

Two Negations, One Sentence and One Focus

— A Squib, alias a Trial Balloon — *

Ágnes Bende-Farkas
IMS Stuttgart University
agnes@ims.uni-stuttgart.de

September 8, 2006

1 The Problem

This paper is about the possibility of syntactically simple Hungarian sentences with Focus to contain two negative particles that (i) express semantic negation and (ii) do not interact with each other.

- (1) János nem [a Hamletet]_F nem olvasta (hanem [a Rómeó és Júliát]_F)
John not [the H-Acc]_F not read-Past+Def3Sg (but [the R and J-Acc]_F)
“It was not Hamlet that John has not read (it was Romeo and Juliet)”

In (1) there are two occurrences of the negative particle *nem* ‘not’; one of them immediately precedes and the other immediately follows the *DP* in Focus position. These two particles correspond to two independent instances of semantic negation: I propose that the right semantic representation for (1) contains two propositional units (a presupposition and an assertion part), containing one negation each.

At this point it is perhaps easier to tell what (1) is not:

It is not a case of double negation, as in the sentence *This problem is not impossible to solve, it is merely very hard*. It is not an instance of negative spread (or negative absorption): *No-one saw no-one*. It is not a case of Negative Concord, as in (2) where *nessuno* does not on its own express negation:

- (2) Non ha telefonato nessuno
Not has phoned no-one
“No-one has phoned”

The sentence (1) resembles complex clauses where negation in the matrix clause does not interfere with negation in the subordinate clause. The English *it*-cleft that served as paraphrase for (1) is a case in point, and so is (3).

- (3) Peter did not meet the student who has not read Hamlet

Preliminary remark: this paper relies on the distinction between syntactic vs semantic negation (e.g. Giannakidou (2000), Zeijlstra (2004)).¹

*Acknowledgements: my thanks to Artemis Alexiadou, Hans Kamp, and the audience of the Stuttgart Graduate Seminar. All misperceptions and errors are mine.

¹A bit like semantic vs morphological tense. In fact, a parallel between Negative Concord and Sequence of Tenses (von Stechow (2005)). Or semantic vs morphological number, as in ‘genuine’ vs dependent plurals.

(4) *(Non) ha telefonato nessuno

Semantic negation: a negative element in the syntax or morphology is translated by means of $\neg \dots$. In (4) *nessuno* does not contribute semantic negation, unlike *no-one* or *niemand*. (Postverbal) *nessuno* needs a licenser.² In this case it is the negative particle *non*. Conventional wisdom: the domain of licensing is the clause.

Licensing domain: the syntactic domain where an *n*-word needs to have a licenser (in the appropriate syntactic configuration). Also: the syntactic domain *D* s.t. an element ν_i carrying semantic negation *within D* is not ‘interfered with’ from another, similar element ν_2 outside of *D*. (I.e. there is no double negation or negative spread reading.)

Assumed: the licensing domain for *n*-words is the same as the domain for elements that express semantic negation. (Cf. (6) below: the *n*-word needs to be licensed within the subordinate clause; also: negative particle in subordinate clause does not interact with negative particle from matrix clause.)³

Hungarian is a (strong) Negative Concord language. (This adds to the surprise effect of two-negation-with Focus data like (1).) In Hungarian too the domain for licensing *n*-words is (usually) the clause. In (6) the preverbal *n*-word *senki* ‘no-one’ needs the negative particle *nem* within its own clause (NC). (6) shows that the need for a licenser ‘persists’ when *senki* is in preverbal position — unlike Italian, where preverbal *n*-words need not be licensed, cf. (4). Hungarian is therefore a strong NC language).

(6) János nem tudja, [_{CP}hogy senki *(nem) ment haza]
John not know+Def3Sg, [_{CP}that no-one (not) went home-to]
“John doesn’t know that nobody went home.”

To recapitulate: the problem is that Hungarian can have syntactically simple sentences that contain two negative particles (*nem*) in the presence of Focus, and that these particles contribute semantic negation independently of each other.

(7) János nem [a Hamletet]_F nem olvasta, hanem a Rómeó és Júliát
John not [the H-Acc]_F not read+Def3Sg, but the R and J-Acc
“It was not Hamlet John has not read, it was Romeo and Juliet”

If the context is right, a sentence like (7) is possible in Romanian too:⁴

(8) Ion nu [Hamlet]_F nu a citit ci [Romeo și Julieta]_F
John not [Hamlet]_F not Aux(Perf-Comp)-3Sg read-Part but [Romeo and Juliet]_F
— same as (7) above —

What (7) is **not**:

²(Almost) nothing in this work about the proper analysis of *n*-words. Simply assuming that they resemble polarity items in that they need a licenser.

³Curiously enough, the domain for semantic negation can also be a *DP* or a *PP*:

- (5) a. John did not include any unproved theorems in his coursebook
b. I don’t like towns without a mediæval main square and a Gothic church

One could argue that the participle *unproved* in (5a) (or the *N'* *unproved theorem* has clausal properties, hence the independence of the privative suffix *un-* from the ‘main’ negation in the sentence. But it has to be noted that *unproved* is not ‘immune’ when it is in a predicative position: *John’s theorem did not remain unproved for long*. Or see (16), an example with *impossible*, below.)

⁴Preferred scenario: at a department party (at a dept. of English literature) it is accidentally revealed that John, an ambitious assistant professor, has not read one of the major plays of Shakespeare. Because of this he is denied tenure. (It was the kind of party where *everyone* is there, including the future members of the tenure committee.) Learned source: the novel *Changing Places* by David Lodge.

- Negative Concord:

(9) Non ha telefonato nessuno

(10) $\neg\exists x.[person(x) \wedge phoned(x)]$

- Negative spread/Neg-absorption:

(11) No women date no men who like pink socks

(12) $\neg\exists\langle X, Y \rangle.[W(X) \wedge M(Y) \wedge P(Y) \wedge D(X, Y)]$

(13) $(W \times (M \cap P)) \cap D = \emptyset$

- Double negation:

(14) C'est n'est pas insignifiant

The Budapest dialect of Hungarian:

(15) Ez nem semmi!
This not nothing!
“This is quite something!”

