Who invokes silent negation?
The view from a hybrid negative concord language

Anna Szabolcsi
Uralic Information Centre, Oct. 29, 2025

Abstract Zeijlstra (2004-2022) proposes an agreement-style grammar, where negative concord items (NCI) are existentials that must be licensed by a pronounced or silent negation. The silent negations are invoked by NCIs themselves and, in strict-NC systems, by the overt but meaningless negative marker (NM).

This paper addresses two main issues. First, why is NM obligatory in strict systems, if NCIs can invoke silent negation? Second, is it possible for strict and non-strict NC to co-exist in a language, if the NM is meaningless in the first and meaningfully negative in the second case?

The paper focuses on Hungarian, based on but going beyond existing literature (Surányi 2006, Kenesei 2009, É. Kiss 2015, Szabolcsi 2018a,b, and others). It combines Zeijlstra's analysis for strict-NC with Chierchia's (2013) analysis for non-strict NC. Hungarian is particularly interesting, because it is a hybrid, and so it requires accounts of the two kinds of NC that are compatible.

Introduction: [uNeg]/[iNeg] in Zeijlstra's theory of negative concord

In seminal work, Zeijlstra (2004-2022) analyzes negative concord as an agreement relation between items with an uninterpretable [uNeg] feature that needs to be checked by a c-commanding operator that has an interpretable [iNeg] feature and a ¬ semantics. When no such operator is overtly present, he postulates a null Op¬.

Zeijlstra proposes that strict and non-strict negative concord languages differ with respect to whether of their Negative Markers (NM) are [uNeg] or [iNeg].

In the strict case, e.g. Slavic, the NM is [uNeg] and invokes a null [iNeg, ¬] operator (Op¬) higher in the structure. In the non-strict case, e.g. Italian, NM itself is [iNeg, ¬]. In both types, negative concord items (NCI) are assumed to be [uNeg, ∃], i.e. existentials that invoke an Op¬ if no overt negation is present.

1)	Russian, strict NC			Italian, non-strict NC		
	ne	[uNeg]		non	[iNeg]	¬
	nikto	[uNeg]	∃	nessuno	[uNeg]	∃
	Op¬	[iNeg]	¬	Op¬	[iNeg]	¬

2)	Op¬ [iNeg]	nikto [uNeg, ∃]	ne [uNeg]	pozvonil.	`No one called'
		N-one	NM	called	

3)	Op¬ [iNeg]	nessuno [uNeg, ∃]	ha telefonato.	`No one called'
		N-one	called	

We take this theory as a point of departure and address two problems.

4) The redundancy problem (all strict-NC languages):
Why is the [uNeg] NM obligatory in strict-NC languages in the presence of NCIs?

If NCIs are [uNeg], they are capable of invoking Op¬ on their own. If, in Italian, *Nessuno ha telefonato* is good enough, with [iNeg] Op¬ invoked by [uNeg] *nessuno*, why is **Nikto pozvonil* not good enough in Russian, with [iNeg] Op¬ invoked by [uNeg] *nikto*?

Zeijlstra (2004) proposed that NM is part of the verbal morphology in strict-NC languages. That may be correct for Czech, but it is not tenable for Russian or Hungarian, for example. Zeijlstra (2022:86) likens NM to agreement markers in null subject languages, which cannot be dropped even if the subject is overt:

5)	a. Canto.	b. Io canto.	c. * Io cant.
	sing-1SG	I sing-1SG	I sing

This explanation does not seem as robust as the phenomenon it seeks to explain.

6) The hybridity problem
If a language has both strict and non-strict NC and an apparently unique NM, is that NM [iNeg] or [uNeg]?

Since Surányi (2006), Hungarian has been recognized as a hybrid NC language. It is a "true hybrid:" the NM is never optional, unlike in Modern Greek, RSL, or Catalan, judging by Giannakidou (2007), Kuhn and Pasalskaya (2019) and Tubau et al. (2023).

When the items *senki* `N-one,' *semmi* `N-thing,' *sehol* `N-where,' etc. occur by themselves, they function as strict NCIs. When they are in the specifier of the clausal-head particle *se(m)* `nor', we have non-strict NC. The data below demonstrate their characteristic behavior. If the preverbal NCI is bare *senki*, NEM must follow (strict NC, compare Russian). If preverbal *senki* is in the spec of SEM, NEM must not follow (non-strict NC; compare Italian).

7)	a.	Nikto	ne	videl	nichego.	*w/o NE	`No one saw anything'
		Senki	nem	látott	semmit.	* w/o NEM	`No one saw anything'
	b.	Nessuno		ha visto	nichego.	* with NON	`No one saw anything'
		Senki sem		látott	semmit.	* with NEM	`No one saw anything'

8)	a.	Marija	ne	videla	nichego.	* w/o NE	`M didn't see anything'
		Mari	nem	látott	semmit.	* w/o NEM	`M didn't see anything'
	b.	Maria	non	ha visto	niente.	* w/o NON	`M didn't see anything'
		Mari	nem	látott	semmit sem.	* w/o NEM	`M didn't see anything'

Postverbally, all combinations are possible, indicating that the two kinds of NC are not somehow kept apart in the language.

9)	{Sen-ki / Mari}	{nem / sem}	látott	se-hol (sem)	sem-mit (sem).
	{N-one / Mari}	{NM / NOR}	saw	N-place (NOR)	N-thing (NOR)

To answer questions (4) and (6) above, this paper focuses on Hungarian and combines Zeijlstra's (2004-2022) analysis for the NM in strict-NC languages with Chierchia's (2013) analysis for non-strict NC:

10) a. The unique standard NM, NEM is [uNeg] (as in Zeijlstra for strict-NC).

b. NCIs are not [uNeg]. They are not checked by [iNeg] and they don't invoke Op¬. Their relation to negation is indirect. The NCI needs to be exhaustified, and the coherence of exhaustification must be ensured by an intervening semantic negation (as in Chierchia for NPI/NCI licensing).

c. The intervening semantic negation is always silent. One of the elements that can invoke it is [uNeg] NEM. Therefore, NEM is not redundant.

d. For Italian, Chierchia postulates a null NEG head that has the preverbal NCI in its specifier and invokes both a silent exhaustifier and a silent negation. The clausal-head SEM in non-strict NC is an overt counterpart of this null NEG head.

The analysis draws on, but differs from precursors like Surányi (2006) and Kenesei (2009). In many respects it builds on Szabolcsi (2018a,b) but revises the claim that the unitary NEM is [iNeg, ¬]. NEM is argued to be [uNeg] instead.

The structure of the discussion will be as follows.

