

Disjunctive and conjunctive particles meet their negative concord relatives

Anna Szabolcsi, NYU

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- BACKGROUND ON NC

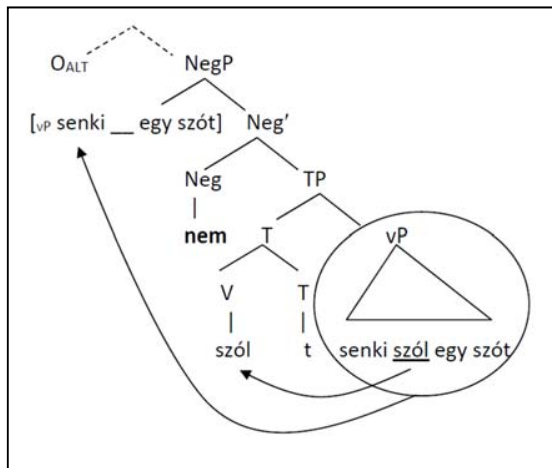
Hungarian has a hybrid (strict + non-strict) negative concord system (Surányi 2006).

Szabolcsi 2017a proposes a unified analysis of that system:

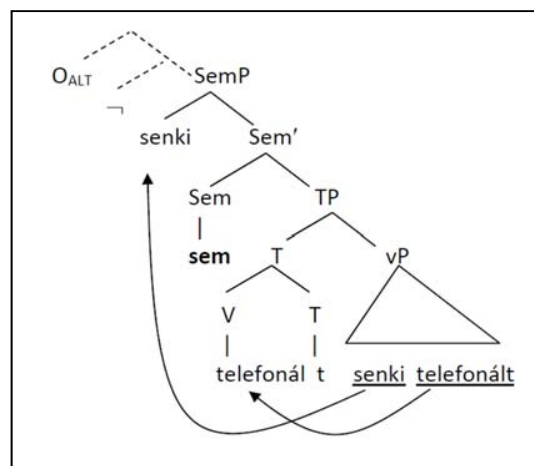
(i) The sentential negation marker (nem) invariably expresses negation \neg .

(ii) All NC items are existentials that fall within the immediate scope of either syntactically-represented or “disembodied” negation in the highest operator sequence (Chierchia 2013).

Strict NC	NCI occurs in the specifier, and thus in the scope of, the Neg head <u>nem</u> (\neg). A quantifier in the spec of a higher head (Dist or Ref) would scope above <u>nem</u> .	
Non-strict NC	Chierchia, Italian \emptyset =NEG Szabolcsi, Hung. <u>sem</u> :	$O_{ALT} \neg$ [nessuno _{[[+n-D]]} NEG _{[[+n-D]]} ha telefonato] $O_{ALT} \neg$ [senki _{[[+n-D]]} sem _{[[+n-D]]} telefonált]



Strict
⇐



Non-strict
⇒

- CURRENT FOCUS

... will be on two types of particles. Those that **precede** their hosts are quantifier-internal, but the quantifiers can be sentence-size. Those that **follow** their hosts are heads on the clausal spine. When particle=sem, the former yields strict and the latter non-strict NCIs.

- SEMANTICS

Expressions with clausal heads is / sem are disjunctions that undergo various kinds of exhaustification. is and sem invoke and activate focus alternatives or scalar alternatives of the specifier.

- SOME HISTORICAL RELEVANCE

The two kinds of negative concord in Hungarian do not seem like successive stages in a cycle.

“Particle that precedes host” is **quantifier-internal**.

“Particle that follows host” is a **head on the clausal spine**.

The main novel descriptive observation is that senki and senki sem are paralleled by two distinct ‘neither_nor’ constructions, each of which has its own extended family.

- | | | | | | | | | |
|-----|------------------|-----|--------|---|----------------------------|-----|--------|------------------------|
| (1) | Senki | nem | aludt. | ≈ | Sem Kati sem Mari | nem | aludt. | strict NC |
| | n-one | not | slept | | nor Kati nor Mari | not | slept | particle precedes host |
| (2) | Senki sem | | aludt. | ≈ | Kati sem (Mari sem) | | aludt. | non-strict NC |
| | n-one nor | | slept | | Kati nor Mari nor | | slept | particle follows host |

There are at least three **differences** between the two constructions.