(16) The problem is not impossible to solve, it is merely very hard

(17) $\neg\neg\Diamond solve(p) \leftrightarrow \Diamond solve(p)$

What (7) **is**: a syntactically simple sentence that contains two separate instances of semantic negation.⁵ In other terms, one sentence corresponds to two licensing domains for negation. Question: how is this possible?

After giving some background on Hungarian syntax in Section 2 Section 3 offers a DRT-based semantic analysis of simple cases like (7). The analysis relies on an independently established property of Hungarian Focus viz it triggers a presupposition–assertion division of the sentence. (7) is taken to presuppose that there is something John has not read and to assert that that something is not Hamlet.

Question: is this all there is to it? That is, is a presupposition–assertion ‘split’ sufficient to explain the licensing of two instances of semantic negation, or is there some underlying (i.e. syntactic) mechanism that makes it possible? Some speculations on syntax and the syntax–semantics interface are offered in Section 4.⁶

2 Background: On Hungarian Syntax & Interface Issues

2.1 The Standard View

This part offers some background on the syntax of Hungarian. Hungarian has an array of pre-verbal positions — two of these have a function in discourse (Topic and Focus, respectively). The so-called Quantifier position hosts *MON* \uparrow quantificational expressions or *XPs* modified by *is* ‘too’ or *még* ‘... is ‘even’.

(18) $Topic^* \prec (MON \uparrow)Quant^* \prec (Neg \prec)Focus \prec Neg \prec V \dots$

⁵Sentences like (7) were already mentioned in Szabolcsi (1996), together with the observation they involve to independent semantic negations. Szabolcsi however does not raise the questions that are raised here.

⁶The conclusion reached in this paper is that Hungarian simple sentences with Focus have a bi-clausal structure. István Kenesei made a very similar proposal in Kenesei (2005). I became familiar with his paper after I had completed most of this document.

These positions can host arguments and adjuncts alike; what counts is the relevant denotational properties of the fillers (Szabolcsi 1997). In (19), for instance, every preverbal position is filled by a temporal expression.

- (19) [Tavaly]_T [minden második hónapban]_Q [vasárnap]_F mentem operába
 [Last-year]_T [every second month-in]_Q [Sunday]_F go-Past-Sg1 opera-into
 “Last year, every second month it was on a Sunday I went to the Opera”
 (whereas in the other month(s) it was on a Wednesday)

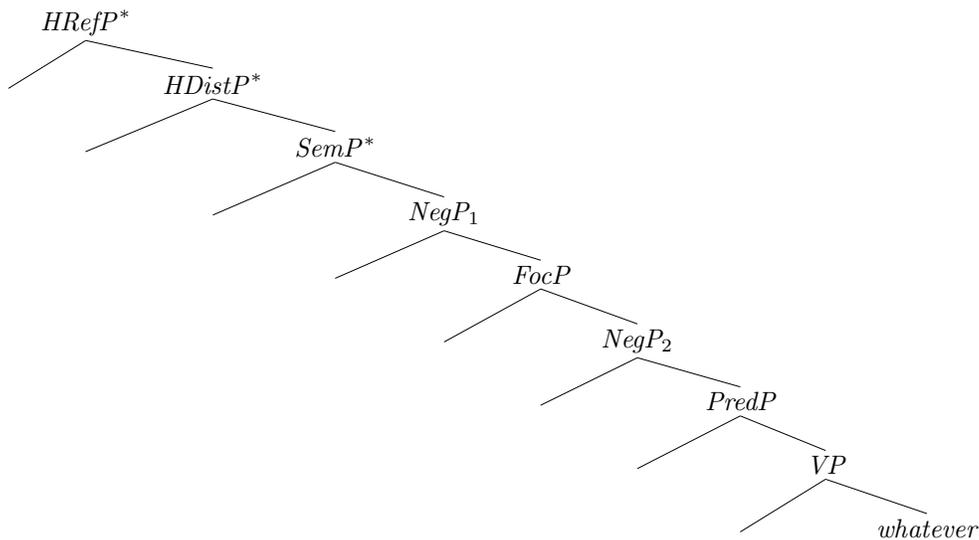
The negative particle *nem* ‘not’ can be immediately preverbal or it can immediately precede Focus:

- (20) a. János *nem* ment haza
 John not went home
 “John didn’t go home”
 b. [János]_F *nem* ment haza
 [John]_F not went home
 “It was John who didn’t go home”
 c. *Nem* [János]_F ment haza (hanem Péter)
 Not [John]_F went home (but Peter)
 “It wasn’t John who didn’t go home”
 d. *Nem* [János]_F *nem* ment haza
 Not [John]_F not went home
 “It wasn’t John who didn’t go home”

Where *n*-words are concerned, any number of them can occur preverbally (stacked between *MON* ↑ quantifiers and (negation and) Focus).⁷

- (21) (Ebben a faluban) senki senkinek semmikor *nem* köszön
 (This-in the village-in) no-one no-one-Dat no-when not greet-3Sg
 “(In this village) no-one ever greets anyone”

(22) below presents an eclectic model of Hungarian sentence structure (Szabolcsi (1997a), Szabolcsi (1996), Szabolcsi (2005), Puskás (2000), Surányi (2002), Olsvay (2000)...) For theoretical and methodological the reader is referred to the original publications. The purpose for presenting (22) is to have as comprehensive a structure as possible.



⁷The relationship between *MON* ↑ quantifiers and *n*-words is in fact much more complex (cf. Szabolcsi (2005)), but this does not bear on the issues discussed here.

In the tree (22)

HRefP is the Topic position. (“Referential Phrase”); (the label is from Szabolcsi (1997a));

HDistP is the Quantifier Position; (label from Szabolcsi (1997a));

SemP is for *n*-words; (Olsvay (2000), Puskás (2000), Surányi (2002));

*NegP*₁ : not constituent negation;

FocP : obvious; standard analyses (crosslinguistically): covert Focus feature in the head of *FocP* attracts *XP* to the specifier position of *FocP* (cf. Brody (1990) among many others);

*NegP*₂ hosts (immediately preverbal) *nem*; the *V* is assumed to have moved to the head of *NegP*₂; (but exactly this is disputed by Szabolcsi in her 1996 paper);

PredP is the host for complex predicates ((*Pred*₂ *V*) complexes; *Pred*₂ includes verbal prefixes).⁸

2.2 An Alternative View on the Syntax of Hungarian Focus

In this subsection I present a proposal that may be relevant to the main problem of having two semantic negations in one sentence. It was made in Piñón (1992), and it can be regarded as a syntactic response to the observation that in Hungarian the preverbal ‘field’ is relevant for conveying illocutionary force.

