Representing scales: Degree result clauses and emphatic negative polarity items in Romanian

Monica-Mihaela Rizea Manfred Sailer

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Outline

Aims of the talk

- Integrate scalar analyses into a representational framework: HPSG syntax & LRS (Richter & Sailer, 2004) for the syntax-semantics interface;
- Discuss two phenomena for which a scalar analysis is very natural: *high degree readings of finite result clause constructions* and *emphatic negative polarity items*;
- Propose a classification of the negative polarity items that can occur in degree result clauses.

Finite result clause constructions (RCXs)

Finite result clause constructions RCXs:
primary predication (in main clause)
+ **secondary predication (in finite *result clause* RCl):**
atât de deasă ADJ [RCl: de *nu se vede om cu om]*
so thick ADJ [RCl: (that) *you can't see your hand in front of your face*]

(1) Dimineața e o ceață [**RCX: atât de deasă, de nu se vede om cu om**.]

lit.: In the morning there is a fog so thick that you can't see the closest person.

Intended: 'In the morning, the fog is [**RCX: so thick you can't see your hand in front of your face**'.]

High degree RCXs

RCXs of the type **ADJ + finite RCl** can receive a *high degree* interpretation:

(2) ceață [RCX: atât de deasă.ADJ
fog [RCX: so thick.ADJ
[RCI: de *nu se vede om cu om*]]
[RCI: that *you can't see your hand in front of your face*]]
⇒ ceață **extrem de deasă**/**extremely thick** fog

High degree RCXs with *emphatic negative polarity items* (E-NPIs)

(3) Dimineața e o ceață [atât de deasă, de **#(nu)** se vede om cu om].

lit.: In the morning there is a fog so thick that you can't see the closest person.

Intended: 'In the morning, the fog is [so thick you ca**n't** see your hand in front of your face].'

(4) Ion e [așa de prost de **#(nu)** știe cum îl cheamă (cu buletinul în mână)].

lit.: Ion is so stupid that he does not know his own name (with the ID in hand).

Intended: 'Ion is [so stupid he ca**n't** see a hole in a ladder].'

E-NPIs

Mostly represented by *minimizer expressions* – typically denoting minimal elements on a contextually salient scale:

(5) a. se vede om cu om/ see one's hand in front of one's face
– the minimum range of visibility

b. știe cum îl cheamă / see a hole in a ladder
– the minimum manifestation of one's knowledge / of one's sensitivity to details

De complementizer in degree RCXs

- *Încât* – regular complementizer for RCIs in Romanian;
- *De* – restricted to RCIs that are associated with an emphatic result:

(6) Ion se îmbracă așa de elegant

'Ion dresses so elegantly'

a. [**încât/de** lumea îl *admiră*]

'that people *admire* him'

b. [**încât/#de** lumea îl *observă*].

'that people (no more than) *notice* him.'

- Expressions that have evolved into high-degree modifiers – typically collocate with *de* and reject *încât*:

(7) a. *(bucuros)* [*de/#încât nu se poate*]
(lit.: (so happy) that it cannot be) 'very happy'

b. *(bucuros)* [*de/#încât mor*]
(lit.: (so happy) that I die) 'very happy'.

E-NPIs in high degree RCXs – Tests

- E-NPI1: *a (nu) vedea la un pas* 'not see within a step' (lit.: not to see a step ahead) (id.: 'there is no visibility at all')
- E-NPI2: *a (nu) se vedea om cu om* 'not REFL see person with person' (lit.: not to see the person in one's immediate range of sight) (id.: 'there is no visibility at all')
- E-NPI3: *a (nu) [te/vă] vedea* 'not CL.ACC.2SG/PL I.see' (lit.: not to see sb.)

Tests

T1: Can we change the RCX into a coordination without changing the meaning of the expression?

Test 1

(8) E-NPI1 & E-NPI2

a. E o aglomerație pe străzi în timpul grevei [**de** nu *se vede la un pas*]/ [**de** nu *se vede om cu om*].

'There is a huge crowd in the streets during the strike.'
(lit.:There is a crowd in the streets during the strike **that** one cannot see a step ahead/ **that** one cannot see the person in their immediate range of sight.)

b. = E o aglomerație pe străzi în timpul grevei [**și** nu *se vede la un pas*]/ [**și** nu *se vede om cu om*]. (lit.: There is a crowd in the streets during the strike **and** one cannot see a step ahead/ **and** one cannot see the person in their immediate range of sight.)