Diff #1 “Particle precedes host” **needs a pair**. “Particle follows host” version is **happy on its own**.

- (3) a.(*) **Sem** Kati nem aludt. (only as ‘Nor did K sleep’)
 nor K not slept.
 b. * Nem aludt **sem** Kati.
 not slept nor K
- (4) a. Kati **sem** aludt. ‘K didn’t sleep, either’
 K nor slept
 b. Nem aludt Kati **sem**. ‘K didn’t sleep, either’
 not slept K nor

Other particles with the same behavior:

(5) “Particle precedes host”

- | | | | |
|----|-----------------------------------|---------------------------|--------------------|
| a. | sem Kati sem Mari | ‘neither K nor M’ | (strict NCI) |
| b. | mind Kati mind Mari | ‘K as well as M’ | lit. ‘all K all M’ |
| c. | vagy Kati vagy Mari | ‘either K or M, not both’ | |
| d. | akár Kati akár Mari | ‘whether/either K or M’ | |

(6) “Particle follows host”

- | | | | |
|----|------------------------------------|-------------------|----------------------|
| a. | Kati sem (Mari sem) | ‘neither K nor M’ | (non-strict NCI) |
| b. | Kati is (Mari is) | ‘K as well as M’ | lit. ‘K too (M too)’ |

Analysis

- (7) a. The particle that **precedes** its host within a pair (n-tuple) is a quantifier-internal particle, much like the sen-/sem- component of the n-words senki and semmi.
- b. The particle that **follows** its host is a head on the clausal spine, cf. sem in non-strict NC.

Diff #2 The tuples in both series optionally contain overt connectives, but **different connectives**. Pedig and és are not interchangeable.

(8) “Particle precedes host”

- | | | |
|----|--------------------------------------|-------------------------------|
| a. | sem Kati sem (pedig) Mari | `neither K nor M’ (strict NC) |
| b. | mind Kati mind (pedig) Mari | `K as well as M’ |
| c. | vagy Kati vagy (pedig) Mari | `either K or M, not both’ |
| d. | akár Kati akár (pedig) Mari | `whether/either K or M’ |

(9) “Particle follows host”

- | | | |
|----|---------------------------------|-----------------------------------|
| a. | Kati sem (és) Mari sem | `neither K nor M’ (non-strict NC) |
| b. | Kati is (és) Mari is | `K as well as M’ |

Hungarian és ‘and’ is a mere pair-forming Junction operator (Szabocsi 2015).

The connective pedig that occurs in second position in the last con/disjunct is similar to Russian a. In this function, it is a marker of a completed list of partial answers to a question under discussion. Cf. “Where are the kids? -- Pat is at school, Chris is at home, Kim *PEDIG* is at the gym.”

Diff #3 Particles that precede their hosts **form quantifier words** with indeterminate pronouns:

(10) “Particle precedes host”

- | | | |
|----|----------------------------------|------------------------------------|
| a. | senki, semmi, sehöl | `no one, nothing, nowhere’ |
| b. | mindenki, minden(*mi), mindenhol | `everyone, everything, everywhere’ |
| c. | valaki, valami, valahol | `someone, something, somewhere’ |
| d. | akárki, akármi, akárhol | `whoever, whatever, wherever’ |

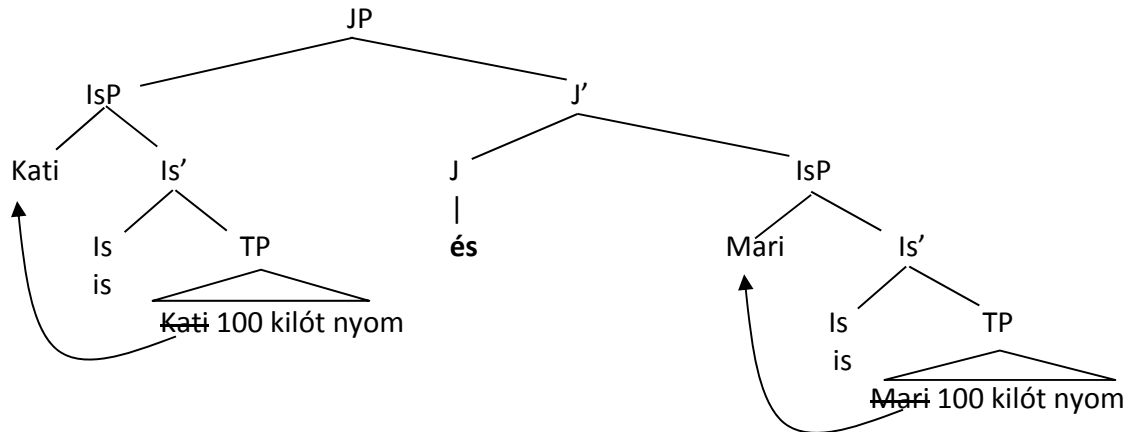
(11) “Particle follows host”

