 Summary

Returning to the quotation at the beginning of this article, the case of Hungarian FP shows the importance of using a range of analytical tools. The conventional assumption that syntactic and truth-conditional semantic representations can be straightforwardly aligned with one another in the name of compositional semantic analysis has been shown in this case to lead to the assumption of unnecessary entities within both syntactic and semantic theory. Once the effects of extra-grammatical inferential processes are taken into account, the relationship between linguistic structure and its interpretation looks quite different. The apparent 'pre-verbal focus position' proves to be just one manifestation of a more general word order / meaning correspondence, which accounts also for the position of VMs and verbs in so-called 'neutral' sentences. The meaning encoded in the relevant grammatical configuration is a certain kind of predicative procedure. The identificational and exhaustive interpretations of certain expressions in this position predictably follow by inference on the basis of this procedure and therefore need not be attributed to grammatically encoded semantic operators.

In the light of these findings, this article has also looked afresh at the comparison between the Hungarian FP and English *it*-cleft constructions, concluding that they do not inevitably convey parallel meanings and that when they do, this does not reflect common encoded semantics, but rather shows the same effects arising inferentially from two different sources. More specifically, the *it*-cleft directly and explicitly encodes an identificational reading, while in the case of Hungarian FP an identificational reading arises on the back of an encoded predicative procedure. The tendency in parts of the analytical literature to maximize the parallelism between these constructions, in spite of both details of linguistic form and evidence from felicitous usage, provides a clear demonstration of how the conventional notion of the syntax-semantics interface, for all the mathematical sophistication that has been brought to it, can be too crude and simplistic

a tool, making complex and contrasting mechanisms look like just so many nails, waiting to be hammered into place one way or another. Importantly, the case of Hungarian FP also shows that the conventional interface cannot simply be enhanced by adding an extra layer of semantic representation, such as a formal model of discourse, since the factors that have to be taken into consideration include inferences triggered in the course of incrementally processing strings of linguistic material. This particular example of a meeting place of information structure and grammar thus implies profound challenges for the way we think of both.

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¹ One existing framework of this kind is Dynamic Syntax (Kempson, Meyer-Viol and Gabbay 2001). It remains to be seen how the formal apparatus of this developing framework could be adapted to accommodate the ideas outlined below, which I present in a largely informal way here. For a more formal treatment, see Wedgwood (2005).

² The strict left-adjacency of a focus to the tensed verb is uncontroversial (see, for example, É. Kiss 2002: 83), but perhaps worth illustrating, given its importance below. If an expression such as a noun phrase is separated from the verb by, say, an intervening adverb (as in (i)), this expression cannot get the cleft-like ‘focus’ interpretation (though it might be acceptable on another, ‘multiple topic’, reading; É. Kiss 2002: 13):

- (i) # *János Mari kelleltenül hívta meg.*
János Mari.ACC reluctantly called VM
Intended: ‘It’s Mari who János invited reluctantly.’

Superficially, there are two exceptions to the generalization that nothing can intervene between focus and verb: the particle *-is* ‘also, even’ and negative particle *nem*. For explanations of these, see Wedgwood (2005: 77 and Chapter 8).

Unlike most analyses, my approach treats the unmarked strict left-adjacency to the verb of ‘verbal modifiers’ in parallel to this focus-verb adjacency and also treats their inability to intervene between focus and verb in parallel to other expressions (see below).

³ Other members of the class of VMs include other ‘prefixes’ with directional/aspectual semantics, bare nominal internal arguments and resultative secondary predicates.

⁴ For arguments against Bródy’s verb movement analysis, see Koopman and Szabolcsi (2000), É. Kiss (2002). The alternatives presented in these works involve movement of the VM to some other pre-verbal position in ‘neutral’ sentences, plus some reason why this movement is blocked when FocusP is occupied.

⁵ This is not to discount work in ‘dynamic semantic’ frameworks like DRT (Kamp and Reyle 1993). Such frameworks may in one sense make the process of mapping from syntax to semantics less direct, but only by introducing a particular set of (discourse-)semantic processes. The distinction between linguistic and extra-linguistic (i.e. pragmatic) contributions to meaning is, if anything, somewhat obscured by most of these frameworks. Hence, the problem remains of semantic effects being ultimately fed back into syntactic representations that are presumed to trigger them, whether or not these effects might be attributable to some other source.