Section 1 motivates following Zeijlstra in analyzing Hungarian NEM as [uNeg].
Section 2 briefly summarizes Chierchia's semantic proposal for NCIs with reference to a null NEG head in syntax.
Section 3 argues that Hungarian SEM is a counterpart of Chierchia's NEG, but fleshes out the analysis of SEM as the NC version of the particle IS. Since IS forms additive expressions, NPIs, free choice items, etc., it must have a sparse semantics that corresponds to what all these have in common: activating alternatives.
Section 4 turns to various matters of locality that the above analyses raise.
Section 5 concludes.
Section 6 contains appendices on double negation (DN) and the additive interpretation of IS/SEM.

Two disclaimers:

First, this paper only addresses NCIs that can be analyzed as existentials under negation. It does not consider cases that might require an analysis as universals above negation, as argued in Surányi (2006).

Second, this paper only addresses the simplest cases of standard propositional negation. It does not analyze expletive negation, negation in polar interrogatives, and double negation, all of which have been extensively discussed in recent literature (although it makes references to Uralic negation). Here is a brief catalog of Hungarian negations:

- *Expletive negations vis-à-vis standard negations* (Halm & Huszár 2021)

[TopP*	[SpeakerDeixisP	**[nem(i)**	[NegP	**nem(ii)**	[TP	**[nem(iii)**+T^0]]]]]
		Expletive		Standard		Standard or Expletive

i) Hát **nem** elaludt?! -- EXPLETIVE neg.; surprise; operates on presuppositions
`She fell asleep, I realize with surprise'

ii) **Nem** aludt el. -- STANDARD neg.; operates on assertion; combines with focus
Nem "Mari aludt el. / "Mari **nem** aludt el. / **Nem** "Mari **nem** aludt el. /
Mari **nem** elaludt, hanem...
Hát **nem** nem aludt el?! -- EXPLETIVE (i) can co-occur with STANDARD (ii)

iii) a. El **nem** aludt. / El **ne** aludj! -- STANDARD "Uralic" neg.; operates on assertion (Gugán 2012, É. Kiss 2015)
b. Ha/amíg/hacsak hirtelen el **nem** aludt. -- EXPLETIVE neg.
c. Miket el (**nem**) olvasott! -- EXPLETIVE neg.; surprise; implicatures

- *Extra-clausal STANDARD negation:*
iv) **Nem**hogy elaludt volna. / **Ne**hogy elaludj!
- *Inner(a) and outer(b) negation in polar interrogatives* (Gärtner & Gyuris 2022)
v) a. **Nem** esik az eső sem /\ ? b. **Nem** esik az eső is /\ ?
`Isn't it raining either?' `Isn't it raining too?'
- *Strong(a) and weak(b) double negation* (Puskás 2012)
vi) a. "Senki **nem** mondott semmit. b. "Semmit \/ "senki **nem** mondott.
`Everybody said something,' lit. `Nobody said NOthing'

1. The Hungarian NM is [uNeg] and invokes Op¬

1.1. How do we know that Hungarian NEM is [uNeg]?

Szabolcsi (2018a,b) proposed that the unitary NM, NEM in Hungarian is [iNeg, ¬]. This seemed like a straightforward choice, but the present paper proposes to abandon it. Section 1.1.1 replicates one of Zeijlstra's arguments, and 1.1.2 presents a new argument based on `neither_nor' constructions. 1.1.3 examines another argument based on Zeijlstra, but this one will be found to be inconclusive. The point of all these arguments is that NEM does not make a semantic contribution in-situ as an overt [iNeg, ¬] item would. Instead, the ¬ operation applies higher in the structure. This is attributed to the silent Op¬ operator that the [uNeg] NEM invokes.

1.1.1 Zeijlstra's argument from fragment answers with NCIs

Everybody assumes that (unless NCIs are themselves negative), fragment NCI answers need a deleted [uNeg] element and the OP¬ it invokes.

Szabolcsi (2018a) assumed that SEM is effectively [uNeg] (see Sections 3-4), so non-strict NC worked fine. -- Some speakers find (11a) marginal. It is acceptable to me, and especially the structurally parallel ellipsis in (11b) sounds perfect to me. At any rate, non-strict NC is not the critical case.

11) a. Ki jött be? Op¬ Senki sem[uNeg] [~~jött be~~]. *Hungarian non-strict NC*
who came in N-one NOR came in

b. Tegnap sokan jöttek, ma viszont senki se.
yesterday many came today however N-one NOR

But the 2018 analysis of NEM as [iNeg, ¬] did not properly account for the strict-NC case. If the fragment answer *Senki.* is analyzed as in (12), how does NEM itself scope over *senki*, and how is it elided in a positive context? These problems were swept under the rug.

12) Ki jött be? Senki [~~nem[iNeg] jött be~~]. *Hungarian strict-NC*
who came in N-one NM came in

If, instead, the analysis is (13), NEM can be elided because it is not semantically negative, and the Op¬ it invokes scopes over the NCI:

13) Ki jött be? Op¬ Senki [~~nem [uNeg] jött be~~]. *Hung. strict-NC, revised*
who came in N-one NM came in

1.1.2 A new argument from SEM NEM..., SEM NEM...

The second argument involves a `neither_nor' construction of the strict-NC kind, which therefore requires NEMs in all its juncts. Before we turn to this, a quick background is in order.

Hungarian has two distinct SEM's, and we must keep track of which we are dealing with. Szabolcsi (2018b) argued that one SEM is a head on the clausal spine, and the other is quantifier-phrase internal. The counterpart of Chierchia's null NEG head is the clausal head SEM (see Sections 3-4). Here however we are interested in QP-internal SEM.

14) **Head on the clausal spine**:
IS, SE(M)

Particle follows host.
Need not be part of a tuple.
Tuple-internal connective: ÉS 'and'.
Doesn't build quantifier words.
Builds non-strict NCIs.

