Strict and non-strict negative concord in Hungarian: A unified analysis[1]
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Surányi (2006) observed that Hungarian has a hybrid (strict + non-strict) negative concord system. This paper proposes a uniform analysis of that system within the general framework of Zeijlstra (2004, 2008) and, especially, Chierchia (2013), with the following new ingredients. Sentential negation *nem* is the same full negation in the presence of both strict and non-strict concord items. Preverbal *senki* `n-one' type negative concord items occupy the specifier position of either *nem* `not' or *sem* `nor'. The latter, *sem* spells out *is* `too, even' in the immediate scope of negation; it is a focus-sensitive head on the clausal spine. *Sem* can be seen as an overt counterpart of the phonetically null head that Chierchia dubs NEG; it is capable of invoking an abstract (disembodied) negation at the edge of its projection.

1. The basic hybrid data

Russian is a classical strict negative concord (NC) language: the sentential negation marker *ne* is always obligatory in the presence of n-words. Italian is a classical non-strict NC language: the sentential negation marker *non* is in complementary distribution with preverbal n-words (unless the intended meaning is double negation). See Giannakidou (1997).

Hungarian is known as a strict NC language. But, alongside *nikto* and *nichto* (*nichego*) style *senki* `n-one' and *semmi* `n-thing', it also has *senki sem* `n-one nor' and *semmi sem* `n-thing nor'. Surányi (2006) made the fundamental observation that the distribution of the latter items is largely the same as that of *nessuno* and *niente*. He concluded that Hungarian is a hybrid NC language.

(1) a.	Nikto	ne	videl	nichego.	* w/o *ne*	`No one saw anything'
(2) a.	Nessuno		ha visto	niente.	* with *non*	`No one saw anything'
(3) a.	Senki	nem	látott	semmit.	* w/o *nem*	`No one saw anything'
(4) a.	Senki sem		látott	semmit sem.	* with *nem*	`No one saw anything'
(1) b.	Marija	ne	videla	nichego.	* w/o *ne*	`M didn't see anything'
(2) b.	Maria	non	ha visto	niente.	* w/o *non*	`M didn't see anything'
(3) b.	Mari	nem	látott	semmit.	* w/o *nem*	`M didn't see anything'
(4) b.	Mari	nem	látott	semmit sem.	* w/o *nem*	`M didn't see anything'

As Surányi points out, *sem* cannot be simply the same thing as *nem*. *Nem* only occurs preverbally, but *sem* may accompany n-words in postverbal position as well.

The two kinds of Hungarian NC items peacefully co-exist within one sentence, as expected based on (3)-(4). To underscore this, I add a third n-word in (5). All postverbal combinations are possible: *soha semmit*, *soha sem semmit sem*, *soha semmit sem*, *soha sem semmit*.

(5) a. Senki nem látott soha (sem) semmit (sem).   `No one ever saw anything '
         n-one not   saw   n-ever nor n-thing   nor

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b.	Mari	nem	látott	soha	(sem)	semmit (sem).	`M never saw anything'
	M	not	saw	n-ever	nor	n-thing nor	
c.	Senki sem	látott	soha	(sem)	semmit (sem).		`No one ever saw anything'
	n-one nor	saw	n-ever	nor	n-thing nor		

These facts raise the following questions, to be refined below:

(6)   How do the strict and non-strict NC systems combine in one language?
(7)   Why is *senki* a strict, and *senki sem* a non-strict, NC item?

Surányi proposed a system with multiple ambiguities: "N-words in Hungarian can be semantically negative or non-negative, and both types are lexically ambiguous between a universally quantified and a non-quantificational interpretation" (2006: 272).

My goal is to steer clear of ambiguities. In this short paper I am not able to consider all the issues that Surányi did, but I hope that the key questions are adequately addressed. In many respects I follow Zeijlstra and Chierchia. It should be immediately noted that Surányi did not refer to these authors; his work had largely or completely preceded theirs.

2. The gist of the proposal

Zeijlstra's (2004, 2008) theory is a promising framework for unification. Zeijlstra treats n-words in both strict and non-strict NC languages as carriers of the uninterpretable [uNeg] feature. This is something I adopt:

(8)   Following Zeijlstra, both *senki* and *senki sem* must be within the immediate scope of negation; syntactically, they carry the feature [uNeg].

On the other hand, Zeijlstra does not treat the sentential negation markers uniformly. In making the strict/non-strict distinction, he analyses Italian *non* as having an interpretable [iNeg] feature and expressing semantic negation $\neg$, but Czech (Russian) *ne* as having uninterpretable [uNeg]. The status of *ne* is similar to that of *nikto*. Both are licensed by a phonetically null operator Op with a $\neg$ semantics.

Zeijlstra's divergent analyses of the sentential negation markers predict that strict and non-strict NC do not coexist in one language. But the hybrid situation exists in Hungarian, so the sentential negation marker *nem* requires a unitary analysis. If [iNeg]$\neg$ versus [uNeg] are the only options, the former is the more straightforward choice:

(9)   Hungarian *nem* has an interpretable [iNeg] feature and expresses semantic negation $\neg$, like Italian *non*.