In Piñón (1992): the ‘area’ around Hungarian Focus is labelled as the Focus Field (similar to, but different in relevant aspects from, the original concept in Brody (1990)). Piñón postulates a single extended projection, ΣP , whose heads can include Tense, negation and certain discourse particles. Observation: this is an area that is relevant for expressing illocutionary force: assertion, affirmation/confirmation, questions, negation and denial a.s.o. (The original insight comes from Laka Mugarza (1990); that implementation is for English and Basque.)

The Hungarian Focus field is indeed an area marked for illocutionary force: it is the locus not only for negation and Focus but for *wh*-phrases as well.⁹ Hungarian *wh*-phrases occur in the Focus position (or somewhere in the Focus Field if there are several of them). Perhaps the most telling is (23c), where the *wh*-word *ki* ‘who’ follows the complementizer *hogy* ‘that’; moreover, there is a Topic *DP* between complementizer and *wh*-word.

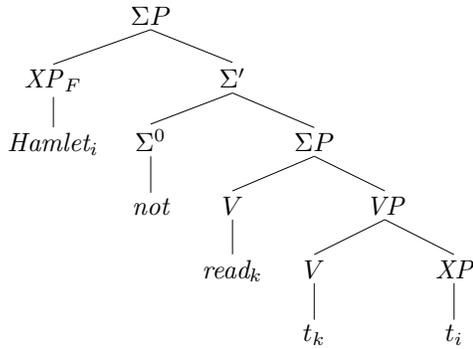
- (23) a. [Marit]_T [ki]_F hívta meg?
[M-Acc]_T [who]_F call-Past+Def3Sg pfx
“Who invited Mary?”
- b. *Ki [Marit]_T ([tegnap]_T) meg-hívta?
Who [M-acc]_T ([yesterday]_T) pfx-call-Past+Def3Sg
Intended: same (\pm yesterday)
- c. János tudja, hogy_{Comp} [Marit]_T [ki]_F hívta meg
John knows, that_{Comp} [M-acc]_T [who]_F call-Past+Def3Sg pfx
“John knows who invited Mary”

According to Piñón Focus is in the specifier position of ΣP ; the heads in ΣP include negation, tense, the verb, certain (illocutionary) particles. Note that in this model there is no Focus feature in head position. (I don’t know whether the absence of the Focus feature is intentional and is therefore an essential component of Piñón’s proposal.)

⁸According to the view on which Hungarian secondary predicates are phrases and do **not** incorporate into the verb (cf. Koopman and Szabolcsi (2000)): There is a projection *PredP*, and secondary predicates, which are phrases, move to its specifier position. The verb moves to the head of *PredP*. If *PredP* is preceded by negation and/or Focus the verb moves ‘up’ out of *PredP* to the head of the appropriate phrase; this accounts for the surface order *Focus* \prec *Neg* \prec *V* \prec *Pred*₂ ... In sentences without Focus or negation the order is precisely *Pred*₂ \prec *V* ...

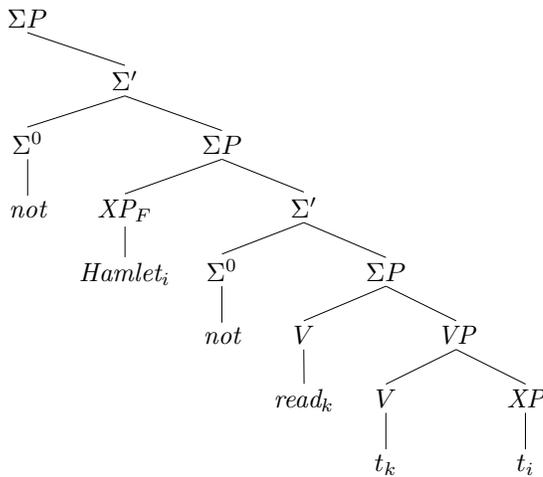
⁹Also, the question morpheme *-e* in yes-no questions is cliticised to the verb.

- (24) János [a Hamletet]_F nem olvasta
 John [the H-Acc]_F not read-Past+Def3Sg
 “It was Hamlet that John has not read”



Piñón would presumably take pre-Focus negation and preverbal *n*-words to belong to ΣP as well. (27) is my syntactic analysis of (26) in Piñón’s model.

- (26) János nem [a Hamletet]_F nem olvasta
 “It is not Hamlet that John has not read”



3 Hungarian Focus: Semantic Analysis

This section presents a DRT-based analysis of Hungarian Focus, showing how the problem of two negations and Focus can be solved at this level of representation. (For a detailed exposition the reader is referred to Bende-Farkas (2006) and Kamp (2004)).

Properties of Hungarian Focus that a semantic analysis has to pay attention to:

1. Hungarian Focus is exhaustive: the denotation of the Focus-marked expression is identical to the unique greatest entity (from among alternatives) with some property P . That is, Hungarian sentences with Focus (that are answers) are exhaustive answers. Exhaustivity is not implicated. I take exhaustivity to be presupposed. (Cf. Bende-Farkas (2006) for more extensive discussion.)

- (28) John has read Hamlet_F. OK: He has read Falstaff_F too.

- (29) a. János [a Hamletet]_F olvasta.
 John [the H-Acc]_F read-Past+Def3g
 “It was Hamlet that John read”
 b. ???#És a Falstaffot is
 And the F-Acc too
 “And (he’s read) Falstaff too”

(29b), as a continuation of (29a), is marked, odd, contradictory... It is acceptable as a correction or when it involves a change of context.¹⁰

Maximality/exhaustivity: relative to the property ‘constructed’ from material that follows Focus (the verb and postverbal material — modulo some intonationally marked exceptions that ‘outscope’ Focus). In (30a) this property is (somebody’s) being loved; in (30b) it is being loved by every boy.