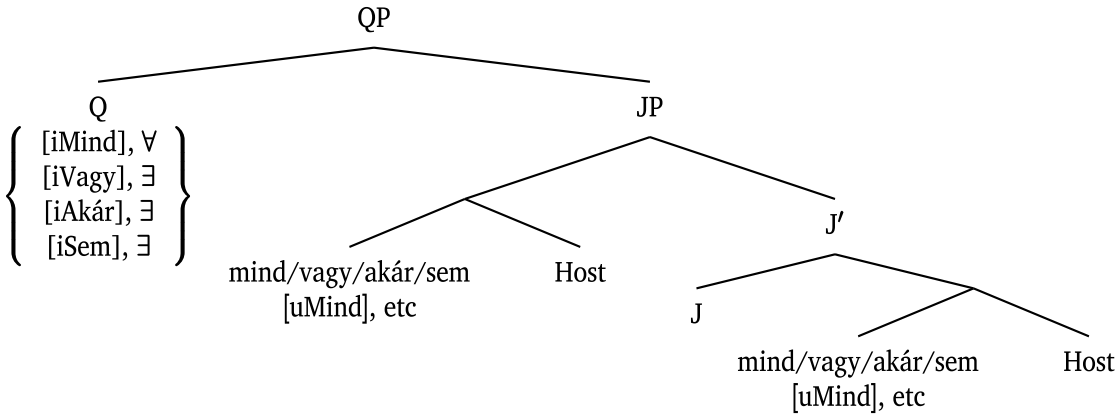
(a) X **is** `X too'
X sem `nor X'
(b) X **is**, Y **is** `X as well as Y'
X sem, Y sem `not X, nor Y'
(c) *is-ki

Quantifier-phrase internal:
MIND, VAGY, AKÁR, SE(M)

Particle precedes host.
Must be part of a tuple.
Tuple-internal connective: PEDIG.
Builds quantifier words.
Builds strict NCIs.

(d) * **vagy** X
* sem X
(e) **vagy** X, **vagy** Y `either X or Y'
sem X, sem Y `neither X nor Y'
(f) **vala**-ki `someone'
sen-ki `n-one'

15) The structure for QP-internal particle constructions



	mind/vagy/akár	*evett,*	*mind/vagy/akár*	*ivott*
	se	*nem evett,*	*se*	*nem ivott*
w/ prefixal verbs	*se*	*nem jött be,*	*se*	*nem ment ki*
	se	*be nem jött,*	*se*	*ki nem ment*

QP-internal `neither_nor' takes the shape *SEM proposition1 , SEM proposition2*. This is a strict-NC construction: it mandates the presence of NEM in each junct. Ellipsis is possible when both juncts have the same predicate, see the (b) versions.

16) a. Sem Mari nem evett, sem Kati nem evett/ivott. (NEM in pre-V NegP)
NOR Mari NM ate, NOR Kati NM ate/drank
`Neither did Mari eat, nor did Kati eat/drink'

b. Sem Mari [~~nem evett~~], sem Kati nem evett.

17) Peti sem nem evett, sem nem ivott. (NEM in pre-V NegP)
Peti NOR NM ate, NOR NM drank
`Peti neither ate nor drank'

18) a. Sem nem "**Mari** evett, sem nem "**Kati** evett/ivott. (NEM in pre-Foc NegP)
NOR NM Mari ate, NOR NM Kati ate/drank
`Neither was it Mari who ate, nor was it Kati who ate/drank'

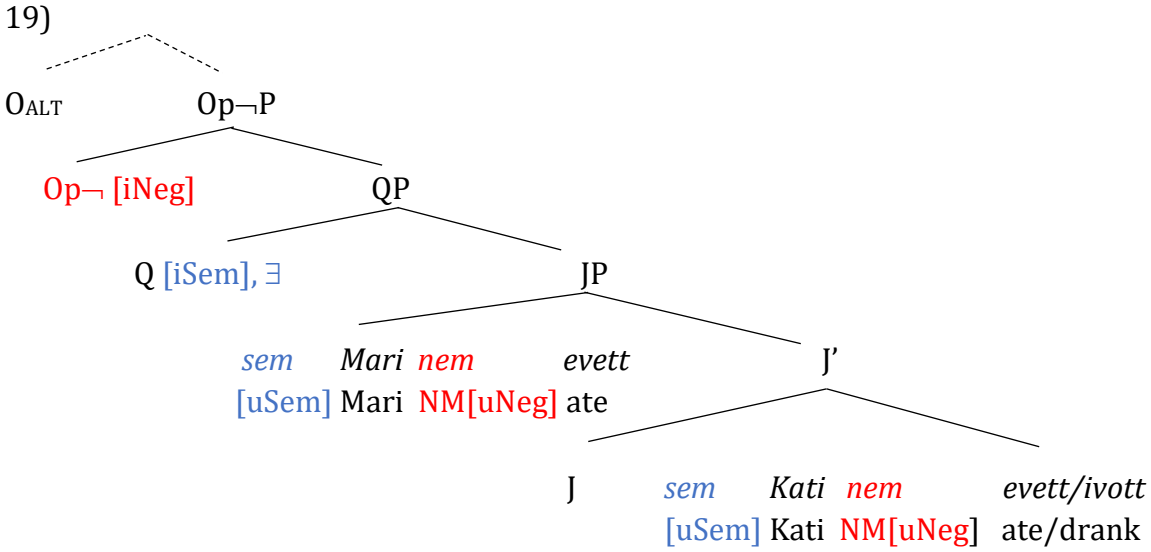
b. Sem nem "**Mari** [~~evett~~], sem nem "**Kati** evett.

All these sentences mean, `There is no true proposition in the set $\wp$' where $\wp$ = {"Mari ate" , "Kati ate/drank"}. I.e. **$\neg \exists p : p \in \wp$. p is true.**

How come the NEMs occur inside the individual juncts but $\neg$ scopes high above $\exists$?

Using (16) as an example, unless the NEM's undergo Across-the-Board LF movement, which seems implausible, the only way to compose the strings and obtain the desired meaning is (19), where Op¬P is modeled after the propositional QP:

19)



Szabolcsi (2018a,b) assumed that Hungarian NEM was [iNeg, ¬]. That made the patterns in (16)-(17)-(18) entirely puzzling. Here we have argued that NEM is generally [uNeg] and invokes Op¬, so the puzzle disappears. Those patterns offer a new argument for this analysis, rather than pose a problem.

1.1.3 Zeijlstra's argument from ¬ scoping over non-NC material preceding the NM

Zeijlstra's central argument for distinguishing the NMs of strict and non-strict NC languages is that the former is able to scope over NPIs that precede it. According to his analysis, it is the Op¬ that [uNeg] NM invokes that scopes high:

20) a. Mne mnogo ne nuzhno.
to.me much NM needed
¬ > much: `I don't need much'
Op¬ *mne mnogo ne*[uNeg] *nuzhno*

b. Molto (pizza) non ha mangiato.
much (pizza) NM has eaten
¬ > much: `She hasn't eaten much'
(b/c no Op¬ is invoked)

Hungarian seems to exhibit the Russian pattern, suggesting the same analysis:

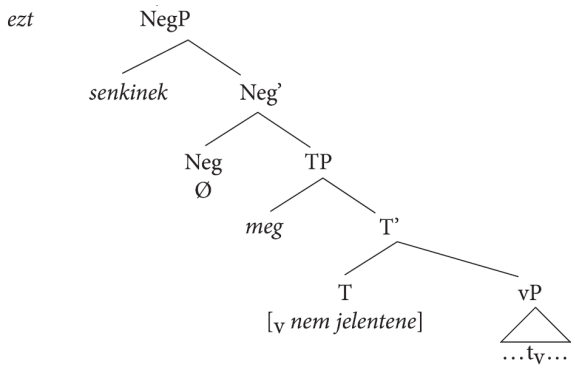
21) [Senki egy szót nekem] nem szólt.
N-one one word-acc to.me NM spoke
`Nobody said one word to me'
Op¬ *senki egy szót nekem nem*[uNeg] *szólt*

However, invoking Op¬ is not the only way to produce the requisite scope relation.