This revision will also solve a major problem in Zeijlstra's account of strict NC. Since Zeijlstra's *ne* has just [uNeg], it remains unexplained why its presence is obligatory in all negated sentences. Zeijlstra suggests that it is part of the verbal morphology. This may well be true for Czech, but Russian *ne* is merely a syntactic clitic, and Hungarian *nem* is not even a clitic. On my proposal, Hungarian *nem* plays a useful role in supplying semantic negation $\neg$ and, where needed, the licensing feature [iNeg].

Let us turn to the contrast between *senki* (strict NCI) and *senki sem* (non-strict NCI). My account of non-strict negative concord will rely directly on Chierchia (2013). Chierchia explicitly follows Zeijlstra in many respects, but he revises both the semantics and the syntax, as will be explained in some detail in the next section. At this point it suffices to point out the

following syntactic difference. For Zeijlstra, negation, $\neg$ is the meaning of the peripheral null operator Op that carries the [iNeg] feature that licenses [uNeg] *nessuno*. In contrast, Chierchia separates the syntactic licensor and negation. He introduces a null head NEG that (i) needs an agreeing *nessuno* in its specifier and, (ii) requires abstract negation, $\neg$ to scope right above its projection.[2] On Chierchia's account, $\neg$ is entirely abstract, it has no syntactic carrier, while NEG is a vanilla null head in the syntax.

(10)   a. Nessuno ha telefonato.
       `No one called'
       b.   Op[iNeg]:$\neg$ nessuno[uNeg]   ha telefonato   Zeijlstra
       c. O$_{ALT}$ $\neg$ [nessuno[[+n-D]]   NEG[[+n-D]] ha telefonato]   Chierchia

I will argue that Hungarian preverbal *sem* can be seen as an overt counterpart of Chierchia's NEG with the n-word *senki* in its specifier:

(11)   O$_{ALT}$ $\neg$ [**SemP** senki[[+n-D]]   **sem**[[+n-D]]   telefonált]   Szabolcsi

More generally, *sem* spells out *is* `too, even' in the immediate scope of negation. It is a focus-sensitive head, whose specifier accommodates a variety of different stressed elements.

I take *nem* to be the head of NegP and, as stated in (9), to be interpreted as $\neg$. Neg does not require a specifier, but *senki* can occur there and be licensed by Neg:

(12)   O$_{ALT}$ [**NegP** senki[uNeg]   **nem**[iNeg]:$\neg$ telefonált]   Szabolcsi

Details are laid out below. Section 3 introduces and compares the relevant aspects of Zeijlstra's and Chierchia's theories. Turning to Hungarian, section 4 spells out the core analysis of strict negative concord, and section 5 of non-strict negative concord. Given limitations of space, I can only briefly point out that the unsurprising existential semantics for *senki* is plausibly matched by a somewhat surprising disjunctive semantics for *sem* in section 6.

3. Background: Zeijlstra (2004, 2008) and Chierchia (2013)

This paper aims to contribute to the understanding of negative concord by analyzing the Hungarian hybrid, embedded within Zeijlstra's and Chierchia's theories. It is therefore important for the reader to be aware of those theories and their slightly different assumptions. This section gives a bare bones summary, without trying to do full justice to their insights.

(13) exhibits Zeijlstra's syntactic features and semantic interpretations. I write "N" for his "Neg" to reduce clutter.

(13)

not NC Dutch (Standard English)		non-strict NC Italian		strict NC Czech (Russian)	
niet	$\neg$	non	[iN]:$\neg$	ne	[uN]
niemand	$\neg\exists$	nessuno	[uN]:$\exists$	nikdo	[uN]:$\exists$
		Op	[iN]:$\neg$	Op	[iN]:$\neg$

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[2] Chierchia's [[n-D]] feature corresponds to Zeijlstra's [uNeg] (Chierchia 2013: 233). [[n-D]] is checked by the exhaustifier O$_{ALT}$, whereas the negation within the scope of O$_{ALT}$ is needed for semantic coherence; see a brief explanation of Chierchia's semantics in section 3.

The contents of the table reflect an amendment by Penka (2011, 2012). While Zeijlstra proposed that *nessuno*, *rien*, and *nikdo* were variables, Penka argued that they need to be indefinites. Hence the ∃ quantifier.

Below are Zeijlstra's representations for some simple examples. Start with Italian:

(14)   Gianni non$_{[iN]}$:¬ ha telefonato.   `G didn't call'
(15)   Gianni non$_{[iN]}$:¬ ha telefonato a nessuno$_{[uN]}$.   `G didn't call anyone'
(16) Op$_{[iN]}$:¬ nessuno$_{[uN]}$ ha telefonato.   `No one called'
(17) Op$_{[iN]}$:¬ nessuno$_{[uN]}$ ha telefonato a nessuno$_{[uN]}$.   `No one called anyone'

(18) Chi ha telefonato?   Op$_{[iN]}$:¬ Nessuno$_{[uN]}$.   `Who called? No one'

While Italian has an overt sentential negation marker *non* with the same [iN] feature and ¬ semantics as Op, Czech does not. I illustrate strict NC with Russian, which works identically to Czech in these respects.