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- ⁶ This process is explicable within Sperber and Wilson's (1986/95) Relevance Theory without recourse to Grice's (1975) problematic assumption of co-operation between interlocutors and without any specific 'quantity maxim'.
- ⁷ Brunetti (2003) independently comes to similar conclusions regarding foci in a (superficially) left-peripheral position in Italian.
- ⁸ Exactly this seems to be the case within English: the *it*-cleft and phonological focus strategies are in some contexts virtually interchangeable, despite, as argued above, presumably having different encoded semantics and despite on other occasions carrying quite distinct meanings.
- ⁹ A reviewer has pointed out that Paul's description of the relevant Malagasy particle as determiner-like is far from uncontroversial (and Paul herself recognizes it to be somewhat arbitrary). This does not substantially alter my point, however: whatever the Malagasy particle is, it seems likely that it encodes something directly related to cleft-like 'identificational' semantics—and the Hungarian FP construction contains no equivalent of it.
- ¹⁰ É. Kiss (2004) suggests another trigger for appearance in PredP, closely related to the proposals of Szendrői (2003): that the main 'information focus' of a sentence must be aligned with the main stress-bearing position, which happens to be PredP in Hungarian. Apart from raising conceptual problems (such as maintaining both PredP and abstract focus features and relating them only indirectly, when they are intuitively such closely connected aspects of interpretation that one might expect the one to explain the other) this involves the assumption that in a neutral sentence with a VM, the VM is always the main information focus, since it appears in PredP in this case (a related idea is presented in É. Kiss 2005b). This assumption seems difficult to motivate independently, in particular in the case of the many semantically non-compositional combinations of VM and verb, such as *beolvas* (lit. 'in-read') 'tell off'.
- ¹¹ The 'presupposed' material may in practice be accommodated into the context in the course of interpreting the sentence, rather than being truly 'given' in the prior context. This does not affect the explanation given here: the important point is that the sentence indicates that certain information must be taken to be presupposed, given the nature of the item that must effect main predication.
- ¹² For purely illustrative purposes, I make the assumption here that accusative case maps directly onto a Theme role. The proper treatment of case is far beyond the scope of this article and does not affect the present argument.
- ¹³ See Wedgwood (2005) for a formalisation of this analysis using a novel combination of neo-Davidsonian semantics and the epsilon calculus of Hilbert and Bernays (1939). This allows the creation of a proposition to be defined in terms of a dynamic process of achieving existential quantification over an eventuality variable.
- ¹⁴ See Wedgwood (2005) for some apparent exceptions to this prediction which prove to involve adverbial uses of the would-be VM and therefore no true VM+V combination at all.
- ¹⁵ As Delin (1989, 1992, 1995) shows, this impression is itself inaccurate: the most frequent usage of the *it*-cleft is the kind in which the non-clefted material is in fact 'newer' than the clefted material and the latter is correspondingly stress-bearing, as in (ii).

(ii) A: Why are you so fond of Bill?

B: Because it's Bill who taught me how to tango.

This kind of usage is also possible with the Hungarian FP construction, though further research is required to establish how frequently it is employed in this way. Since only identification or predication are claimed to be directly encoded in these constructions, the account outlined here is compatible with these facts—Delin argues that the *it*-cleft always has a ‘presuppositional’ reading, even if the distribution of ‘new’ and ‘given’ material does not always align with this in the stereotypical way.

- ¹⁶ There is another well-known similarity between the two constructions: certain kinds of quantified NP, including universal QNPs, are barred from the clefted part of an *it*-cleft and from the Hungarian ‘focus position’. Space does not allow me to cover this complex issue here; see Wedgwood (2005) for evidence that the precise restrictions are predicted only by assuming the Hungarian pre-tense position to be essentially predicative. Though I argue here for a different overall analysis of the *it*-cleft, it is possible that the restrictions on quantification in that construction are also to be explained by reference to predication: see Partee (1987), McNally (1998) for the idea that the complement of copula *be* must have a predicate reading of a certain kind, which effectively rules out universals and other relevant QNPs. Adopting this analysis of the quantificational data would not alter the basic observation that the *it*-cleft explicitly and compositionally encodes identification, while the FP construction, according to my arguments, does not.