Test 1

(9) E-NPI3

a. Emoțiile astea mi-au făcut foame [**de** nu *te văd*]. (CoRoLa)
'These emotions made me extremely hungry.'
(lit.: These emotions made me hungry **that** I cannot see you.)

b. ≠ Emoțiile astea mi-au făcut foame [**și** nu *te văd*].
(lit.:These emotions made me hungry **and** I cannot see you.)

	T1
E-NPI1: (de) nu se vede la un pas	✓
E-NPI2: *de nu se vede om cu om*	✓
E-NPI3: *de nu [te/vă] văd*	✗

Tests

T2: Can the expression be used felicitously if the context does not permit the inference of a result relation?

Test 2

(10) E-NPI1 & E-NPI2

Mergeam pe stradă [**și** nu *se vedea la un pas*]/ [#**și** nu *se vedea om cu om*].

(lit.: I was walking down the street **and** one could not see a step ahead/ **and** one could not see the person in their immediate range of sight.)

	T1	T2
E-NPI1: (de) nu se vede la un pas	✓	✓
E-NPI2: *de nu se vede om cu om*	✓	✗
E-NPI3: *de nu [te/vă] văd*	✗	n/a

Tests

T3: Is variation with respect to the RCI complementizer possible without a change of meaning in the expression from the result clause?

Test 3

(11) E-NPI1 & E-NPI2

E așa de întuneric afară [**de/ încât** nu *se vede la un pas*]/ [**de/încât** nu *se vede om cu om*].
(lit.: It's so dark outside that one cannot see a step ahead/ that one could not see the person in their immediate range of sight.)

'Outside is very dark.'

(12) E-NPI3

Emoțiile astea mi-au făcut foame [**de**/#**încât** nu *te văd*].
(lit.: These emotions made me hungry **that** I cannot see you.)

'These emotions made me extremely hungry.'

	T1	T2	T3
E-NPI1: *(de)* nu se vede la un pas	✓	✓	✓
E-NPI2: *de nu se vede om cu om*	✓	✗	✓
E-NPI3: *de nu [te/vă] văd*	✗	n/a	✗

Tests

T4: Does the result clause construction entail the proposition in the result clause?

Test 4

T4 is intended to show what is the meaning contribution of the RCI to the overall RCX:

(13) E-NPI1 & E-NPI2

Ninge **a.** [de nu *se vede la un pas*]/**b.** [de nu *se vede om cu om*].

(lit.: It is snowing **a.** [that one cannot see a step ahead]/
b.[that one can't see the person in one's immediate range of sight].)

'It is snowing very hard.'

Entails: **a.** Nu *se vede la un pas*./**b.** Nu *se vede om cu om*.
(result reading: both **a.** and **b.** trigger the scalar inference *there is no visibility at all*)

Emphatic NPIs in high-degree RCXs – Test 4

(14) E-NPI3

Emoțiile astea mi-au făcut o foame [de nu *te văd*].

(lit.: These emotions made me hungry [that I cannot see you].)

'These emotions made me extremely hungry.'

Does not entail: Nu *te văd*. (no result reading)

The sole meaning contribution of the proposition in the RCI to the RCX is intensification – the RCI asserts high degree rather than its result reading.

E-NPIs in high-degree RCXs – Patterns

- Type 1: NPIs that are only occasionally used in result clauses and act as intensifiers; there is also a result interpretation:
  E-NPI1: *(*de) nu se vede la un pas
- Type 2: NPIs that require a result relation, being bound to the result construction; they encode a high degree reading, while also keeping the notion of result:
  E-NPI2: *de nu se vede om cu om*
- Type 3: NPIs that express nothing but intensification, being lexicalized into high-degree modifiers:
  E-NPI3: *de nu [te/vă] văd*

	T1	T2	T3	T4
E-NPI1: *(*de) nu se vede la un pas	✓	✓	✓	✓
E-NPI2: *de nu se vede om cu om*	✓	✗	✓	✓
E-NPI3: *de nu [te/vă] văd*	✗	n/a	✗	✗

Lexical Resource Semantics (LRS)

- Contraint-based underspecified semantic combinatorics for HPSG – like MRS (Copestake et al., 2005)
- Semantic respresentation: expression of some standard semantic language (predicate logic etc)
- Phenomena: scope ambiguity, negative concord, gapping, projective meanng ... (Richter & Sailer, 2004; Bouma, 2003; Penn & Richter, 2005; Hasegawa & Koenig, 2011; Lahm, 2016; Sailer & Am-David, 2016; Park et al., 2018)

Lexical Resource Semantics

- Semantic meta-language for constraints
- Lexical items (words or phrasal lexical units) determine which constants and operators may occur.