(19) Op$_{[iN]}$:¬ Marija   ne$_{[uN]}$ pozvonila.   `M didn't call'
(20) Op$_{[iN]}$:¬ Marija nikomu$_{[uN]}$ ne$_{[uN]}$ pozvonila.   `M didn't call anyone'
(21) Op$_{[iN]}$:¬ nikto$_{[uN]}$ ne$_{[uN]}$ pozvonil.   `No one called'
(22) Op$_{[iN]}$:¬ nikto$_{[uN]}$ nikomu$_{[uN]}$ ne$_{[uN]}$ pozvonil.   `No one called anyone'

(23) Kto pozvonil?   Op$_{[iN]}$:¬ Nikto$_{[uN]}$.   `Who called? No one'

N-words are [uN]:∃ in both types of languages, and the preverbal ones are uniformly licensed by Op$_{[iN]}$:¬. Zeijlstra supports the claim that the preverbal n-words in Russian are not licensed by *ne* but, rather, by a higher licensor, with the observation that regular NPIs fall within the scope of negation when preverbal. Analogous strings do not carry analogous interpretations in Italian. Again, I illustrate with Russian:

(24) Op$_{[iN]}$:¬ mne   **mnogo**$_{NPI}$ ne$_{[uN]}$ nuzhno.   `I don't need much'
(25) Op$_{[iN]}$:¬ nikomu$_{[uN]}$ **mnogo**$_{NPI}$ ne$_{[uN]}$ nuzhno.   `Nobody needs much'

The licensing of regular NPIs (*anyone*, *much*) is purely semantic, not a matter of feature-checking. They must fall within the scope of a decreasing operator.

Why must negative polarity items, negative concord items among them, be within the immediate scope of an (appropriate) monotonically decreasing operator? With this question we turn to Chierchia (2013).

At the heart of Chierchia's theory is the idea that NPIs in general are distinguished by the fact that they come with obligatorily active (grammaticized) alternatives. Active alternatives must be factored into meaning by alternative-sensitive operators. One such operator is the silent and non-presuppositional counterpart of the exhaustifier *only*, which he and the associated literature dub O. O$_{DA}$ is specialized for subdomain alternatives, and works as follows.

(26) # There are any cookies left.
      Assertion: $\exists x \in D$ [cookies(x) & left(x)]
      Alternatives: $\{\exists x \in D'$ [cookies(x) & left(x)] : $D' \subseteq D\}$
      Exhaustified: O$_{DA}$ $\{\exists x \in D'$ [cookies(x) & left(x)] : $D' \subseteq D\}$ contradicts assertion

(27) There aren't any cookies left.
    Assertion: $\neg\exists x \in D$ [cookies(x) & left(x)]
    Alternatives: $\{\neg\exists x \in D'$ [cookies(x) & left(x)] : $D' \subseteq D\}$
    Exhaustified: O_{DA} $\{\neg\exists x \in D'$ [cookies(x) & left(x)] : $D' \subseteq D\}$ no contradiction

O_{DA} negates those alternatives that are not entailed by the assertion. In a monotone increasing context like (26), this leads to a contradiction. "There are cookies left" does not entail the subdomain alternative "There are cookies left on the table", so the latter is negated by O_{DA}. But systematically negating all such alternatives leaves no chance for "There are cookies left" to be true. In contrast, in a monotone decreasing environment like (27), the subdomain alternatives are all entailed by the assertion: "There aren't cookies left" entails "There aren't cookies left on the table", and so on. O_{DA} does not negate entailed alternatives. This is the reason why NPIs are acceptable in a decreasing environment.

Skipping some details, n-words (NCI) are a subspecies of strong negative polarity items. They must be exhaustified with respect to both subdomain and scalar alternatives in one breath. The inseparable combination of O_{DA} and $O_{\sigma A}$ is notated as O_{ALT}. NCIs carry a [[n-D]] feature that must be checked by O_{ALT} (and become [[+n-D]]). [[n-D]] corresponds to an unchecked [uN] feature. Compare (10b,c) above. Contradictions caused by O_{ALT} can only be averted if the alternatives come with an end-of-scale decreasing operator such as negation; they are not averted by *few*, for example. See Chierchia (2013: 221).

In this theory, the peculiarity of NCIs is that they can support a phonetically null NEG head by occurring in its specifier and agreeing with it with respect to [[n-D]]. To repeat,

(28) O_{ALT} $\neg$ [Nessuno$_{[[+n-D]]}$ NEG$_{[[+n-D]]}$ ha telefonato]

Both *nessuno* and NEG acquire the + value on their [[n-D]] feature from O_{ALT}. The abstract negation $\neg$ serves to maintain semantic coherence in the presence of O_{ALT}.

Note that while Chierchia's NEG needs the NCI, the NCI does not need NEG. It needs O_{ALT} and, consequently, a negation. When our NCI is postverbal, that negation is either contributed by *non* (29) or invoked by NEG, with another NCI in its specifier (30).