- | | |
|----|---------------------|
| a. | [valaki/akárki is] |
| b. | * iski, ismi, ishol |

- Szabolcsi (2015) discusses is-type additive particles in detail. The existence of mind-type particles is recognized, but left for further research (2015: 183-84). The present paper takes up that challenge.

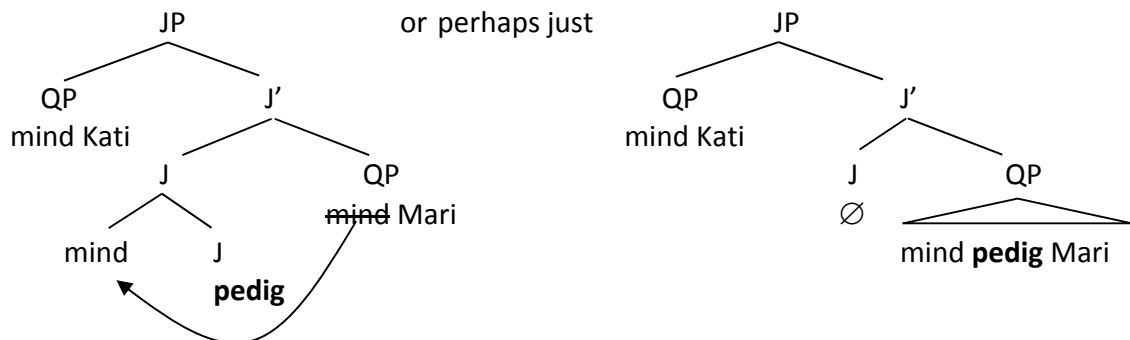
- | | | | | |
|---------|---|---|------------------|--------------------------------|
| (12) a. | mind -en-ki | } | dare-mo | `everyone/anyone’ |
| b. | mind A mind B | | A mo B mo | `A as well as B, both A and B’ |
| c. | A is (és) B is
A is | | A mo | `A too/even A’ |

Is 'too, even' is a head on the clausal spine (Szabolcsi 2015; JP from den Dikken 2006)



- (13) a. [_{JP} Kati ~~is 100 kilót nyom~~ [_{J'} (és) [Mari ~~is 100 kilót nyom~~]]] (optional ellipsis)
 'Kate as well as Mary weigh 100 kg' (individually/*together)
- b. [_{JP} Kati ~~is 100 kilót nyom~~ [_{J'} (és) [Mari ~~is 100 kilót nyom~~]]] (optional ellipsis)
 'Kate as well as Mary weigh 100 kg' (individually/*together)

Mind 'all' is a quantifier-internal particle (ki 'human indeterminate pronoun, who')



- (14) a. mind X mind Y mind Z = mindenki, when the universe is {X, Y, Z} 'everyone'
 b. sem X sem Y sem Z = senki, when the universe is {X, Y, Z} 'no one; str NC'
 c. akár X akár Y akár Z = akárki, when the universe is {X, Y, Z} 'whoever, anyone'
 d. vagy vagy Y vagy Z ≈ valaki, when the universe is {X, Y, Z} 'someone'

BUT, ellipsis possibilities show that those quantifiers are, or can be, sentence-size (vP). See Appendix 2 for some syntax. (15)-(16) involve "non-focus pivot right-node raising" with ellipsis in-situ (Valmala 2012, thanks to Anikó Lipták for help)