(15) [S: Everyone [VP: didn't call]].
everyone: $\forall x(\mathbf{person}(x) \rightarrow \beta[x])$
didn't: $\neg\alpha$
call: $\mathbf{call}(x)$

- Phrases can constrain scoping: $\alpha[\mathbf{call}(x)]$ $\beta[\mathbf{call}(x)]$
- Readings ("pluggings"):
  - $\forall x(\mathbf{person}(x) \rightarrow \neg\mathbf{call}(x))$ $(\alpha = \mathbf{call}(x); \beta = \neg\alpha)$
  - $\neg\forall x(\mathbf{person}(x) \rightarrow \mathbf{call}(x))$ $(\alpha = \forall x(\mathbf{person}(x) \rightarrow \beta);\ \beta = \mathbf{call}(x))$

Projective meaning: At-issue, presupposions, and CIs

- Karttunen & Peters (1979); Bach (1999); Potts (2005); Tonhauser et al. (2013)
- Incorporated into LRS in Hasegawa & Koenig (2011); here following Sailer & Am-David (2016):
- projective meaning – presuppositions and conventional implicatures (CI)– as underspecified scope
- ...with different scoping constraints

(16) Constraints of *the*:

$$\left[\text{lrs}\left[\begin{array}{ll}\text{at-issue} & x \\ \text{presupposed} & \langle \exists x(\alpha[x] \wedge \beta[x]) \rangle \\ \text{ci} & \langle \gamma \wedge (\exists x \alpha) \rightarrow (\exists! x(\alpha[x])) \rangle\end{array}\right]\right] \quad \begin{array}{l}\text{(reference)} \\ \text{(existence)} \\ \text{(uniqueness)}\end{array}$$

(17) The consul of Illocutia isn't bald. (Horn & Abbot, 2013, 341)

a. $\exists x(\mathbf{cons}(x) \wedge \neg \mathbf{bold}(x)) \wedge (\exists x(\mathbf{cons}(x)) \rightarrow (\exists! x \mathbf{cons}(x))$

b. $\neg \exists x(\mathbf{cons}(x) \wedge \mathbf{bold}(x)) \wedge (\exists x(\mathbf{cons}(x)) \rightarrow (\exists! x \mathbf{cons}(x))$

Emphatic assertion

(18) Alex didn't see a thing.

$\neg\exists x(\textbf{minimal-thing}(x) \wedge \textbf{see}(\textbf{alex}, x))$

- Krifka (1995): Background, Focus, Alternatives
  - NPI refers to a minimal amount: $F = \textbf{minimal-thing}$
  - triggers larger alternatives: $A = \{P | \textbf{min-thing} \subseteq P\}$
  - requires to make a statement that entails all alternatives **Scal.Assert**(B, F, A)

  $\Rightarrow$ NPI must be used in downward-entailing context within B!
- Problems:
  - NPI-licensing domain not always with illocutionary force
  - Not all NPI-uses are emphatic (*ever*)
  - Different licensing requirements for different NPIs (Eckardt & Csipak, 2013)

Representational emphatic assert

- Reformulation of **Scal.Assert** as operator within a semantic representation.
- **ScAs**(β, ϕ, Σ)
  corresponds to **Scal.Assert**$(\langle B, F, A\rangle)$, with $\beta = B(F)$, $\phi = F$.

(19) For each formula β with subexpression ϕ_τ and each set $\Sigma_{\tau t}$ that refers to alternatives of ϕ,
ScAs(α, ϕ, Σ) is an emphatic expression, where
$[\![\textbf{ScAs}(\beta, \phi, \Sigma)]\!] = [\![\beta \wedge \forall P \in \Sigma(\beta \rightarrow \beta'))]\!]$,
where β' is just like β but with P replacing ϕ.