(29) O_{ALT} [Gianni non   ha telefonato a **nessuno**$_{[[+n-D]]}$]
(30) O_{ALT} $\neg$ [Nessuno$_{[[+n-D]]}$ NEG$_{[[+n-D]]}$ ha telefonato a **nessuno**$_{[[+n-D]]}$]

Chierchia (2013: 239) tentatively treats *ne* in strict-NC languages as an overt variant of NEG that relies on a distinct abstract $\neg$ operator. But that cannot be quite right. NEG requires an n-word in its specifier, but *ne* occurs on its own, and only when the meaning is negative.

(31) Marija ne pozvonila.   OK `M didn't call'   but   * `M called'

This may be the appropriate point to comment on the abstractness of the negation $\neg$ invoked by NEG. Is it legitimate to postulate semantic operations without syntactic carriers? I believe it is. Szabolcsi (2015) appealed to join ($\cup$) and meet ($\cap$) operations that are abstract in exactly the same way, called them "disembodied", and suggested that disembodiment may be the norm for logical semantic actors.

Note that disembodied operators do not show up haphazardly. Szabolcsi (2015) proposed that disembodied join ($\cup$) and meet ($\cap$) may come into play in two ways. They kick in either to satisfy presuppositions triggered by overt morphemes of the KA-type or the MO-type, or by default elsewhere. For defaults, think of the routinely invoked existential closure operation ($\cup$),

and of the conjunctive interpretation of stringing sentences together in a text (∩). In Chierchia (2013), the ¬ operation kicks in to resolve the contradiction arising from certain instances of exhaustification by O$_{ALT}$. (In Zeijlstra's theory, the null Op interpreted as ¬ is invoked syntactically.) Presupposition satisfaction, default interpretation, contradiction resolution, and syntactic agreement all seem like reasonable ways to invoke disembodied operations. Naturally, an explicit theory of disembodiment is called for, but it cannot be attempted here.

4. Strict negative concord in Hungarian

This section offers an analysis of strict negative concord, with some modifications of the theories just reviewed. I start with a bit of a background for the analysis.

Pre-Zeijlstra, strict NC had often been analyzed as involving universals scoping directly above sentential negation. See Szabolcsi (1981: 528-535) and Surányi (2006) for Hungarian; Giannakidou (2000, 2006), though not Giannakidou (1997), for Modern Greek, and Shimoyama (2011) for Japanese. The arguments in these works were language-specific, but they had a common thread. N-words should fall under the same generalizations concerning linear order and prosody that apply to other quantifiers in the given language. The authors found that the position and stress of N-words suggested that they were scoping right above sentential negation in their languages. If so, they had to be be universals; they could not be existentials within the scope of negation.

For example, Szabolcsi (1981) argued, in agreement with É. Kiss and Hunyadi, that Hungarian supports the following descriptive generalizations (setting contrastive topics aside). The generalizations were based on the behavior of universals, indefinites, modified numerals, and all manner of other quantificational expressions.

(32) In the preverbal field, left-to-right order maps to c-command and thus to scopal order.
(33) A stressed operator outscopes a de-stressed one.

NC items may either precede or follow sentential negation *nem*; in both cases, the NC item can be stressed (the received view at that time was that it has to be stressed). The order variants below carry the same meanings.

(34) a.   SENKI   nem szólt.   `No one spoke'
            n-one   not   spoke
      b.   Nem szólt   SENKI.   `No one spoke'

(35) a.   SENKI   nem   szólt   SEMMIT.   `No one said anything'
            n-one   not   spoke   n-thing
      b.   SENKI   SEMMIT nem   szólt.   `No one said anything'
      c.   Nem   szólt   SENKI   SEMMIT.   `No one said anything'

On the other hand, universals formed with *minden* are barred from scoping immediately above negation, however emphatic a denial might be:

(36) a.*   MINDENKI nem szólt.   intended, * ∀ > ¬
            every-one   not spoke.
      b.*   Nem szólt MINDENKI.   intended, * ∀ > ¬
      c.   NEM szólt mindenki.   `Not everyone spoke'

It seemed natural to conclude that *senki*, *semmi* serve to express ∀ > ¬, so as to fill the gap left

by *minden*.

The $\forall > \neg$ analysis of negative concord encounters various difficulties with further data; these are detailed in Surányi (2006). One of the striking observations that Surányi makes parallels Zeijlstra's argument involving *mnogo* `much' in (24)-(25). *Egy SZÓ* is a minimizer.

(37) Egy SZÓT nem szóltam.
  one word.acc not spoke.1sg
  `I didn't say a word'

(38) SENKI egy SZÓT nem szólt.
  n-one one word.acc not spoke
  `No one said a word'

These examples flatly refute the assumption that all stressed operators preceding *nem* scope over *nem*. *Egy SZÓT* clearly scopes under *nem*. But then *SENKI* in (38) must too. We have seen though that Surányi ended up with a multiple-ambiguities analysis.

Here is how I propose to solve the problem of Hungarian strict NC. First, as was anticipated in (9), I propose, deviating from both Zeijlstra and Chierchia, that Hungarian *nem* expresses semantic negation $\neg$ just like Dutch *niet*, English *not*, and Italian *non*, and is as independent of NC-items as those are.