(i) Szabolcsi (2018a) accounted for (21) by placing the material [**...**] in Spec, NegP by remnant movement, which reconstructs.

(ii) More importantly, Katalin É. Kiss (p.c.) points out that using a prefixal verb reveals that (21) must involve **Uralic negation**, where NEM is not in NegP. It is adjoined to V, and the negated V moves to T; *senki* acts as a scope marker for negation:

É. Kiss (2015, p. 90)



that this-ACC nobody-to PRT not report-COND.3SG
'that he would not report this to anybody'

22) Senki egy szót nekem **el** **nem** mondott / * nem mondott el.
N-one one word-acc to.me pfx NM said

23) Soha egy szalmaszálat **keresztbe** **nem** tesz / ? nem tesz keresztbe.
N-ever one straw-acc over NM moves

Uralic negation also enables NEM to scope over a preceding additive expression:

24) Ha a kakaska is meg nem halt volna, az én mesém is tovább tartott volna.
`[Everybody died.] If it had not been the case that the little rooster died too, ...'
https://mesenapok.hu/a-tyukocska-halalrol-grimm-mesek/

What should we conclude now?

(i) If only the NEM of Uralic negation scopes over preceding operators other than N-words (21)-(24), then Hungarian does not really have a replica of Zeijlstra's (20a) in support of a [uNeg] analysis with null Op¬.

(ii) On the other hand, it seems that fragment answers (1.1.1) and the SEM NEM..., SEM NEM... construction (1.1.2) require, and thus support, such an analysis.

(iii) Given (ii), it is a mystery why non-Uralic negation doesn't scope high in (21)-(24).

(iv) It is also interesting that English (not even a NC language) produces an interpretation parallel to Hungarian (24) with `not > too'. The quote below only makes sense on the reading `If it were not the case that even the Newtonian philosophy is permitted to be questioned, mankind would not trust it as they now do'.

25) "If *even the Newtonian philosophy were not* permitted to be questioned, mankind could not feel as complete assurance of its truth as they now do."
(J S Mill 1859, On Liberty https://www.utilitarianism.com/ol/two.html)

Unfortunately, the cross-linguistic literature does not tend to discuss data similar to Zeijlstra's Slavic—Italian contrast in (20a,b), even though it is central to his theory. For the time being, we continue to assume that Hungarian NEM is a [uNeg] element based on 1.1.1 and 1.1.2, and keep the scope facts of this section on the agenda for further research.

2. Why must NCIs be in the immediate scope of negation if they are not [uNeg]?

Chierchia (2013) argues that NCIs are strong NPIs. In his theory, all NPIs have grammaticized active domain-alternatives, which means that they must be exhaustified. (Different kinds of NPIs and NCIs differ as to how they must be exhaustified.) Exhaustification amounts to negating non-entailed alternatives. This means that if a positive NPI-sentence (p) is exhaustified, we get a contradiction, #.

26) With a vanilla NPI: # Op-EXH (There is **any** cookie in the kitchen) =
There is a cookie in the kitchen but
NOT (there is a cookie on the kitchen table) and
NOT (there is a cookie in the kitchen cupboard) and …

If (¬p) is exhaustified, the alternatives are entailed, so Op-EXH is vacuous: it does not have anything to negate. So, the intervention of ¬ between Op-EXH and NPI/NCI prevents contradiction:

27) With a vanilla NPI: Op-EXH (There isn't **any** cookie in the kitchen) =
There isn't any cookie in the kitchen

NCIs only differ from vanilla NPIs in needing a stronger exhaustifier (O_{ALT} for both subdomain and scale), but the general rationale is the same.

Let uX be "has active alternatives, needs to be exhaustified." (Expository only; we are not committed to [uX]-[iX] feature checking.)

28) **Op[iX, EXH]** **Op[iNeg,¬]** Mari **nem[uNeg]** látott **semmit[uX, ∃]**

We have a big gain: If the relation of NCIs to semantic negation is always indirect, then it is explained why [uNeg] NM is mandatory in strict-NC systems, even in the presence of NCIs. Only the NM can invoke Op¬. NCIs cannot.

3 The other face of the hybrid: Non-strict NC in Hungarian

Let us see how the above analysis is compatible with the non-strict NC aspect of Hungarian.

The belief that NCIs are [uNeg] is based on the view that in languages like Italian, preverbal NCIs are "self-licensers" (Ladusaw 1992). Chierchia offers a different story in terms of NEG, and Hungarian supports that: SEM is an overt counterpart of NEG.

To complement the discussion above, this section summarizes the arguments in Szabolcsi (2017, 2018a,b).

3.1 Chierchia's null NEG head and its Hungarian counterpart, SEM

Chierchia (2013: 235) says that NCIs must be exhaustified by an operator that he calls O_{ALT}. In addition, he introduces a null syntactic head NEG with feature [[n-D]] that

(i) needs an agreeing NCI in its specifier, and

(ii) requires an abstract negation, ¬ to scope right above its projection.

Note that the [[n-D]] feature corresponds to Zeijlstra's [uNeg] – in effect, though not in content. [[n-D]] is checked by the exhaustifier O_{ALT}, not by ¬.

29) Nessuno ha telefonato. `No one called'

	Op[iNeg, ¬] nessuno[uNeg] ha telefonato	Zeijlstra
O_{ALT}	¬ (nessuno[[+n-D]] **NEG**[[+n-D]] ha telefonato)	Chierchia

Szabolcsi (2018a,b) argued that the Hungarian preverbal SEM `nor' head is an overt counterpart of Chierchia's NEG. The n-word *senki* is in its specifier:

30) O_{ALT} ¬ (senki[[+n-D]] **sem**[[+n-D]] telefonált)

The received wisdom in the literature on Hungarian is that IS `too' is a focus-associating head on the clausal spine, and SEM is its counterpart in the immediate scope of negation.