- (30) a. Minden fiú [Marit]_F szereti
 Every boy [Mary-Acc]_F love+Def3Sg
 ‘For every boy x : there is a unique greatest α_x that x loves, and α_x is Mary’.
 b. [Marit]_F szereti minden fiú
 [Mary-Acc]_F love+Def3Sg every boy
 “It is Mary who is loved by every boy”

2. Hungarian Focus triggers an existence presupposition: the Background is presupposed. The Background contains (a representation of) the property relative to which Focus is exhaustive. It also contains the information that there is a unique greatest entity that has that property.

- (31) a₁. Do you think John has read [Hamlet]_F?
 a₂. Do you think it was Hamlet that John read?
 b. No, he hasn’t read anything.
 (OK as an answer to a₁; strange or reads as denial as an answer to a₂)

- (32) a. Azt hiszed, hogy János [a Hamletet]_F olvasta?
 That-Acc believe+Def2Sg [the H-Acc]_F read-Past+Def3Sg?
 “Do you think it was Hamlet that John read?”
 b. #Nem olvasott ő semmit.
 Not read he nothing-Acc
 “He hasn’t read anything”

The reply (32b) to (32a) is acceptable only if its meaning includes the denial of the presupposition that John has read something. Otherwise it is decidedly odd.

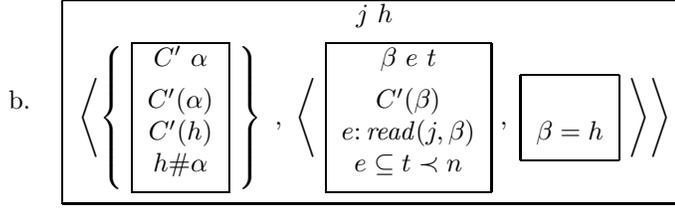
3. On the analysis presented here the representation of the Background for Hungarian Focus contains an existence and maximality presupposition. Analogies with definite descriptions, (restrictive) (free) relatives, cleft constructions.
 4. Both the presupposition and the assertion component of Hungarian Focus enter scope interactions. (Have narrow scope wrt material to the left and wide scope relative to material to the right. One example is (30) above.)

A DRT-based analysis of English Focus (Kamp (2004)) and for Hungarian Focus (Bende-Farkas (2006)) — a hybrid between a Structured Meaning and an Alternative Semantics approach. (33b) is the representation of sentence (33a) in DRT. (33c) is a makeshift translation from DRT into a version of predicate logic with structured propositions; $\partial\varphi$ says that φ is presupposed.¹¹

¹⁰E.g. the exchange in (29) is felicitous if the set of alternatives is shifted, say, from Shakespeare’s tragedies to all of his plays, **and** if all dialogue participants accept this shift.

¹¹ ∂ here is supposed to work in the way presupposition works in DRT, cf. van der Sandt (1992) or Genabith, Kamp and Reyle (t.a.).

(33) a. John read [Hamlet]_F

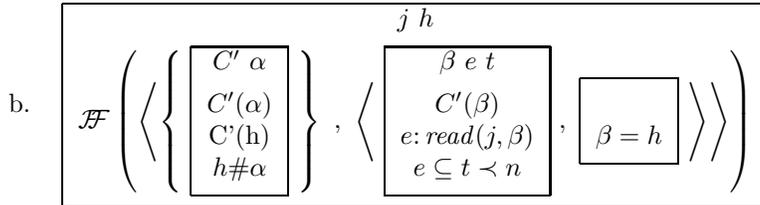


c. $\langle \partial(\exists C', x.[C'(h) \wedge x \neq h \wedge C'(x)]) , \langle \lambda p.[p = (\lambda y.\exists e.[read(e)(j, y))](a) \wedge C'(a)] , \lambda p'.[p' = \lambda y'.\exists e.[read(e)(j, y)](h)] \rangle \rangle$

In (33b–c) (English-type, i.e. intonational) Focus introduces a Background–Focus structure $\langle \mathcal{R}, \langle \mathcal{B}, \mathcal{F} \rangle \rangle$. \mathcal{R} , the Restrictor is an existence presupposition for a set C' of alternatives to the (denotation of the) Focus-marked expression. \mathcal{B} , the Background or Focus-frame, is a set of alternative propositions. Here it is of the form $read(j, \beta) \wedge \dots$, where β ranges over alternatives to the Focus-marked expression. \mathcal{F} , the Focus-DRS is a set of propositions (here: of the form $read(j, h)$ — i.e. in this case it is a singleton set).

Hungarian Focus is said to involve an exhaustivity/maximality operator \mathcal{F} that is Focus-sensitive (in the way *only* is taken to be Focus-sensitive). \mathcal{F} takes an ‘English’ type Focus–Background structure as input. (For detailed motivations see Horvath (2002) and Bende-Farkas (2006)). So the first stage in representing a Hungarian sentence containing Focus is shown in (34b):

(34) a. János [a Hamletet]_F olvasta
John [the H-Acc]_F read-Past+Def3Sg
“It is Hamlet that John has read”

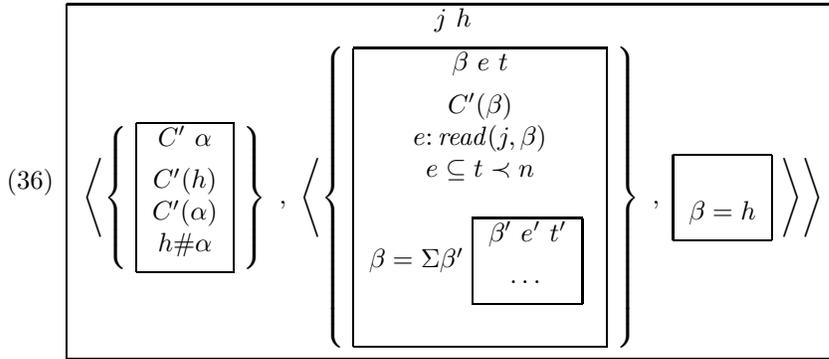


The contribution of \mathcal{F} : the Background acquires the status of a presupposition. One has existential closure over the set of alternative presupposition and an additional maximality condition expressed by means of DRT’s abstraction operator Σ .) In (36) it is presupposed that there is a unique greatest β in C' that has some property φ . The uniqueness requirement on β does not imply that β needs to be atomic; β can be the sum of $n \geq 2$ individuals (which may in turn be \pm atomic themselves):

(35) a. János [a Hamletet és a II. Richárdot]_F olvasta
“It was Hamlet and Richard the Second that John read”
b. János [a tragédiákat és a szonetteket]_F olvasta
“It was the tragedies and the Sonnets that John read”

Constructing the property φ : roughly from material to the right hand side of Focus.