Representational rendering of scalar inference

(20) Maria nu vede la un pas.
Maria not sees within a step

$$\left[\text{lrs}\left[\begin{array}{ll}\text{at-issue} & \boxed{1}\ \textbf{ScAs}(\neg\exists x(\textbf{min-range}(x)\wedge\textbf{see}(\textbf{maria},x)),\textbf{min-range},A)\\ \text{presup} & \langle\exists A(\forall P\in A(\forall x(P(x)\rightarrow\textbf{min-range}(x))\wedge\boxed{1})))\rangle\end{array}\right]\right]$$

- Pragmatic theory incorporated into representational framework.
- Presupposed alternatives: not just any set, but contextually relevant alternatives – as in pragmatic theories.
- No explicit negation requirement, but scale reversal effect by contrast between **ScAs** and structure of the alternative set.

Degree semantics and result clauses (Meier, 2003)

- Degree parameter, d, for gradable adjectives
- d is an interval, denoting the *extent* of the property.

(21) The room was dark.
$\mathbf{Max}(\{d|\mathbf{dark}(d, \mathbf{the\text{-}room})\}) \geq \mathbf{standard}$

- Result clauses compare extents.
- Modal component in the interpretation of the result clause

(22) The room was so dark that Alex didn't see anything.
$\mathbf{Max}(\{d|\mathbf{dark}(d, \mathbf{the\text{-}room})\}) \geq$
$\mathbf{Min}(\{d|\mathbf{dark}(d, \mathbf{the\text{-}room}) \rightarrow \Box\neg\exists x(\mathbf{see}(\mathbf{alex}, x))\})$

Abbreviated notation:

(23) $\mathbf{ResOp}\, d\, (\mathbf{dark}(d, \mathbf{the\text{-}room}) : \neg\exists x(\mathbf{see}(\mathbf{alex}, x)))$

Result clauses

- Meier-style semantics of the result construction:

  (24) At-issue content of the result construction:
  ResOp $d(\alpha : \beta)$
  where α contains the semantics of the primary predicate and β the semantic representation of the result clause.

- English: Result meaning is contributed by the degree particle *so*; ordinary, optional complementizer *that*:

(25) The room was *(so) dark [(that) Alex couldn't see anything].
ResOp d(**dark**$(d,$ **the-room**$)$:$\neg\exists x($**see**$($**alex**$, x))$)

Result clauses in Romanian

- Degree particle is optional;
- meaningful variation in the complementizers *de* vs. *încât*

  ⇒ result meaning contributed by both, degree particle and RCX-complementizer.

(26) Camera este (atât de) întunecată [*(încât) Alex nu vede nimic].
room.the is so dark that Alex not sees nothing
'The room is so dark that Alex doesn't see anything.'

ResOp d (**dark**(d, **the-room**):¬∃x(**see**(**alex**, x)))

Lexical entry: Result complementizer

$$\begin{bmatrix} \text{phon} & \langle \text{de/încât} \rangle \\ \text{syns} & \begin{bmatrix} \text{head} & \begin{bmatrix} \textit{RCl-complementizer} \\ \text{select} \ A \begin{bmatrix} \text{index} & d \\ \text{main} & \alpha^* \end{bmatrix} \end{bmatrix} \\ \text{val} & \begin{bmatrix} \text{comps} & \langle \text{S} \begin{bmatrix} \text{main} & \beta^* \end{bmatrix} \rangle \end{bmatrix} \\ \text{cont} & \begin{bmatrix} \text{index} & d \\ \text{main} & \textbf{ResOp} \end{bmatrix} \end{bmatrix} \\ \text{lrs} & \left[\text{at-issue} \ \ \textbf{ResOp}\, d(\alpha[\alpha^*] : \beta[\beta^*]) \right] \end{bmatrix}$$