This makes for a natural connection with Chierchia's NEG, with one difference. IS/SEM needs a focus-accented phrase in its specifier. It accommodates a variety of such elements, including lexical expressions and quantifiers. SEM doesn't specialize in hosting NCIs, unlike Chierchia's null NEG.

3.2 IS has a sparse semantics: it just activates alternatives

Szabolcsi (2017) points out that Hungarian IS, Serbo-Croatian I, and Hindi BHII (and perhaps examples from many other languages) build additives, NPIs, FCIs, scalar expressions, and NCIs, often aided by other particles. With Hungarian examples:

31) a. Mari is telefonált. *Mari is* = additive
Mari IS called
`Mari too called'

b. Nem hiszem, hogy valaki is telefonált. *valaki is* = NPI
NM think-1sg that someone IS called
`I don't think that anyone called'

c. Akárki is telefonált ... *akárki is* = FCI
AKÁR-WHO IS called ...
`Whoever it was who called... [ignorance flavor]'

d. Még Mari is telefonált. *még Mari is* = scalar
even Mari IS called
`Even Mari called'

e. Mari sem / Senki sem telefonált. *Mari sem, senki sem* = NCI
Mari NOR / N-one NOR called
`Mari didn't call / No one called'

In Fox/Chierchia style theories these all involve exhaustification.

The conclusion is that if IS plays a critical role in building as different things as additives, NPIs, FCIs and NCIs, it must have a sparse semantics: just what is common to them. The various "surface uses" of IS must be produced from this with independently available tools.

Chierchia assumes that it is a lexical property of some expressions that they have obligatorily active alternatives. The Hungarian/Serbo-Croatian/Hindi data suggest that activating alternatives is a function that can be delegated to a separate morpheme. Active alternatives must then be figured into the meaning of the sentence, e.g. by exhaustification, performed by a separate operator.

Recall that the head SEM is IS within the immediate scope of clause-mate negation. If so, SEM (i) activates the specifier's alternatives and, like Chierchia's NEG, (ii) calls for an exhaustifier, and (iii) invokes an abstract negation to maintain logical coherence.

32) O_{ALT} ¬ ((még) "Mari **sem**[[+n-D]] telefonált))
`Mari didn't call either / Even Mari didn't call'

33) O_{ALT} ¬ (Senki **sem**[[+n-D]] telefonált)) [repeated]
`Nobody called'

3.3. IS/SEM and the additive presupposition

A natural question that arises is this: How is one use of Hungarian IS/SEM capable of exhibiting additive presuppositions if IS/SEM are not an additive particles, just alternative-activators? Szabolcsi (2017) addresses this question, using alternative-activation and exhaustification. However, that is a complex story and not pertinent to present concerns. It is summarized in Appendix B, but it will not feature in this talk.

4. Matters related to locality (fseqs, phases, intervention)

4.1 Postverbal SemPs are located in reiterating lower fseqs

Expressions in the specifiers of IS/SEM, *Valaki is/senki sem* and *Mari is/Mari sem* can occur post-verbally:

34) Ha láttam valakit is / Marit is, …
`If I saw anyone(lit. someone IS) / Mary too, …'

35) Nem láttam senkit sem / Marit sem.
`I didn't see anyone / Mary either'

Is this compatible with the assumption that IS/SEM are always heads on the clausal spine with the focus-accented phrases in their specifiers? Following Hallman (1997), Szabolcsi (1997) and Brody & Szabolcsi (2003) propose that the same sequence of operator heads that is clearly visible in the preverbal field reiterates postverbally, above each inflectional head that will be suffixed onto V. The only exception is Neg, which only occurs in the preverbal field. The low fseqs host all manner of quantifiers. IS and SEM heads happily occur there.

This is not an uncontroversial assumption, but if correct, post-V occurrence is not an obstacle for the clausal head analysis and the SEM ≈ NEG correspondence.

Postverbal SEM heads cannot invoke Op¬. This is clear from the fact that they require an overt NEM or a preverbal SEM. We assume that the reason is that Op¬ can only show up in the same high phase as the overt NEM, and postverbal SEM is too far below (inside vP).

4.2 Hungarian has preverbal and pre-focus standard NegPs

36) [$_{NegP2}$ Nem [$_{FocP}$ "**Mari** [$_{NegP1}$ nem [TP telefonált]]]].
`It is not Mary who didn't call'

The pre-focus Neg supports preverbal NCIs, but not postverbal NCIs:

37) Senkinek nem "**Mari** nem telefonált.
`For no one was it Mary who didn't call him/her'
* It was not Mary who didn't call anyone'

38) Nem "**Mari** nem telefonált senkinek.
`It was not Mary who didn't call anyone'
* For no one was it Mary who didn't call him/her' (unless *senkinek* scopes up)

The facts were first observed and analyzed in Szabolcsi (1981), who assumed NCI=∀. Kenesei (2009) revisits this, with NCI=∃; he attributes the missing readings to phases. Szabolcsi (2018a) proposes that the exhaustive operator of contrastive focus intervenes between pre-focus NEM and low-scoping *senki*. Compare:

39) * Nem mindenki látott senkit.
40) * Not everyone saw anyone.

4.3 Impossible sequences with two silent negations

Surányi (2006) observed the following facts. Both NEM and the clausal head SEM can be preceded by multiple NCIs,

41) Senki soha semmit nem szólt.
N-one N-ever N-thing NM spoke
`No one ever said anything'

42) Senki soha semmit sem szólt.
N-one N-ever N-thing NOR spoke
`No one ever said anything'

but there can be no more than one clausal head SEM in the preverbal domain,

43) * Senki sem (soha sem) semmit sem szólt. (illegit SEM highlighted)
N-one NOR N-ever N-thing NOR spoke
Intended: `No one ever said anything'

and the clausal head SEM cannot appear above NEM, unless they are separated by the focus phrase (adding *soha sem* would not help):

44) * Senki sem nem szólt.
N-one NOR NM spoke
Intended: `No one spoke'

45) * Senki sem nem "**Marinak** szólt.
N-one NOR NM to.Mari spoke
Intended: `For no one was it not Mari to whom he spoke'

46) Senki sem "**Marinak** nem szólt.
N-one NOR to.Mary NM spoke
`For no one was it Mari to whom he did not speak'

Note that the grammatical SEM NEM data in Section 1.1.2 involved the QP-internal SEM that precedes its host, not the clausal-head SEM that was argued to be a counterpart of NEG.

Since both NEM and clausal head SEM invoke Op¬, the descriptive generalization is this:

47) There cannot be more than one Op¬ invoking head on the clausal spine within the same phase / more than one Op¬ above the same phase.