The Focus-DRS: asserts that the unique greatest entity β (with property φ) is identical to the denotation of the Focus-marked expression.

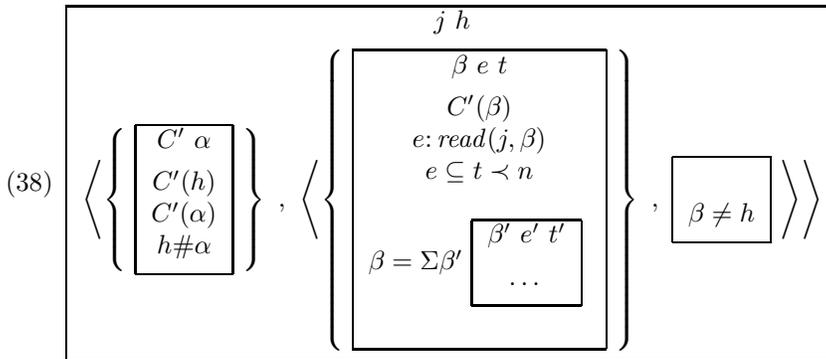


How negation (in a sentence with Focus) enters the picture:

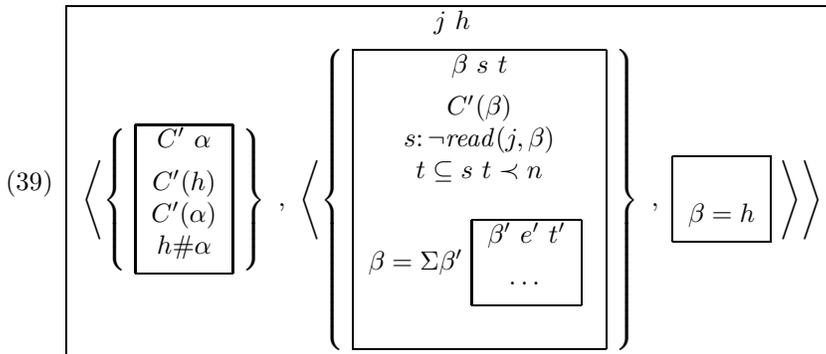
- (37) a. János *nem* [a Hamletet]_F olvasta neg. in assertion-DRS
 John not [the H-Acc]_F read-Past+Def3Sg
 “It was not Hamlet John has read”
 b. János [a Hamletet]_F *nem* olvasta neg. in presupposition-DRS
 John [the H-Acc]_F not read-Past+Def3Sg
 “It was Hamlet that John has not read”

A bit of prose:

- (37a) presupposes that there is a unique greatest entity β that John read; it asserts that that entity is not identical to Hamlet; (DRS for (37a): assertion-DRS contains an inequality: $\beta \neq h$);



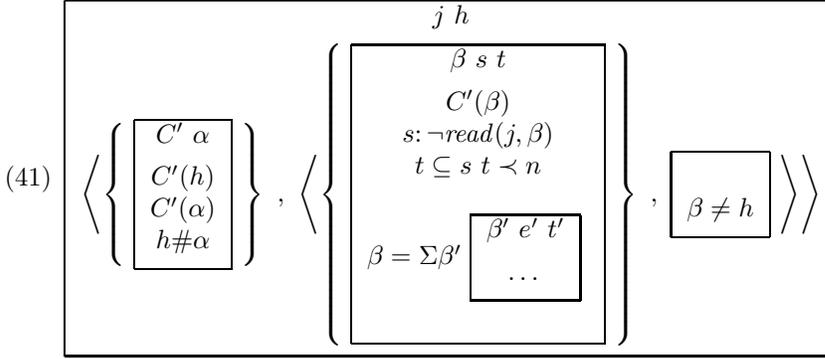
- (37b) presupposes that there is a unique greatest entity β that John has not read (say, from a reading list for a course); it asserts that that entity is identical to Hamlet.



DRS for (37b): instead of an event, the Background-DRS contains a state of John’s not having read something.

- (40) János nem [a Hamletet]_F nem olvasta
 John not [the H-Acc]_F not read-Past+Def3Sg
 “It is not Hamlet that John has not read”

What to do about the problem sentence (40): have negation both in the presupposition-DRS and in the assertion-DRS. I.e. negation in the presupposition part acts independently from negation in the assertion part in a structured representation.



4 Is This All There Is to It?

Two remaining questions/issues:

1. Semantic analysis for more complex cases. Why this is relevant: matters of presupposition accommodation, scope and variable binding. (The formulae in (42b) and (43b) can be taken as ‘translations’ of DRS-es, ∂ is a presupposition operator (van der Sandt (1992), Beaver (1992), Beaver (1995), ... Unlike the ‘translation’ in (33c) (42b) and (43b) do not follow the original DRT-analysis of Focus. They merely serve expository purposes, and to indicate scope relations between Focus and the *n*-word *senki*.)