The generalization that linear precedence maps to c-command in the preverbal field has been cashed out in terms of a cartographic analysis in the intervening 30 years; see among many others Szabolcsi (1997), É. Kiss (2002), and Brody & Szabolcsi (2003). For example, the universals in (36a) would be sitting in the specifier of the Dist(ributive) head, as in (39).

(39) # [$_{DistP}$ mindenki [$_{Dist'}$ Dist [$_{NegP}$ nem $\exists$e szólt(e) ...]]]
    every-one   not   spoke   *every > not*

In line with standard assumptions of event semantics, Beghelli & Stowell (1997) propose that Dist must scope directly over an existential quantifier over events ($\exists$e). But negation inescapably scopes over the event quantifier and thus deprives Dist of its distributed share. Therefore (39) is unacceptable.[3] In contrast, `most of the children' and `six children' occupy the specifier of the Ref(erential) head, itself an existential, that does not have a comparable requirement. They happily scope directly above negation and, indeed, that is the only possible interpretation in (40). The *not>most/six children* interpretation is unavailable.

(40) [$_{RefP}$ {A legtöbb gyerek / hat gyerek} [$_{NegP}$ senkinek **nem** $\exists$e szólt(e) ...]]
    the most child / six child   n-one.to not   spoke
    `Most of the children/Six children didn't speak to anyone'   *most/six > not*

In the spirit of Zeijlstra and Chierchia, we now need an analysis for (38) where *senki* and *egy SZÓT* precede *nem* but scope under, not over, *nem*.[4] They cannot be in the specifier of a

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[3] Such an explanation of the scope restriction will also prevent universal *senki* from filling in for *mindenki*. But I am abandoning that 1981 assumption anyway.

[4] I maintain that the requirement is in terms of scope, not c-command, in agreement with Hoeksema (2000:123): "It is argued that triggering is sensitive to the scope of negation and negative operators, but that a syntactic treatment in terms of c-command is problematic, because semantic scope and syntactic c-command, no matter how we define the latter, and at

functional head above NegP. But they can be in the specifier of Neg itself. When such matters are discussed explicitly, an indefinite or set-denoting expression in the specifier of an operator head is assumed to be within the scope of that head (e.g. Beghelli & Stowell (1997), Brody & Szabolcsi (2003)). In our case, *senki* and *egy SZÓT* are possibly remnant-moved there, which even gives them an extra reason to be taking low scope: remnant movement must reconstruct. The distinction between quantifiers that take scope above vs. below negation when they precede negation can be made thanks to the fact that syntactic theory offers more analytical options today than it did in 1981. Roughly, the structure is this, assuming V-to-T for simplicity:

(41)

Strict NC

nem, ¬
senki, existential, NCI
egy szó, existential, minimizer
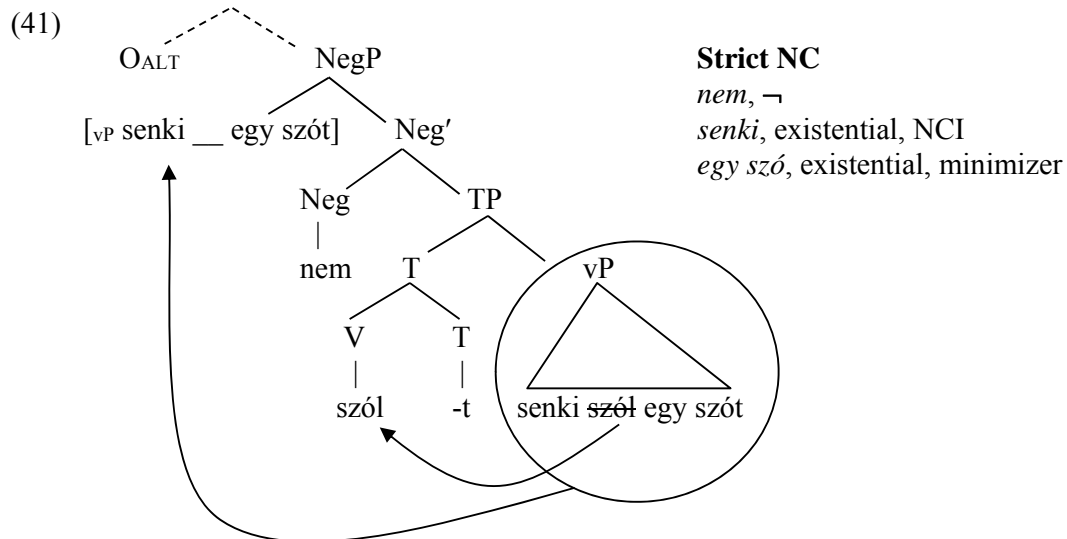
The fact that the minimizer can occur in the specifier of *nem* and thus within the scope of the negation that *nem* expresses makes it unnecessary to appeal to a higher Op:¬ for the sentential negation marker in Hungarian, voiding Zeijlstra's argument based on NPIs, cf. (24)-(25).[5]

   What about the stress generalization? Experimental work in the past decades has shown that the correlation between higher stress and wider scope is not as clear-cut as it had been thought. I do not claim that I have a full understanding of the stress facts, but they do not appear to constitute a reason to reject the proposed analysis.