- (15) **Mind** egy magas -- **mind** hat alacsony gyerek-et felhívtam.
 all one tall all six short child-acc up-called-I
 'I called both one tall and six short children'
- (16) **Sem** a jobb- -- **sem** a bal-kezes gyerekek nem ügyetlenek.
 nor the right- nor the left-handed child-pl not clumsy-pl
 'Neither the right- nor the left-handed children are clumsy'

Rough semantics for the clausal heads *is* and *sem* (more detail in Szabolcsi 2017b)

- The larger expressions α is and α sem are weak existentials/disjunctions that undergo various kinds of exhaustification. But is/sem itself cannot be either \exists/\vee or an exhaustifier. is/sem operates on focus alternatives or scalar alternatives generated by the specifier and activates them (=forces them to be exhaustified by some other, overt or silent operator).
- The \exists/\vee semantics is unavoidable in view of the general mission of α is and α sem:

<u>akár Kati is,</u>	<u>(akár) egy lélek is,</u>	<u>(akár) valaki is</u>	are FCIs and weak NPIs;
<u>akár Kati sem,</u>	<u>(akár) egy lélek sem,</u>	<u>(akár) senki sem</u>	are strong NPIs (NCIs).
- A set of propositional alternatives is nothing but the **union** of the individual alternatives:

$$\{ \{w: \text{dance}_w(k)\}, \{w: \text{dance}_w(m)\} \} = \{ \{w: \text{dance}_w(k)\} \} \cup \{ \{w: \text{dance}_w(m)\} \}$$

Thus the \exists/\vee semantics is there; no need to posit that is and sem are \exists/\vee operators.
- When is/sem acts as additive particles, the focus alternatives of the scale-less host are recursively exhaustified by silent EXH² without a conjunctive alternative, in the spirit of Mitrović 2014, Bowler 2014, Bar-Lev & Margulis 2014, and Singh et al. 2016. The results:

“Kati is telefonált.	assrt: Kate called.	psp: Someone else called.	OR
	assrt: Kate called.	psp: Something else similar happened.	
- When is/sem builds an FCI, NPI or NCI, EXH is often overt in Hungarian (akár, még), cf.

surface string	*Mary saw anyone	ok Mary rarely/never saw anyone
syntactic scope	Mary saw > anyone	Mary rarely/never see > anyone
LF scope	EXH ($\exists x.\text{saw}(x)(m)$)	EXH (<u>MON</u> ↓/¬ $\exists x.\text{saw}(x)(m)$)
- Division of labor: sem blocks vala/is in the immediate scope of clause-mate negation.
- My analysis converges with Gajić 2016 (Serbian -i/-ni) and Balusu 2017 (Telugu -ainaa/-VV). But neither Gajić nor Balusu pull together the additive uses and the FCI/NPI/NCI uses of the particles, and they do not take presuppositions [postsuppositions] seriously. Therefore my analysis diverges from theirs at some points.

Does the co-existence of strict and non-strict NC in Hungarian represent Jespersenian limbo, in full swing for ca. 600 years?

According to Kiss 2015, the non-strict version is more recent than the strict one, but they do not represent successive stages of NC in the language. They seem like two separate constructions. See Appendix 1. This squares with my findings about each having its extended family.

References: Balusu 2017 NELS | Bar-Lev & Margulis 2014 SuB | Bowler 2014 SALT | Chierchia 2013 OUP | den Dikken 2006 NLLT | Gajić 2016 SuB | Kiss 2015 in OUP | Mitrović 2014 PhD thesis | Singh et al. 2016 NLS | Surányi 2006 Lingua | Szabolcsi 2015 L&P | Szabolcsi 2017a lingbuzz/003498 | Szabolcsi 2017b Ms. | Valmala 2012 Ms.

Appendix 1: excerpts from K. É. Kiss (2015), A negative cycle in 12-15th century Hungarian. In Biberauer & Walkden (eds.) *Syntax over Time: Lexical, Morphological, and Information-Structural Interactions*. OUP, pp. 86-101.