- (42) a. Senki nem [a Hamletet]_F olvasta
 No-one not [the H-Acc]_F read-Past+Def3Sg
 “There is a contextually salient group *X* and for every member *x* of *X*:
 it is presupposed that there is a unique greatest entity α_x that *x* read, and
 it is asserted that α_x is not identical to Hamlet”
 b. $\exists X.[C'(X) \wedge \forall x.[x \in X \rightarrow \partial(\exists C''. \exists! \alpha_x.[C''(\alpha_x) \wedge read(\alpha_x)(x)]) \wedge \alpha_x \neq h]$

- (43) a. [A Hamletet]_F nem olvasta senki
 [The H-Acc]_F not read-Past+Def3Sg no-one
 “It is Hamlet that no-one read”
 b. $\partial(\exists C'. \exists! \alpha.[C'(\alpha) \wedge \neg \exists x.[read(\alpha)(x)]) \wedge \alpha \neq h$

The formulae in (42) and (43) correspond to DRS-es obtained by a syntactically driven construction algorithm, in that the scope of the respective presuppositions is determined by surface syntax. One problem: (42a) has another reading where the presupposition outscopes the *n*-word. (I.e. where the scope of the presupposition does not correspond to what is yielded by the construction algorithm.) This wide scope presupposition is that everyone (from a contextually given group) has read something. Relating the wide and narrow scope presuppositions to each other involves problems of variable binding — simply exporting the narrow scope presupposition in its current form will not do, as the variable *x* would become unbound.

Another problem: preverbal *senki* ‘no-one’ in (42a) does involve universal quantification over members of a familiar group; to be elucidated: whether this is merely one of the options available for *n*-words in general (Giannakidou, among others), or whether there is some interaction with the presupposition triggered by Focus.

2. A question of architecture: what is the level of grammar where (the two) negative particles are licensed?

Options:

- (a) Contrary to conventional wisdom, in such Hungarian cases negation is licensed at the level of semantic representation. The domain that licenses negation: proposition-level components of a structured representation (presupposition and assertion).
- (b) Licensing in the syntax, for purely syntactic reasons. The operator \mathcal{F} has a syntactic counterpart that acts like a barrier and creates two syntactic domains.
- (c) Licensing in the syntax, because syntax **is** sensitive to semantic properties (Szabolcsi (2005)). (Syntactic module in this case: a categorial grammar/calculus annotated for certain features, e.g. *MON* \uparrow, \downarrow -ness.)

4.1 What Do Two *Nems* Mean? (With or without Focus)

[Comment: this subsection does not quite fit here; it has been included in order to clarify the status of the two negative particles *nem*.]

Surányi (2002): the first *nem* is meta-linguistic. E.g.

- (44) a. **A:** Nem mentél haza tegnap.
 Not go-Past-2Sg home-to yesterday
 “You didn’t go home yesterday”
 b. **B:** Nem nem mentem haza, hanem letartóztattak
 Not not go-Past-1Sg home-to, but arrest-Past+Def3Pl
 “It’s not that I didn’t GO home: I was arrested”

(Szabolcsi (1996))

The ur-example (7) does seem to involve a correction or a contradiction but it is different from the ‘quotational’ impression left by (44). Also, (44a) is different from the main case (7)/(45), in that in (44b) the entire clause *nem mentem haza* ‘I didn’t go home’ can be taken as Focus — that is, it is not a case of post-Focus and pre-Focus negation.

- (45) (=7) János nem [a Hamletet]_F nem olvasta, hanem a Rómeó és Júliát
 “It is not Hamlet that John has not read, it is Romeo and Juliet”

Something else: in (46) pre-Focus *nem* acts as licenser to *senki* ‘no-one’. That is, pre-Focus negation has a syntactic role to perform; it is not a ‘meta-device’ that has little to do with its syntactic environment.

- (46) Senki nem [a trigonometriát]_F nem tudta, hanem az integrálokat
 No-one not [the trigonometry]_F not know-Pas+Def3Sg, but the integral-Pl-Acc
 “For no *x* was it the case that it was trigonometry that *x* didn’t know; it was the integral calculus”

A little test: if *nem* were meta-linguistic in (45) the first sentence could be continued with a statement that is contrasted with the entire denied proposition. On the intended construal, (47) is compatible with a scenario where John has read neither Troilus and Cressida nor Hamlet. In such a scenario (47) (or its English counterpart) can be taken to convey a reason or argument, or to invoke a scale. In Hungarian these construals are better conveyed with the complementizer *hogy* inserted between the first *nem* and Focus, but the point is that the simpler form (47) can also be construed in this way.

- (47) János nem [a Troilus és Cressidát]_F nem olvasta, hanem [a Hamletet]_F
 J not [the Tr and Cr-Acc]_F not read+Def3Sg, but [the H-Acc]_F
 “It is not (just) that John has not read Troilus and Cressida, he hasn’t (even) read Hamlet!”
- (48) János nem [a Hamletet]_F nem olvasta: fogalma sincs Shakespeare-ről vagy az angol reneszánszról
 John not [the H-Acc]_F not read+Def3Sg: idea-Ps3Sg not-is Sh-about or the English Ren-about
 “It is not (just) that John has not read [Hamlet]_F: he has no idea about Shakespeare
 or the English Renaissance”

The difference between (45) and (47)–(48): (45) is merely a correction or a clarification. No scale is involved, as regards e.g. the ranking of Shakespeare’s plays or the gravity of the situation. (47) and (48) on the other hand imply a kind of scale, on which the first proposition is ‘lower’ than the correction/denial following it: Not having read Troilus and Cressida is less serious (at an English department) than not having read Hamlet; or, not having read Hamlet is less serious than having no idea about Shakespeare.

4.2 Domains

[This subsection is a bit long-winded. The main issue is whether **both** pre- and post-Focus *nem* have a licensing role to play wrt *n*-words. I.e. whether they contribute to sentence *structure*, in addition to expressing semantic negation.]

Semantic negation: non-interference between (\pm finite) clauses. Stating the obvious: the sentences in (49) are not double negation sentences.

- (49) a. The English department could not give tenure to someone who had not read Hamlet Rel. Cl.
 b. John too/John himself didn’t like an opera liked by no-one Participial Phrase
 c. Jánost nem idegesítette a Shakespeare-ről semmit *(nem) tud-ó diák Ger/Pr.Part.
 John-Acc not nervous-Cause-Past+Def3Sg the Sh-about nothing (not) know-Gr-Pr student
 “John was not annoyed by the student who knew nothing about Shakespeare”
 d. John didn’t know that the department decided to offer no courses on Shakespeare. Inf. Cl.

Hungarian *n*-words: (in the standard case) need to be licensed within their clause.