5. <u>Non-strict negative concord in Hungarian</u>

Let us now turn to non-strict NC. The status of *nem* is no longer an obstacle to the unified analysis: *nem* expresses ¬ in all its occurrences.

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which level we check it, do not see eye to eye on all the relevant cases." The reason why it may seem that decreasing operators must c-command polarity-sensitive items at spell-out is that such operators do not take inverse scope and polarity-sensitive items do not automatically lower into their scope.

[5] Two issues are left for further research. (i) The fact that the counterparts of (24)-(25) are not available in Italian would be easily predicted if *non*, in contrast to *nem*, were a specifier and not a head in NegP. But *non* is standardly viewed as a head, so the explanation of the cross-linguistic contrast must lie elsewhere. (ii) The fact that *Ki szólt? -- Senki.* serve as canonical question-answer pairs (cf. `Who spoke? -- No one') may require the assumption of an elided *nem* in the fragment answer, cf. Giannakidou (2000: 486) for Modern Greek.
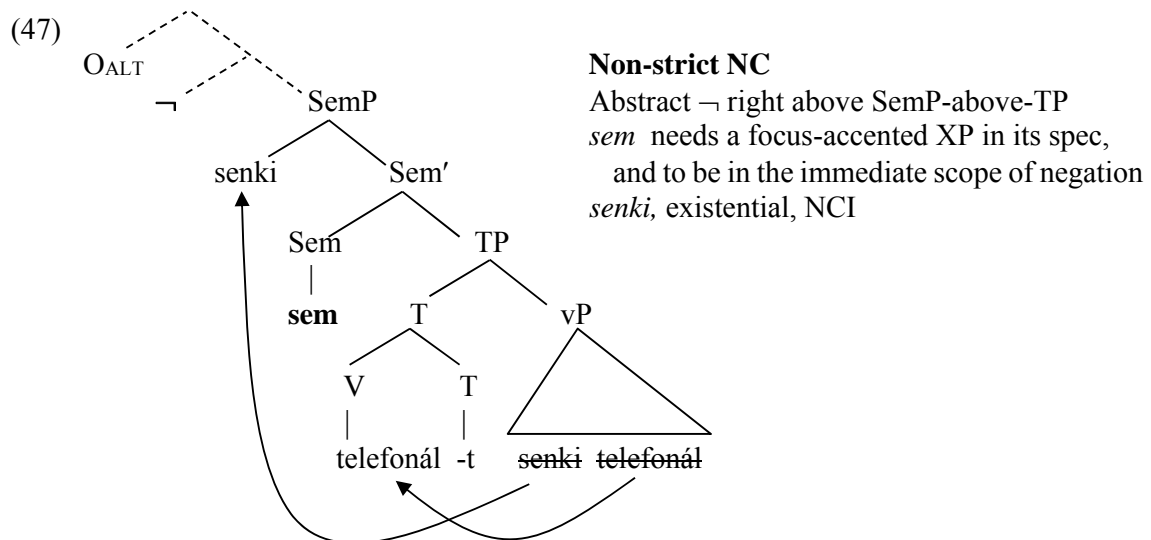
As was anticipated in (11), the *sem* of preverbal *senki sem* can be seen as an overt version of Italian NEG in Chierchia's (2013): both are heads in the same region of the clausal spine, and both are capable of activating a disembodied ¬ right above their maximal projections:

(42) O_{ALT} ¬ [nessuno$_{[[+n-D]]}$ NEG$_{[[+n-D]]}$ ha telefonato]
(43) O_{ALT} ¬ [senki$_{[[+n-D]]}$ sem$_{[[+n-D]]}$ telefonált]

However, *sem* does not specifically require an n-word in its specifier. *Sem* spells out the focus-particle *is* `too, even' under negation; what it needs in its specifier is an XP with focus. E.g.,

(44) Egy SZÓT sem szóltam.   `I didn't say a word'
(45) (Még) ÉN sem szóltam.   `Not even I spoke'
(46) * Sem szóltam.

Sem will be discussed a bit further in section 6, but this short paper concentrates on NC.

(47)

Non-strict NC
Abstract ¬ right above SemP-above-TP
sem needs a focus-accented XP in its spec,
   and to be in the immediate scope of negation
senki, existential, NCI

The Hungarian surface scope data show that the abstract (disembodied) ¬ scopes right at the edge of the preverbal SemP, supporting Chierchia's assumptions about NEG. Linearly preceding quantifiers and indefinites happily scope over the negation that licenses the NC item. They are sitting in the specifier of the functional head RefP above SemP. Notice that (48), with *sem* in the place of *nem*, exhibits the same unambiguous scope relation as (40).

(48) [RefP {A legtöbb gyerek / hat gyerek} O_{ALT} ¬ [SemP senkinek **sem** szólt]]
          the most child   / six child   n-one.to nor   spoke
       `Most of the children/Six children didn't speak to anyone'   *most/six > not*

Now recall from (5) that the string *senki sem* occurs both preverbally and postverbally. That is fully compatible with the SemP analysis but confirms that, for independent reasons, *sem* is not an exact replica of Chierchia's NEG.