“Gugán (2012) argues that the Hungarian negative particle *nem* is also the result of a negative cycle having taken place in Proto-Hungarian. Most Uralic languages have a negative auxiliary, which also existed in Proto-Ugric in the form **e ~ä ~a*. In Proto-Hungarian, however, its negative force underwent weakening, and an indefinite pronominal element reconstructed as *nēmš* was introduced to reinforce it (Sipos 1991: 395). Eventually, the negative auxiliary disappeared (except in *yes-no* questions, where it has survived as an interrogative particle), and the pronoun assumed the role of negative operator. The negative particle *nem* is the descendant of *nēmš*, hence it is cognate with the indefinite pronouns and proadverbs *né-mi* ‘some-what’, ...

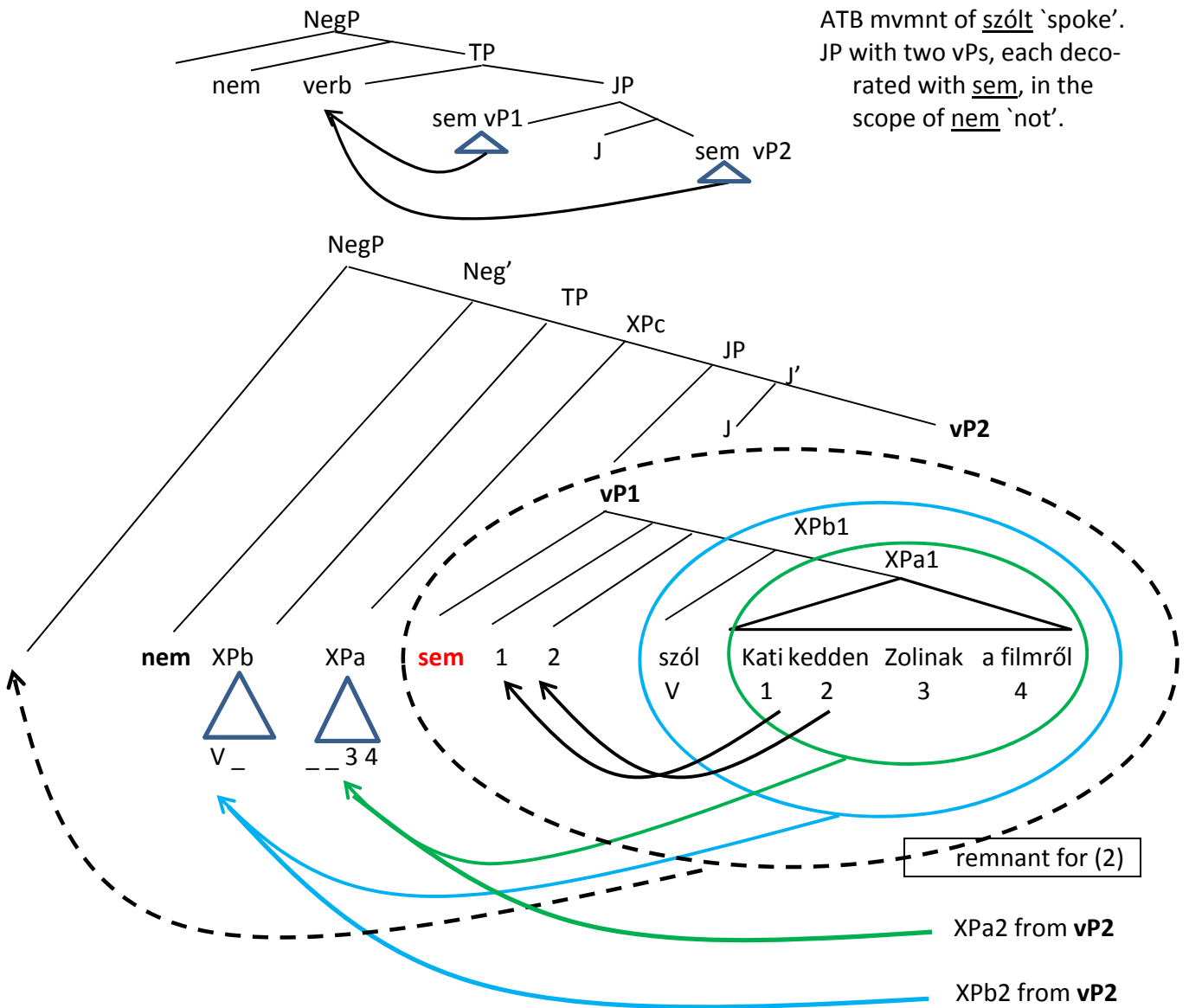
In the late Proto-Hungarian period, the cycle began anew. As a first step (resulting in stage 2 of the new cycle), negated indefinites were strengthened by the emphatic/additive/distributive particle *es*, and the numeral *egy, egyik* ‘one’... Recall *es num igg ember* ‘even not one man’, an example from 1193-95 ... Negation was strengthened by *es* also in the case of indefinite pronouns in the scope of negation.