Why? If both NEM and SEM were [uNeg], this could be a Minimality problem for feature checking; but SEM is not supposed be [uNeg]. If the two Op¬'s cancelled out, a third one ought to help; but it does not. So, we don't have a precise explanation yet.

Re phases: Kenesei (2009) argued that FocP tops off a phase. If so, when SEM and NEM are separated by a focus phrase, they are not in the same phase. Likewise, when the clausal head SEM is postverbal, it is inside vP and in a different phase.

5 Conclusion

Zeijlstra (2004-2022) proposed that strict and non-strict negative concord languages differ with respect to the status of their sentential negative markers (NM). In the former, e.g. Slavic, NM is [uNeg] and invokes a null [iNeg, ¬] operator (Op¬). In the latter, e.g. Italian, NM itself is [iNeg, ¬]. In both types, Negative concord items (NCI) are assumed to be [uNeg, ∃].

This paper addressed two questions raised by this setup. One, why is the NM obligatory in strict-NC even in the presence of NCIs, if NCIs are capable of invoking Op¬? Two, are there hybrid systems with both strict and non-strict NC, if the NM is supposed to be [uNeg] in the one and [iNeg] in the other?

The paper put forth new arguments to the effect that the Hungarian negative marker NEM is [uNeg], but NCIs are not. Their relation to negation is indirect; they are existentials that need to be exhaustified, which in turn requires an intervening negation to maintain logical coherence (Chierchia 2013). Thus, there is no redundancy in the NM co-occurring with NCIs.

The analysis combined features of Zeijlstra's proposal for strict NC and Chierchia's proposal for non-strict NC. This does not only help answer the redundancy question but is also necessitated by the fact that Hungarian is a true hybrid NC language (Surányi 2006), where the NM is never optional. It is argued that in the non-strict NC subsystem, the clausal-head particle SEM is an overt counterpart of Chierchia's Italian null NEG head, which invokes a silent exhaustifier and a silent negation. Hybridity proves that these features can coexist.

Finally, we now see that all three Boolean operators, ∃, ∀, and ¬ present themselves in syntax in the shape of meaningless functional elements that point to silent actors at the left periphery, generalizing the picture in Szabolcsi (2015) in the spirit of Carlson (2006).

6.1 Appendix A on Double Negation (DN)

Puskás (2012) correctly describes the basic patterns that she calls strong DN and weak DN (=reconstruction) in Hungarian. But (i) her actual examples often sound unacceptable, and (ii) do not seem to extend to arbitrary new examples. It seems that DN is really not productive in Hungarian.

(i) The lowest scoping NCI must be SEMMIT `N-thing.acc'. Some of Puskás's examples have low-scoping SENKI `N-one' and they sound unacceptable to me **on the DN reading**.

48) SEMELYIK FILMET nem ismerte senki. (Puskas 2012, ex. (21))
no film-ACC NEG knew-3S n-person-NOM
`Nobody knew no film'

(ii) Even with SEMMIT, only a restricted set of verbs seem to support DN. I haven't figured out the generalization yet, but here are some examples:

49) OK as DN: "**Senki** nem mondott semmit (verum focus)
`Nobody said nothing = Everybody's speech was contentful'

50) OK as DN: Semmit\/ nem mondott senki. (contrastive topic)
`idem'

51) OK NC, # DN: Senki nem érzett/magyarázott el/vett észre/tört le semmit.
Intended DN: `Nobody felt/explained/noticed/broke off nothing =
Everybody felt/explained/noticed/broke off something'

52) OK NC, #/?? DN: Semmit\/ senki nem érzett/magyarázott el/vett észre/tört le.
Intended DN: same as above

Maybe DN is okay with some fragment answers to negative questions (see Surányi 2006 and Falaus—Nicolae 2019).

I have no reliable intuitions here, and so I am putting DN aside.

6.2 Appendix B on the additive presupposition of IS/SEM and TOO/EITHER

How do Hungarian IS and English TOO (and their NC versions SEM and EITHER) exhibit additive presuppositions if they are not additive particles, just alternative-activators, as argued above? This section is a summary of the technical parts of Szabolcsi (2017).

TOO/IS associate with focus, and proposed that presuppositions triggered from focus-alternatives explain the presuppositional character of the additive component. Following Abusch (2010), the existential presupposition of focus is soft. By contrast TOO/IS has a hard (non-cancellable) presupposition. That is because the particle does not make any other contribution and therefore must not end up being vacuous, Szabolcsi argued.

Focus induces a set of propositional alternatives, type $\langle\langle s,t\rangle,t\rangle$, as per Rooth (1992). A set of propositional alternatives is nothing else than the disjunction (join) of the member alternatives: $\{\{w: \phi_w\}, \{w: \varphi_w\}, \{w: \psi_w\}\} = \{\{w: \phi_w\}\}\cup\{\{w: \varphi_w\}\}\cup\{\{w: \psi_w\}\}$. This puts the focus-alternative set on a par with the core $\exists/\vee$ semantics of NPIs and FCIs.

53) BILL ásított `BILL yawned'
assertion: $yawn_{w^*}(b)$
focus-alternatives, ALT: $\{\{w: yawn_w(b)\}, \{w: yawn_w(m)\}, \{w: yawn_w(k)\}\}$
presupposition: $\exists p \in ALT.\ p_{w^*}$

54) BILL nem ásított `BILL didn't yawn'
assertion: $\neg yawn_{w^*}(b)$
focus alternatives, ALT: $\{\{w: \neg yawn_w(b)\}, \{w: \neg yawn_w(m)\}, \{w: \neg yawn_w(k)\}\}$
presupposition: $\exists p \in ALT.\ p_{w^*}$

The presence of TOO/IS modifies the presupposition that at least one focus-alternative is true to the effect that at least one focus-alternative **other than the prejacent** is true; this is additivity. TOO/IS plays its role by seeking out the set of focus-alternatives ALT and relies on some operation that removes the prejacent from ALT, in one way or another. Preliminarily stating this directly in terms of **set-theoretic difference** (notated as \):

55) BILL **is** ásított `BILL yawned **too**'
assertion: $yawn_{w^*}(b)$
ALT^{DIFF}: $\{\{w: yawn_w(b)\}, \{w: yawn_w(m)\}, \{w: yawn_w(k)\}\} \setminus \{\{w: yawn_w(b)\}\}$
$= \{\{w: yawn_w(m)\}, \{w: yawn_w(k)\}\}$
presupposition: $\exists p \in ALT^{DIF}.\ p_{w^*}$

56) BILL **sem** ásított = Nem ásított BILL **sem** `BILL didn't yawn **either**'
assertion: $\neg yawn_{w^*}(b)$
ALT^{DIFF}: $\{\{w: \neg yawn_w(b)\}, \{w: \neg yawn_w(m)\}, \{w: \neg yawn_w(k)\}\}\setminus \{\{w: \neg yawn_w(b)\}\}$
$= \{\{w: \neg yawn_w(m)\}, \{w: \neg yawn_w(k)\}\}$
presupposition: $\exists p \in ALT^{DIFF}.\ p_{w^*}$

Szabolcsi (2017) proposes a procedure where a version of exhaustification helps produce ALT^{DIFF}. Using such a procedure is desirable because, if viable, it unifies the ways in which the activated alternatives can be figured into the meaning of the sentence, while leaving it open what kind of exhaustification is suitable in each case. It is also relevant to our main focus, which is SEM and not IS, because it provides a link to Chierchia's theory of non-strict negative concord. Beyond these considerations, the procedure does not matter for us, but it is briefly summarized below.