Lexical entry: Degree particle

$$\begin{bmatrix}
\text{phon} & \langle \text{atât de} \rangle \\
\text{syns} & \begin{bmatrix}
\text{head} & \begin{bmatrix} \textit{degree-particle} \\ \text{select } \boxed{1} \; A \begin{bmatrix} \text{index} & d \\ \text{main} & \alpha^* \end{bmatrix} \end{bmatrix} \\
\text{val} & \begin{bmatrix} \text{comps} & \left\langle \left(\text{CP} \begin{bmatrix} \text{head} & \begin{bmatrix} \textit{RCI-compl} \\ \text{select } \boxed{1} \end{bmatrix} \\ \text{cont} & \boxed{2} \\ \text{extra} & + \end{bmatrix} \right) \right\rangle \end{bmatrix} \\
\text{cont} & \boxed{2} \begin{bmatrix} \text{index} & d \\ \text{main} & \textbf{ResOp} \end{bmatrix}
\end{bmatrix} \\
\text{lrs} & \left[\text{at-issue } \textbf{ResOp}\, d(\alpha[\alpha^*] : \beta) \right]
\end{bmatrix}$$

- Optionally selects RCI.
- RCI must be extraposed
- Redundant semantic contribution of particle and RCI-compl.

Derivation

(27) Camera este [RCX: (atât de) întunecată [RCI: încât Alex nu vede
room.the is so dark that Alex not sees
nimic]].
nothing
'The room is so dark that Alex doesn't see anything.'

- [*Alex doesn't see anything*]: $\neg\exists x(\mathbf{see}(\mathbf{alex}, x))$
- RCI-*that*: $\mathbf{ResOp}\, d(\alpha : \beta)$
- RCI: $\mathbf{ResOp}\, d(\alpha : \neg\exists x(\mathbf{see}(\mathbf{alex}, x)))$
- *dark*: $\mathbf{dark}(d, \gamma)$
- *so*: $\mathbf{ResOp}\, d(\alpha : \beta)$
- RCX: *so dark that ...*: $\mathbf{ResOp}\, d(\mathbf{dark}(d, \gamma) : \neg\exists x(\mathbf{see}(\mathbf{alex}, x)))$
- *the room*: **the-room**
- (27): $\mathbf{ResOp}\, d(\mathbf{dark}(d, \mathbf{the\text{-}room}) : \neg\exists x(\mathbf{see}(\mathbf{alex}, x)))$

Free intensifier use of result clauses

Observation 1: RCIs with emphatic content can be used as intensifiers:

(28) a. At issue: **ResOp** $d(\alpha : \beta)$

b. CI content of the result construction:
$\exists A(\textbf{ScAs}(\beta, \gamma, A)) \rightarrow \exists A' \textbf{ResOp}\, d(\alpha : \textbf{ScAs}(\alpha, d, A'))$

- Contextually relevant alternatives A.
- Whether or not the RCI-content is emphatic depends on context.
- If the matrix predicate has an extreme result, it holds to an extreme degree (Hoeksema & Napoli, to appear).

încât vs. *de*

Observation 2: *de* requires an emphatic content in the RCI:

- *de* presupposes the antecedent of the extreme-degree CI

$$\left[\begin{array}{ll}
\text{phon} & \langle \text{de} \rangle \\
\text{syns} & \left[\begin{array}{ll}
\text{head} & \left[\begin{array}{ll} \textit{RCI-complementizer} & \\ \text{select} & A\left[\begin{array}{ll}\text{index} & d \\ \text{main} & \alpha^*\end{array}\right]\end{array}\right] \\
\text{val} & \left[\text{comps}\ \langle \text{S}\left[\text{main}\ \ \beta^*\right]\rangle\right] \\
\text{cont} & \left[\begin{array}{ll}\text{index} & d \\ \text{main} & \textbf{ResOp}\end{array}\right]
\end{array}\right] \\
\text{lrs} & \left[\begin{array}{l}
\text{at-issue}\ \textbf{ResOp}\, d(\alpha[\alpha^*] : \beta[\beta^*]) \\
\text{presup}\ \langle \exists A\,(\textbf{ScAs}(\beta'[\beta^*], \gamma, A))\rangle \\
\text{ci}\ \langle \exists A\,(\textbf{ScAs}(\beta', \gamma, A)) \rightarrow \exists A' \textbf{ResOp}\, d(\alpha : \textbf{ScAs}(\alpha, d, A'))\rangle
\end{array}\right]
\end{array}\right]$$

Type 1: free, minimizer NPIs

(29) E un întuneric afară de Maria nu vede la un pas.
there.is a darkness outside that Maria not sees within a step
'It is so dark outside that Maria can't see anything.'