In the third stage of the cycle, the morphological fusion of *es+nem*, and, especially, the morphological fusion of *es+nem*+pronoun complexes lead to the semantic weakening of negation, and created a need for further strengthening. This was attained by the adjunction of another negative particle to the verb. The re-introduction of the negative particle was first optional. The *se*-pronouns *soha* and *senki*, whose morphological structure had become completely opaque owing to word-internal phonological processes, lost their negative force and came to require an additional negative particle prior to the Old Hungarian period. In the case of the rest of *se* expressions, the additional, V-adjoined negative particle was still optional in the first Old Hungarian documents. According to the evidence of 14th-15th century codices, the pattern without a reinforcing negative particle was becoming less and less common, and by the end of the 15th century it had disappeared completely. In stage 4 of the negative cycle, Hungarian became a strict negative concord language, where negation is conveyed by a negative particle, and *se*-expressions are negative polarity items. ...

Since the Old Hungarian negative cycle reached its final stage, only minor changes have taken place in the syntax of negation. Until the end of the 14th century, sentences could only contain a single *se*-expression, confined to the left periphery. From the 15th century on, we also find postverbal *se*-phrases, which is evidence of their analysis as negative polarity items ...

The history of negative indefinites involving *sem* and the numeral *egy* ‘one’ has been somewhat different from the history of *se*-pronouns. Both *es* and *sem* (*es+nem*) were premodifiers in the earliest Old-Hungarian documents. Later *es* also came to be used as an enclitic, and its two positions came to be associated with different functions. *És*, the standard Modern Hungarian version of the proclitic variant, is the connective corresponding to *and*. *Is*, the descendant of the enclitic, is an additive/distributive particle today. *Sem*, incorporating the additive particle, acting as a premodifier in the early Old Hungarian period, has also become a postmodifier. Jókai Codex contains, in addition to the regular archaic structure and the regular novel structure, two patterns which seem to anticipate the change in the position of *sem* ... The variants in (27a-d) may correspond to subsequent stages of a diachronic process. (27a) contains no negative particle in addition to that incorporated in the particle *sem* associated with the indefinite. In (27b) the negative particle is reintroduced in a position left-adjoined to the verb. In (27d) [*egy ember-sem lakott-uala*], which also occurs only once in Jókai Codex, but has become the winning pattern in the long run, the proclitic *sem* is missing, but the indefinite is followed by a *sem*. If the prosody of (27d) was the same as it is today, then its *sem* is not the stressed negative particle but an unstressed enclitic modifying the indefinite. ... [T]he enclitic *sem* could only retain its negative force when cliticized to a focussed, hence immediately preverbal, indefinite, where it could be reanalyzed as the occupant of the adjacent Neg position. Non-focussed, post-verbal indefinites in the scope of negation require the presence of both the negative particle *nem*, and the minimizing enclitic *sem*.”

Appendix 2: Sample derivations of sentence-size quantifiers using ATB movement, remnant movement, and in-situ ellipsis à la Valmala 2012 (non-focal pivot right-node-raising)



- (1) nem szólt Zolinak a filmről sem Kati kedden _ sem (pedig) Mari szerdán _
not spoke to Zoli abt the film nor Kati on Tues nor Mari on Weds
- (2) variant of (1) by movement of JP with two remnant vPs to spec, NegP
sem Kati kedden sem (pedig) Mari szerdán nem szólt Zolinak a filmről
- (3) variant of (1) with ellipsis ("in-situ RNR" à la Valmala 2012)
nem szólt Zolinak a filmről sem Kati [egy tavaszi napon] sem Mari [egy téli napon]
not spoke to Zoli abt film nor Kati a spring _ nor Mari a winter day-on