References

- Bolinger, D. 1977. “A look at equations and cleft sentences”. In *Studies for Einar Haugen*, E. Firchow (ed.), 96-114. The Hague: Mouton.
- Borkin, A. 1984. *Problems in Form and Function*. Norwood, NJ: Ablex.
- Bródy, M. 1990. “Some remarks on the focus field in Hungarian”. *UCL Working Papers in Linguistics* 2: 201-225.
- Brunetti, L. 2003. A unification of focus. Ph.D. Thesis, University of Florence.
- Cann, R. to appear. “Towards a dynamic account of ‘be’ in English”. In *Existence: Syntax and Semantics*, I. Comorovski and K. von Stechow (eds). Dordrecht: Kluwer.
- Carston, R. 1998. “Informativeness, relevance and scalar implicature”. In *Relevance Theory: Applications and Implications*, R. Carston and S. Uchida (eds), 179-236. Amsterdam: John Benjamins.
- Carston, R. 2002. *Thoughts and Utterances: The Pragmatics of Explicit Communication*. Oxford: Blackwell.
- Dalmi, G. 1998. “Last resort: PF-incorporation of prefixes and other heads in Hungarian”. *TLP Yearbook 1998 [Budapest Department of Theoretical Linguistics Working Papers in the Theory of Grammar* 6 (3)].
- Delin, J. 1989. Cleft constructions in English discourse. Ph.D. thesis, University of Edinburgh.
- Delin, J. 1992. “Properties of *it*-cleft presupposition”. *Journal of Semantics* 9: 179-196.
- Delin, J. 1995. “Presupposition and shared knowledge in *it*-clefts”. *Language and Cognitive Processes* 10 (2): 97-120.
- É. Kiss, K. 1987. *Configurationality in Hungarian*. Dordrecht: D. Reidel.

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- É. Kiss, K. 1994. "Sentence structure and word order". In *The Syntactic Structure of Hungarian* [Syntax and Semantics 27], F. Kiefer and K. É. Kiss (eds), pp. 1-90. San Diego: Academic Press.
- É. Kiss, K. 1998. "Identificational focus versus information focus". *Language* 74 (2): 245-273.
- É. Kiss, K. 1999. "The English cleft construction as a focus phrase". In *Boundaries of Morphology and Syntax*, L. Mereu (ed.), pp. 217-229. Amsterdam: John Benjamins.
- É. Kiss, K. 2002. *The Syntax of Hungarian*. Cambridge: Cambridge University Press.
- É. Kiss, K. 2003. "Division of labor in the derivation and interpretation of focus constructions". Talk delivered to the 26th GLOW Colloquium, Lund, April 2003.
- É. Kiss, K. 2004. "Focussing as predication". Ms., Research Institute for Linguistics, Budapest.
- É. Kiss, K. 2005a. "First steps towards a theory of the Hungarian verbal prefix". In *Approaches to Hungarian, volume 9: Papers from the Düsseldorf conference*, P. Siptár and C. Piñón (eds), 57-88. Budapest: Akadémiai Kiadó.
- É. Kiss, K. 2005b. "Event types and discourse linking in Hungarian". *Linguistics* 43 (1): 131-154.
- Farkas, D. 1986. "The syntactic position of focus in Hungarian". *Natural Language and Linguistic Theory* 4: 77-96.
- Farkas, D. and Sadock, J. 1989. "Preverb climbing in Hungarian". In *Language* 65: 318-338.
- Geurts, B. and van der Sandt, R. 2004. "Interpreting focus". In *Theoretical Linguistics* 30: 1-44.
- Grice, H. P. 1975. "Logic and conversation". In *Speech Acts* [Syntax and Semantics 3], P. Cole and J. Morgan (eds), pp. 41-58. New York: Academic Press. Reprinted in Grice (1989): 22-40.
- Grice, H. P. 1989. *Studies in the Ways of Words*. Cambridge, MA: Harvard University Press.
- Hedberg, N. 1990. The discourse function of cleft sentences in English. Ph.D. dissertation, University of Minnesota.
- Hedberg, N. 2000. "The referential status of clefts". *Language* 76: 891-920.
- Hilbert, D. and Bernays, P. 1939. *Die Grundlagen der Mathematik II*. Berlin, Heidelberg, New York: Springer. Second edition (reprint 1970).
- Horn, L. 1981. "Exhaustiveness and the semantics of clefts". In *Proceedings of NELS 11*, V. Burke and J. Pustejovsky (eds), pp. 125-142. Amherst: GLSA.
- Horn, L. 1992. "The said and the unsaid". In *Proceedings of SALT II* [Ohio State University Working Papers in Linguistics 40], 163-192.
- Horvath, J. 2000. "Interfaces vs. the computational system in the syntax of focus". In *Interface Strategies* [Proceedings of the Colloquium, Amsterdam, 24-26 September 1997], H. Bennis, M. Everaert and E. Reuland (eds), 183-206. Amsterdam: Royal Netherlands Academy of Arts and Sciences.
- Huber, S. 2002. *Es-Clefts und det-Clefts: Zur Syntax und Informationsstruktur von Spaltsätzen im Deutschen und Schwedischen*. Stockholm: Almqvist and Wiksell International.
- Kálmán, L. 1985. Word order in neutral sentences. In *Approaches to Hungarian, Vol. 3*, I. Kenesei (ed.), 13-23. Szeged: JATE University.
- Kamp, H. and Reyle, U. 1993. *From Discourse to Logic: Introduction to Model-Theoretic Semantics of Natural Language, Formal Logic and Discourse Representation Theory*. Dordrecht: Kluwer.
- Kehler, A. 2002. *Coherence, Reference and the Theory of Grammar*. Stanford: CSLI.