Szabolcsi (1997), Brody & Szabolcsi (2003), and Bernardi & Szabolcsi (2008) argue that almost the same functional sequence of operator heads (fseq) that occurs above T (Agr in those papers) and forms the preverbal operator field reiterates itself between T (Agr) and V.

(49) [C fseq [T fseq [Asp fseq ... [V ...]]]]

Therefore, postverbal NCIs may reside in the SemP of a lower fseq. In that case, too, *sem* and its specifier NCI must be in the immediate scope of clause-mate negation. That negation will be supplied by *nem*, as in (5a,b), or by the ¬ invoked by a preverbal *sem*, as in (5c), repeated as (50):

(50) a.   Senki   nem látott soha (sem) semmit (sem).   `No one ever saw anything'
     b.   Mari   nem látott soha (sem) semmit (sem).   `M never saw anything'
     c.   ¬ Senki sem látott soha (sem) semmit (sem).   `No one ever saw anything'

On this proposal, both NEG and *sem* are clausal heads that need a specifier, must be in the immediate scope of clause-mate negation, and are capable of invoking an abstract ¬ at the edge of their projections when they are in the appropriate region of the clausal spine. The fact that Italian has only one NEG per clause and it occurs in such a region gives the impression that invoking ¬ is a necessary, not just a possible, part of the package. But there is no principled reason why that should be the case. *Sem* differs from NEG due to the fact that Hungarian reiterates fseq, and *sem* can occur in any of the iterations.

Why can ¬ only be invoked in the highest fseq? The one major difference between the fseq above T and the ones below T is that only the first comes with Neg (overt *nem*). See especially Bernardi & Szabolcsi (2008: Sections 6, 8). Based on Zanuttini (1997), it appears that languages choose the position of their negations in particular ways; Cinque (1990) does not even include Neg in his invariant sequence. It is plausible that abstract ¬ is restricted to the same region where Neg resides in the given language. But this may not be the full answer.

We have not yet considered constituent negation in this context. Kenesei (2009) offers a cornucopia of examples where NCI occurs within the scope of a constituent-negated expression but the sentence is ungrammatical. For example,

(51) * Nem mindenki dicsért   senkit.
         not   everyone praised n-body.acc
         Intended, unavailable `Not everyone praised anyone'

(52) * Nem Annát   dicsérte senki.
         not   Anna.acc praised n-body
         Intended, unavailable `It was not Anna whom anyone praised'

I attribute the unacceptability of these examples to the fact that a universal quantifier or exhaustive focus intervenes between negation and NCI. Like negative polarity items in general, NCI must be within the immediate scope of negation, meaning that at most plain existential quantifiers may intervene (e.g. Chierchia 2013: Chapter 7). Compare:

(53) # Not everyone praised anyone.

6. *Sem*: a disjunctive particle under negation

Sem is thought to be historically a combination of *is* `too, even' plus *nem* `not'. *Se* is a more colloquial version. Present-day *se(m)* forms NCIs that occur only with clause-mate negation. É. Kiss (n.d.) describes a Jespersen-cycle style development of Hungarian negative concord. Modern Greek *oute* has the same etymology (Classical Greek *ou* `not' + *te* `and, both') and similar properties (Giannakidou 2007).
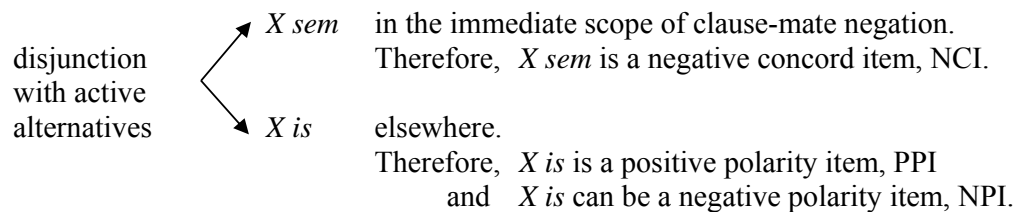
Senki `n-one' and *valaki* `some-one' form a NCI-PPI pair. Both are existentials. *Senki* must,

and *valaki* must not, occur within the immediate scope of clause-mate negation. What about *sem* and *is*? They also form a NCI-PPI pair: *sem* must, and *is* must not, occur within the immediate scope of clause-mate negation. To complete the parallelism in the semantics, it makes sense to analyze *sem* and *is* as disjunctions: ∃ and ∨ are semantic relatives.
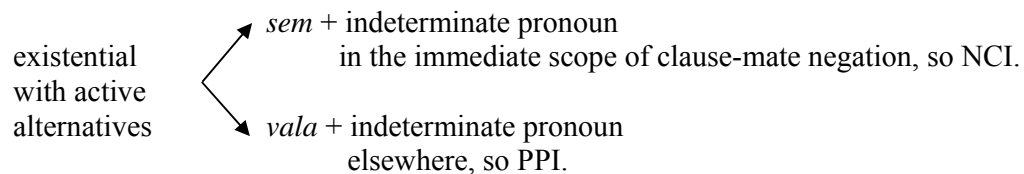
The usual analysis of English *too* is conjunctive, and Szabolcsi (2015) treated *is* similarly. But recent literature, Bowler (2014) and Singh et al. (2016) among others, have analyzed seemingly conjunctive particles as underlying disjunctions that are strengthened to conjunctions in a positive context. Such items show their true disjunctive color in decreasing contexts, where implicature strengthening does not happen. I extend that analysis to *is*.