- (50) a. Nem találkoztam diákkal, aki semmit *(nem) tudott Shakespeare-ről Rel. Cl.
 Not meet-Past-1Sg student-with, who nothing-Acc (not) knew Sh-about
 “I haven’t met any students who knew nothing about Shakespeare”
 b. János nem nézte meg a senki által *(nem) kedvel-t operát Part. Phrase/Passive
 John not watch-Past+Def3Sg pfx the no-one by (not) liked(Part.) opera-Acc
 “John didn’t see the opera liked by no-one”
 c. Present participle/Gerund: (49c) above
 d. János nem tudta, hogy Mari senkivel *(nem) akart beszél-ni Inf. Cl.
 John not knew+Def3Sg, that M no-one-with (not) wanted speak-Inf
 “John didn’t know that Mary didn’t want to talk to anyone”

An **empirical argument** for assigning a complex (bi-clausal) structure for Hungarian sentences:

In sentences with Focus, *n*-words need a licenser in their local (pre-Focus or post-Focus) domain: Preverbal *senki* ‘no-one’ in (51a) needs to be licensed by pre-Focus *nem*, and postverbal *senki* in (51b) needs post-Focus *nem*.¹²

¹²(51a) has two intonational variants. On the first, unmarked variant (stress is distributed evenly among major intonational phrases) the sentence is ungrammatical. On the second intonational variant *Senki* is relatively prominent and has a slightly rising intonational contour, and *nem* receives strong stress; the rest of the sentence receives almost no intonational prominence. On this variant the sentence is grammatical and expresses denial/verum (falsum) Focus. Its meaning is paraphraseable as *NOBODY read Hamlet*.

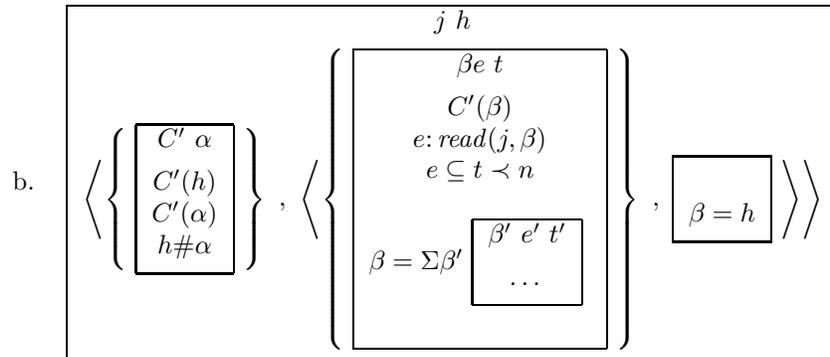
- (51) a. *Senki [a Hamletet]_F nem olvasta
 No-one [the H-Acc]_F not read+Def3Sg
 Intended: “For no x is it the case that it was Hamlet x has not read”
 (That is, the intended meaning is that of the grammatical sentence
 that has pre-Focus negation as well)
- b. *Nem [a Hamletet]_F olvasta senki
 Not [the H-Acc]_F read+Def3Sg no-one
 Intended: “It was not Hamlet that was not read by anyone”
 (Again, the intended meaning is that of the corresponding grammatical sentence
 containing another *nem* in the appropriate place)

Conclusion: Focus partitions Hungarian sentences into two licensing domains for negation.

4.3 A Closer Look at DRSs

The point of this subsection: retracing from the semantic representation what the syntactic representation could/should look like.

- (52) (= (34)) a. János [a Hamletet]_F olvasta
 John [the H-Acc]_F read-Past+Def3Sg
 “It is Hamlet that John has read”



- The presupposition-DRS can be read like the representation of a definite description: there is a unique greatest β in C' with property φ (a.k.a. *the* φ or *the* entity from C' with φ).
- The assertion-DRS reads like the predicative part of a specificational sentence: $\lambda x.[x = h]$.
- Putting the two together: $\iota x.[C'(x) \wedge \varphi(x)] = h$.
- The verb, which is supposed to be the main predicate, is ‘hidden’ in φ .
- What seems to be the main predication: (exhaustive) identification.

A little more about φ : it resembles a relative clause: the description *the* β in C' with property φ reads more correctly as *the* β in C' that does (or undergoes) φ .

Question: does the operator \mathcal{F} have a syntactic correlate? And, if it does, does its contribution in the syntax parallel that of \mathcal{F} at the level of DRS-s?

4.4 What an Operator Can Do

A third theory on the syntax of Hungarian preverbal Focus (Horvath (2002)). In a nutshell: the main ‘specialty’ of Hungarian Focus, exhaustivity, is due to a covert maximality operator (EI) that is Focus-sensitive (à la *only*). Also: a corresponding feature in the head position of the appropriate preverbal projection (EIP). That is, Hungarian Focus is ‘decomposed’ into a maximality operator and in situ Intonational Focus.

- (53) Meghívtam (például) ”Jánost
 Pfx-call-Past+Def1Sg (for-instance) John-Acc
 “I’ve invited [John]_F for instance”

(Horvath (2002))

Horvath’s proposal: Hungarian has in situ, prosodic Focus-marking, just like English. What has become known as “Operator Focus” is a combination of intonational Focus and a covert exhaustivity operator (EI). EI can be taken to be the syntactic correlate of the operator \mathcal{F} that operates at the level of semantic representation.

EI is merged with the determiner of its host DP ; the resulting phrase is attracted to the specifier position of EIP (i.e. what has become known as FP). The feature checked: not Focus but exhaustivity.

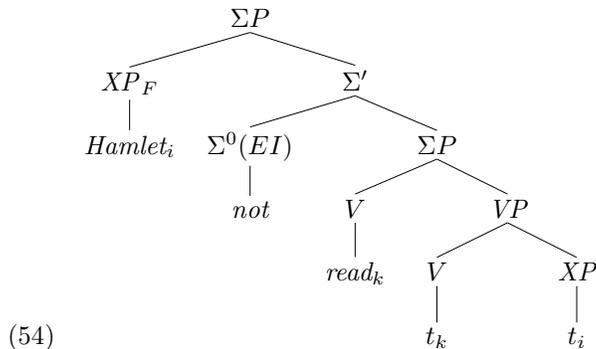
Hungarian appears to have ‘grammaticalized’ the notion of exhaustive identification (in a way that results in overt movement). Furthermore, the use of this ‘grammaticalized’, i.e. syntactically encoded, strategy apparently takes precedence over leaving the choice of exhaustive versus non-exhaustive interpretation open for pragmatics. (Horvath (2002):201.)