There is a recent line of research that derives conjunctive meanings from disjunctive ones by recursive exhaustification without negating a stronger, conjunctive alternative; a modification of Fox (2007). See Bar-Lev & Margulis (2014) for Modern Hebrew *kol*, Mitrović (2014) for Japanese *mo*, Bowler (2014) for Warlpiri *manu*, Singh et al. (2016) for Child English *or*, and Wong (2017) for Malay *pun*. (In fact, Szabolcsi (2020) proposed that Hungarian *vagy* `or' can be used as a non-exhaustive conjunction, which she dubbed "disjunction of exemplification.")

A critical assumption is that in the calculation of exhaustification, the disjunction has only subdomain alternatives (the disjuncts) but no scalar, i.e. stronger alternative (the conjunction), and so no conjunctive alternative is negated. Several of the authors justify that with reference to the fact that the given language has no separate word for conjunction, or (in the case of child language) the speaker cannot access that word. For how such recursive exhaustification yields a conjunction, an early version in Bar-Lev & Margulis (2014) spells out the details of the following.

57) EX (Alt(p)) (p) (w) $\Leftrightarrow$ p is true in w, and every excludable alternative of p is false in w.
Excludable(p, Alt(p)) $\Leftrightarrow \cap\{\text{Alt(p)}' \subseteq \text{Alt(p)} : \text{Alt(p)}'$ is a maximal set in Alt(p) such that $\{p\} \cup \{\neg q : q \in \text{Alt(p)}'\}$ is consistent$\}$

58) EX EX ($a \vee b$) =
$a \vee b \wedge (a \rightarrow b) \wedge (b \rightarrow a)$ =
$a \vee b \wedge (a \leftrightarrow b)$ = $\mathbf{a \wedge b}$

Here is a way to produce the same outcome as ALT^{DIFF}, using exhaustification. We stipulate that TOO/IS "bifurcates" the alternative-set into two big alternatives: the prejacent and a flattened-out disjunction of the other alternatives. (This is natural. All focus-sensitive particles distinguish the prejacent, although not in this same way.) Call the result BI-ALT. With BI-ALT, the presupposition would be that the prejacent is true **or** some other alternative is true. But TOO/IS forces the exhaustification of BI-ALT; this time recursively, without a scalar alternative. Note that no lexical element serves as a primitive additive particle.

59) BILL **is** ásított `BILL yawned **too**'
assertion: $\text{yawn}_{w^*}(b)$
BI-ALT: $\{\{w: \text{yawn}_w(b)\}, \{w: \text{yawn}_w(m) \vee \text{yawn}_w(k)\}\}$
EX-EX(BI-ALT): $\{w: \text{yawn}_w(b)\} \cap \{w: \text{yawn}_w(m) \vee \text{yawn}_w(k)\}$
presupposition: $\exists p \in$ EX-EX(BI-ALT). p_{w^*}

This says that *BILL is ásított* asserts that Bill yawned (prejacent) and presupposes both that Bill yawned and someone else yawned. This presupposition is not quite correct. Extra-clausal negation shows that the proposition that Bill yawned should only be asserted and not part of the presupposition:

60) Nem igaz, hogy BILL **is** ásított
`It is not true that BILL yawned too.' *entails:* Bill didn't yawn.

M. Esipova (2017) suggests that treating the same content as both at-issue (asserted) and not-at-issue (presupposed) is odd on the global level. Oddness or contradiction may motivate the local accommodation of the prejacent part of the presupposition generated by TOO/IS. The result of local accommodation is that `Bill yawned' does not project as a presupposition, it is simply asserted.

Let us now turn to the case of SEM that is our main interest in the NC context. The local accommodation of the prejacent replicates the reasoning above.

61) BILL **sem** ásított / Nem ásított BILL **sem** `BILL didn't yawn **either**'
assertion: $\neg yawn_{w^*}(b)$
BI-ALT: $\{\{w: \neg yawn_w(b)\}, \{w: \neg yawn_w(m) \vee \neg yawn_w(k)\}\}$
EX-EX(BI-ALT): $\{w: \neg yawn_w(b)\} \cap \{w: \neg yawn_w(m) \vee \neg yawn_w(k)\}$
presupposition: $\exists p \in$ EX-EX(BI-ALT). p_{w^*}

Again, extra-clausal negation cancels the negation that is part of the assertion:

62) Nem igaz, hogy Bill sem ásított / hogy nem ásított Bill sem.
`It is not true to Bill didn't yawn either' *entails:* Bill yawned.

As above, local accommodation can ensure that the prejacent proposition (here: $\neg yawn_{w^*}(b)$) does not project as part of the presupposition.

We have argued that the clausal head SEM is a counterpart of Chierchia's null NEG. Here SEM has a focused expression, *BILL* in its specifier (instead of an NCI existential). Being a variant of alternative-activator IS, now SEM activates the (bifurcated) focus alternatives of its specifier. Being the counterpart of NEG, it invokes an exhaustifier, in this case in its recursive version EX-EX, and a negation, overt or covert, below the exhaustifier. Therefore, SEM is in the immediate scope of negation.

If one just looks at (61), one might think that it uses IS scoping over negation. But our whole argument is that IS/SEM are not scope-taking additive operators. The role of SEM is to invoke negation and exhaustification, and the exhaustifier is above negation.

References

Abrusán, M. 2007. EVEN and free choice ANY in Hungarian. In *Proceedings of Sinn und Bedeutung,* volume 11, pages 1–15, http://semanticsarchive.net/Archive/TVkNTE2O/sub11proc.pdf.

Abusch, D. 2010. Presupposition triggering from alternatives. *Journal of Semantics 27*, 37-80.