In this spirit, I put forth the following descriptive generalizations:

(54)   *Sem* and *is* are disjunctive clausal heads

disjunction with active alternatives
- *X sem*   in the immediate scope of clause-mate negation. Therefore, *X sem* is a negative concord item, NCI.
- *X is*   elsewhere. Therefore, *X is* is a positive polarity item, PPI and *X is* can be a negative polarity item, NPI.

(55)   *Senki* and *valaki* are quantifier words with existential particles

existential with active alternatives
- *sem* + indeterminate pronoun in the immediate scope of clause-mate negation, so NCI.
- *vala* + indeterminate pronoun elsewhere, so PPI.

Compare *egy szót sem* and *semmit sem* that are NCIs with *egy szót is* and *valamit is* that are PPIs and weak NPIs at the same time:

(56)   Nem szóltam   {egy szót   sem / semmit   sem}.
        not   spoke-I   one word.acc SEM / n-thing.acc SEM
        `I didn't say even one word / anything'

(57)   Kevés gyerek szólt {egy szót   is / valamit   is}.
        few   child   spoke one word.acc IS / something.acc IS
        `Few children said even one word / anything '

The above correspondences are very natural in view of Progovac (1994), Krifka (1995), Lahiri (1998), Szabolcsi (2002, 2004) and Chierchia (2013). The details of this proposal are fleshed out in Szabolcsi (2016).

References

Beghelli, Filippo & Timothy Stowell 1997, Distributivity and negation: the syntax of EACH and EVERY. In Anna Szabolcsi, ed., *Ways of Scope Taking*, pp. 71-108. Springer, Dordrecht.
Bernardi, Raffaella & Anna Szabolcsi 2008, Optionality, scope and licensing: an application of partially ordered categories. *Journal of Logic, Language and Information* 17: 237-283.

Bowler, Margit 2014, Conjunction and disjunction in a language without `and'. *Semantics and Linguistic Theory* 24: 137-155.

Brody, Michael & Anna Szabolcsi 2003, Overt scope in Hungarian. *Syntax* 6: 19-51.

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

Cinque, Guglielmo 1990, *Adverbs and Functional Heads*. Oxford University Press, Oxford.

É. Kiss, Katalin 2002, *The Syntax of Hungarian*. Cambridge University Press, Cambridge.

É. Kiss, Katalin n.d., A Jókai-kódex tagadó szerkezetei. Ms.

Giannakidou, Anastasia 1997, *The Landscape of Polarity Items*. Dissertation, U. of Groningen.

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

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

Hoeksema, Jack 2000, Negative polarity items: triggering, scope, and c-command. In Laurence Horn and Yasuhiko Kato, eds., *Negation and Polarity. Semantic and Syntactic Perspectives.* Oxford University Press, pp. 123-154.

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

Krifka, Manfred 1995, The semantics and pragmatics of polarity items. *Linguistic Analysis* 25: 209-257.

Lahiri, Utpal 1998, Focus and negative polarity in Hindi. *Natural Language Semantics 6*: 57-123.

Penka, Doris 2011, *Negative Indefinites*. Oxford Studies in Theoretical Linguistics 32. Oxford University Press. Oxford.

Penka, Doris 2012, Negative Features on Negative Indefinites: Evidence from Split Scope. *Journal of Semantics* 29: 373-402.

Progovac, Ljiljana 2005, *Negative and Positive Polarity: A Binding Approach*. Cambridge University Press, Cambridge.

Singh, Raj et al. 2016, Children interpret disjunction as conjunction: Consequences for theories of implicature and child development. *Natural Language Semantics* 24: 305-352.

Shimoyama, Junko 2011, Japanese indeterminate negative polarity items and their scope. *Journal of Semantics*, *28*: 413-450.

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

Szabolcsi, Anna 1981, The semantics of topic-focus articulation. In *Formal Methods in the Study of Language*, pp. 513-541. Mathematisch Centrum, Amsterdam.

Szabolcsi, Anna 1997, Strategies for scope taking. In Anna Szabolcsi, ed., *Ways of Scope Taking*, pp. 109-154. Springer, Dordrecht.

Szabolcsi, Anna 2002, Hungarian disjunctions and positive polarity. *Approaches to Hungarian 8:* 217-241.

Szabolcsi, Anna 2004, Positive polarity--negative polarity. *Natural Language and Linguistic Theory* 22: 409-452.

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

Szabolcsi, Anna 2016, Hybrid negative concord, and quantifier-internal vs. clausal particles. lingbuzz/003114.

Zanuttini, Raffaella 1997, *Negation and Clausal Structure: A comparative study of Romance languages*. Oxford University Press, Oxford.

Zeijlstra, Hedde 2004, *Sentential Negation and Negative Concord*. Dissertation, U. of Amsterdam.

Zeijlstra, Hedde 2008, Negative concord is syntactic agreement. lingbuzz/000645.