Speculations on EI/\mathcal{F}

- introduces a covert relative pronoun/definite article;
- this relative pronoun/definite article could be the direct correlate of Hungarian relative pronouns, which are actually composed of a demonstrative/definite article $a(z)$ plus the sortally appropriate *wh*-word; relative pronouns are morphologically complex and semantically non-redundant, meaning e.g. *that who, that where, that when* a.s.o.;
- something more iffy: is there also a covert copula?

Some more speculation:

- Horvath’s EIP needs to be integrated into an extended projection (ΣP) that is the ‘area’ of illocutionary force:



- The exhaustivity operator (which merges with the Focus-marked expression) or the covert head *EI* has to be made responsible for the creation of the post-Focus domain for negation — either by turning this domain into a sort of relative clause or by simply introducing another *IP* layer (i.e. not bothering about what happens to the verb, where identificational ‘force’ comes from a.s.o.)

From a purely syntactic point of view these modifications (or something very much like them) look necessary because several languages have been said to have a ΣP layer (or to have a comparable area just below *Comp*) but they do not in general license a second (independent) semantic negation.

- ??? (Translation: is the modification to ΣP that was sketched above feasible? If not, how does one explain the internal complexity of Hungarian (or Romanian) sentences with Focus? What arguments are there that support the claim that negation can be licensed at the level of semantic units?)

End-note: According to Artemis Alexiadou, it is entirely feasible that Hungarian sentences with Focus have a complex syntactic structure. Most convincing empirical argument: the need for *n*-words to be licensed by a negative particle in the appropriate position (cf. the examples in (51)). Another suggestion by Alexiadou: Hungarian has \emptyset copula (present construal) — it is therefore feasible that Focus too introduces a covert copula.¹³ Problem: Romanian, which also has pre-Focus and post-Focus negation, does not allow zero copulas:

(56) Ion *(e) medic/bolnav
John (is) doctor/ill

Something else may be going on in Romanian?

References

- Beaver, D. I.: 1992, The Kinematics of Presupposition, in P. Dekker and M. Stokhof (eds), *Proceedings of the Eighth Amsterdam Colloquium*, ILLC, Amsterdam.
- Beaver, D. I.: 1995, *Presupposition and Assertion in Dynamic Semantics*, PhD thesis, University of Edinburgh.
- Beghelli, F. and Stowell, T.: 1997, Distributivity and Negation, in Szabolcsi (1997b).
- Bende-Farkas, Á.: 2006, *Comparing English and Hungarian Focus*, Ms, IMS Stuttgart University; available from <http://www.semanticsarchive.net>.
- Brody, M.: 1990, Some Remarks on the Focus Field in Hungarian, *UCL Working Papers in Linguistics 2*, University College, London.
- Genabith, J., Kamp, H. and Reyle, U.: t.a., Discourse Representation Theory, in D. Gabbay and F. Günthner (eds), *Handbook of Philosophical Logic*, 2nd edn, Vol. 13, Kluwer.
- Giannakidou, A.: 2000, Negative ... Concord?, *Natural Language and Linguistic Theory* **18**, 457–523.

¹³The copula in Hungarian:

- (55) a. János beteg/orvos (*van)
J ill/doctor (is)/ “John is ill/a doctor”
b. János beteg/orvos *(volt/lesz)
John ill/doctor (was/will-be)
“John was ill/a doctor”
“John will be ill/a doctor”

- Horvath, J.: 2002, Interfaces vs the Computational System in the Syntax of Focus, in H. Bennis, M. Everaert and E. Reuland (eds), *Interface Strategies*, Holland Academic Graphics, pp. 183–200.
- Kamp, H.: 2004, Information Structure in a Dynamic Theory of Meaning, *Proceedings of the Linguistic Society of Korea*, LSK, Seoul.
- Kenesei, I.: 2005, Kettős fókus és kettős tagadás a magyarban (Double Focus and Double Negation in Hungarian), *Magyar Nyelv*.
- Kenesei, I. and Csaba Pléh (eds): 1992, *Approaches to Hungarian*, Vol. 4, JATE, Szeged.
- Koopman, H. and Szabolcsi, A.: 2000, *Verbal Complexes*, MIT Press, Cambridge, Mass.
- Laka Mugarza, M. I.: 1990, *Negation in Syntax: on the Nature of Functional Categories and Projections*, PhD thesis, MIT.
- Olsvay, C.: 2000, *A Syntactic Analysis of Negative Universal Quantifiers in Hungarian*, Master's thesis, TLP Budapest.
- Piñón, C. J.: 1992, Heads in the Focus Field, in Kenesei and Csaba Pléh (1992), pp. 99–122.
- Puskás, G.: 2000, *Word Order in Hungarian. The Syntax of A-bar Positions*, John Benjamins, Amsterdam.
- Surányi, B.: 2002, *Multiple Operator Movements in Hungarian*, PhD thesis, Utrecht University.
- Szabolcsi, A.: 1996, *Focus, Negation and Verb Movement in Hungarian*. Ms, UCLA; available from *Citeseer*.
- Szabolcsi, A.: 1997a, Strategies for Scope Taking, in *Ways of Scope Taking* (Szabolcsi 1997b).
- Szabolcsi, A.: 2005, *Questions about Model Theory, Proof Theory, and Semantically Flavored Syntactic Features*. Ms, NYU. Available from <http://homepages.nyu.edu/~as109/>.
- Szabolcsi, A. (ed.): 1997b, *Ways of Scope Taking*, Vol. 65 of *Studies in Linguistics and Philosophy*, Kluwer, Dordrecht.
- van der Sandt, R.: 1992, Presupposition Projection as Anaphora Resolution, *Journal of Semantics* **9**, 333–377.
- von Stechow, A.: 2005, Semantic Licensing of Some Uninterpretable Features. Paper presented at Stuttgart Graduate Seminar, June 9th 2005.
- Zeijlstra, H.: 2004, *Sentential Negation and Negative Concord*, PhD thesis, Utrecht, LOT.