Ahn, D. 2014. The semantics of additive *either*. *Proceedings of Sinn und Bedeutung 19*, 20-36. http://semanticsarchive.net/Archive/TVlN2I2Z/sub19proc.pdf

Bar-Lev, M. & D. Margulis. 2014. Hebrew *kol*: a universal quantifier as an undercover existential. *Proceedings of Sinn und Bedeutung 18*, 60-76.

http://semanticsarchive.net/Archive/jQ5MDU4N/index.html

Bowler, M.(2014. Conjunction and disjunction in a language without `and'. *Proceedings of Semantics and Linguistic Theory 24*, 137-155.

Brody, M. and A. Szabolcsi. 2003. Overt scope in Hungarian. *Syntax 6*, 19-51.

Carlson, Gregory N. 2006. 'Mismatches' of form and interpretation. In Veerle van Geenhoven (ed.), *Semantics in acquisition*, 19–36. Dordrecht: Springer.

Chierchia, G. 2013. *Logic in Grammar*. Oxford University Press.

É. Kiss, K. 2015. A negative cycle in 12-15th century Hungarian. In *Syntax over Time: Lexical, Morphological, and Information-Structural Interactions*, Teresa Biberauer and George Walkden, eds., 86-101. Oxford: Oxford University Press.

Esipova, M. (2017). Presuppositions under Contrastive Focus: Standard triggers and co-speech gestures. Ms., New York University. http://ling.auf.net/lingbuzz/003285

Gärtner, H-M. & B. Gyuris. 2022. On the absence of propositional negation from Hungarian polar e-interrogatives. *Studia Linguistica* 76/3: 661-683.

Giannakidou, A. 1997. *The Landscape of Polarity Items*. Dissertation, University of Groningen.

Giannakidou, A. 2000. Negative ... concord? *Natural Language & Linguistic Theory* 18:457-523.

Giannakidou, A. 2007. The landscape of EVEN. *Natural Language & Linguistic Theory* 25:39-81.

Gugán, K. 2012. Zigzagging in Language History: Negation and Negative Concord in Hungarian. *Finno-Ugric Languages and Linguistics* (*FULL*) 1/1-2. full.btk.ppke.hu

Herburger, E. 2023. On the history of NPIs and Negative Concord. *Canadian Journal of Linguistics* 68: 555-589.

Hallman, P. 1997. Reiterative syntax. In J. Black and V. Montapayane, eds., *Clitics, pronouns, and movement*, 87-131. Amsterdam: John Benjamins.

Halm, T. and A. Huszár. 2021. Expletive negation in exclamatives – evidence from Hungarian. *Acta Linguistica Academica* 68/1: 553-583.

Kenesei, I. 2009. Quantifiers, negation and focus on the left periphery of Hungarian. *Lingua* 119:564-591; erratum *Lingua* 120: 1858-1885.

Koopman, H. and A. Szabolcsi. 2000. *Verbal Complexes*. The MIT Press.

Kuhn, J. and E. Pasalskaya. 2019. Negative concord in RSL. *Sinn und Bedeutung* 24.

Kuhn, J. 2022. The dynamics of negative concord. *Linguistics and Philosophy* 45: 153-198.

Ladusaw, W. 1992. Expressing negation. . In Chris Barker & David Dowty (eds.), *Proceedings of Semantics and Linguistic Theory II*, 237–260., Columbus, OH.: OSU.

Mitrović, M. 2014. *Morphosyntactic Atoms of Propositional Logic*. Dissertation, University of Cambridge.

Puskás, G. 2012. Licensing double negation in NC and non-NC languages, *Natural Language and Linguistic Theory* 30: 611-649.

Rooth, M. 1992. A theory of focus interpretation. *Natural Language Semantics 1*, 75-116.

Rooth, M. 1999. Association with focus or association with presupposition?. In Bosch & van der Sandt, eds., *Focus: Linguistic, cognitive, and computational perspectives*, 232-247. Cambridge: CUP.

Singh, R., Wexler, K., Astle-Rahim, A., Kamawar, D., & Fox, D. 2016. Children interpret disjunction as conjunction: Consequences for theories of implicature and child development. *Natural Language Semantics 24*, 305-352.

Rudnev, P. 2024. Negative concord in fragments: Reexamining the evidence against the negativity of negation markers, *Glossa: a journal of general linguistics* 9(1). doi: https://doi.org/10.16995/glossa.10441

Surányi, Balázs. 2006. Quantification and focus in negative concord. *Lingua* 116:272-313.

Szabolcsi, A. 1981. The semantics of topic-focus articulation. In J. Groenendijk, T. Janssen & M. Stokhof, eds., *Formal methods in the study of language.* Mathematisch Centrum, Amsterdam. 513-541. https://www.academia.edu/24416000/The_semantics_of_topic_focus_articulation_1981

Szabolcsi, A. 1997. Strategies for Scope Taking. *Ways of Scope Taking*, ed. by Szabolcsi. Kluwer. 109-155.

Szabolcsi, A. 2015. What do quantifier particles do? *Linguistics & Philosophy* 38: 159-204.

Szabolcsi, A. 2017. Additive presuppositions are derived through activating focus alternatives. In A. Cremers, T. van Gessel & F. Roelofsen, eds., *Proceedings of the 21st Amsterdam Colloquium*, 455-465. UvA. http://events.illc.uva.nl/AC/AC2017/Proceedings/

Szabolcsi, A. 2018a. Strict and non-strict negative concord in Hungarian: A unified analysis. In H. Bartos, M. den Dikken, Z. Bánréti and T. Váradi, eds., *Boundaries Crossed, at the Interfaces of Morphosyntax, Phonology, Pragmatics and Semantics*, pp. 227-242. Studies in Natural Language & Linguistic Theory, Springer.

Szabolcsi, A. 2018b.Two types of quantifier particles: Quantifier-phrase internal vs. heads on the clausal spine. *Glossa* 3(1), #69. 32 pages. http://doi.org/10.5334/gjgl.538

Szabolcsi, A. 2020. Példálózás diszjunkcióval. *Általános Nyelvészeti Tanulmányok* XXXII: 321-329. English translation: lingbuzz/005448.

Tiskin, D. 2017. *Ni*: Negative concord μ in Russian. *Rhema* 4. 123-138.

Tubau, S., U. Etxeberría and M. T. Espinal. 2023. A new approach to Negative Concord: Catalan as a case in point. *Journal of Linguistics* 1-33. 10.1017/S0022226723000233.

Zeijlstra, H. 2004. *Sentential negation and negative concord*. Dissertation, UvA.

Zeijlstra, H. 2022. *Negation and Negative Dependencies*. Oxford University Press.