-
- Kempson, R., Meyer-Viol, W. and Gabbay, D. 2001. *Dynamic Syntax: The Flow of Language Understanding*. Oxford: Blackwell.
- Kenesei, I. 1986. "On the logic of word order in Hungarian". In *Topic, Focus and Configurationality: Papers from the 6th Groningen Grammar Talks, Groningen, 1984*, W. Abraham and S. de Meij (eds), 143-159. Amsterdam: John Benjamins.
- Koopman, H. and Szabolcsi, A. 2000. *Verbal Complexes*. Cambridge, MA: M.I.T. Press.
- Maslow, A. 1966. *The Psychology of Science: A Reconnaissance*. Harper and Row, New York.
- McNally, L. 1998. "Existential sentences without existential quantification". *Linguistics and Philosophy* 21, 353-392.
- Partee, B. H. 1987. "Noun phrase interpretation and type-shifting principles". In *Studies in Discourse Representation Theory and the Theory of Generalized Quantifiers*, J. Groenendijk, D. de Jongh and M. Stockhof (eds), 115-143. Dordrecht: Foris.
- Paul, I. 2001. "Concealed pseudo-clefts". *Lingua* 111 (10), 707-727.
- Piñón, C. 1992. "Heads in the focus field". In *Approaches to Hungarian, Volume 4: The Structure of Hungarian*, I. Kenesei and Cs. Pléh (eds), 99-121. Szeged: JATE University.
- Pustejovsky, J. 1991. "The syntax of event structure". *Cognition* 41, 47-81.
- Récanati, F. 1993. *Direct Reference: From Language to Thought*. Oxford: Blackwell.
- Roberts, C. 1998. "Focus, the flow of information, and universal grammar". In *The Limits of Syntax* [Syntax and Semantics 29], P. Culicover and L. McNally (eds), 109-160. San Diego: Academic Press.
- Rosenthal, S. 1992. The intonation of simple sentences in Hungarian. In *Papers from the Third Annual Formal Linguistic Society of Midamerica Conference*, L. Smith Stvan et al. (eds), 297-310. Bloomington, Indiana: IULS.
- Sperber, D. and Wilson, D. 1986/95. *Relevance: Communication and Cognition*. Oxford: Blackwell. (First published 1986, second edition 1995).
- Szabolcsi, A. 1981. "Compositionality in focus". *Folia Linguistica Societatis Linguisticae Europaeae* 15: 141-162.
- Szabolcsi, A. 1994. "All quantifiers are not equal: the case of focus". *Acta Linguistica Hungarica* 42, 171-187.
- Szabolcsi, A. 1997. "Strategies for scope taking". In *Ways of Scope Taking*, A. Szabolcsi (ed.), 109-154. Dordrecht: Kluwer.
- Szendrői, K. 2003. "A stress-based approach to the syntax of Hungarian focus". *Linguistic Review* 20 (1): 37-78.
- Wedgwood, D. 2004. "Using focus to improve definition: What counts in Hungarian quantification". In *Proceedings of the Conference "sub8 - Sinn und Bedeutung", 8th Annual Meeting of the Gesellschaft für Semantik, Johann-Wolfgang-Goethe-Universität, Frankfurt am Main, 2003* [Konstanzer Arbeitspapiere Linguistik], C. Meier and M. Weisgerber (eds), 317-332. Konstanz: Universität Konstanz, FB Linguistik.
- Wedgwood, D. 2005. *Shifting the Focus: From Static Structures to the Dynamics of Interpretation*. Oxford: Elsevier.