at issue: $\exists A(\forall P \in A(\ldots \wedge \textbf{ResOp}\, d(\textbf{dark}(d, \textbf{outside}) :$
$\boxed{1}\textbf{ScAs}(\neg\exists x(\textbf{min-range}(x) \wedge \textbf{see}(y, x)), \textbf{min-range}, A))$

presupposed: $\boxed{1}$

CI:
$\boxed{1} \rightarrow \exists A' \textbf{ResOp}\, d(\textbf{dark}(d, \textbf{outside}) : \textbf{ScAs}(\textbf{dark}(d, \textbf{outside}), d, A'))$

High degree inference with minimizer NPIs!

Type 1: Tests

- Test 1: Same interpretation for conjunction (*și* instead of *de*); the meaning of the RCI-content can be inferred; no meaning change of the expression.
- Test 2: OK if there is no salient result relation.
- Test 3: Free variation between *încât* and *de*.
- Test 4: Meaning contribution of the content of the RCI to the overall RCX - *lack of visibility*.

Type 2: minimizer NPIs bound to result semantics

- Just as E-NPI1, but
- Collocation (Soehn, 2009): restriction to RCX.

(30) se vede om cu om

$$\left[\begin{array}{ll} \text{lrs} & \left[\begin{array}{ll} \text{at-issue} & \boxed{1}\ \textbf{ScAs}(\phi[\exists x(\textbf{min-range}(x) \wedge \textbf{see}(x,y))], \textbf{min-range}, A) \\ \text{presup} & \exists A(\forall P \in A(\forall x(\textbf{min-range}(x) \rightarrow P(x))) \wedge \gamma[\boxed{1}]) \end{array}\right] \\ \text{coll} & \left[\text{lic} \left\langle \left[\text{external-cont}\ \ \textbf{ResOp}\, d(\alpha : \beta[\textbf{min-range}(x)])\right]\right\rangle\right] \end{array}\right]$$

Type 2: Tests

- Test 1: Alternation with coordination when result relation salient in discourse.
- Test 2: ...otherwise, no conjunction.
- Test 3: Variation between *încât* and *de*, but result relation must be present.
- Test 4: Referential, result reading present.

High degree particle

(31) Camera este foarte întunecată.
room.the is very dark
'The room is very dark.'

(32) $$\left[\text{lrs}\left[\begin{array}{ll}\text{at-issue} & \boxed{1}\ \textbf{ResOp}\,d(\textbf{dark}(d,\textbf{the-room}) : \textbf{ScAs}(\textbf{dark}(d,\textbf{the-room}),d,A)) \\ \text{presup} & \langle \exists A(\,A = \{d' | \Diamond \textbf{dark}(d',\textbf{the-room})\} \wedge \gamma([\boxed{1}])\rangle\end{array}\right]\right]$$

- *very* triggers alternative extents that are around the standard.
- The extent d to which the room is dark is at least as high as the minimal degree of darkness that is higher than all relevant alternatives.

Fixed extreme degree result clause

(33) Sunt [RCX: bucuros [RCI: de mor]].
I.am happy that I.die 'I am very happy.'

- Parallel to *mixed expressives* such as slurs (Gutzmann, 2011; Gutzmann & McCready, 2016)

  (34) Dan is a Kraut.
  at issue: Dan is German.
  CI: I have a negative attitude towards Germans.

- Analysis of (33)
  - at issue: I am very happy.
  - CI: For each predicate P, if P results in dying, then P has a very high extent.

Fixed extreme degree result clause

(35) Sunt bucuros de mor.
I.am happy that I.die 'I am very happy.'

$$\begin{bmatrix}
\text{phon} & \langle \text{mor} \rangle \\
\text{syns} & [\text{cont} [\text{main } \textbf{die}]] \\
\text{lrs} & \begin{bmatrix}
\text{ai} & \boxed{1}\ \textbf{ScAs}(\alpha[\alpha^*], d, A) \\
\text{pres} & \langle \exists A(A = \{\text{d}' \mid \Diamond[\lambda d.\alpha](d')\} \wedge \gamma[\boxed{1}]) \rangle \\
\text{ci} & \langle \delta \wedge \forall P \exists A\,(\alpha \approx P(x) \rightarrow (\textbf{ResOp}\, d\,(P(x) : \textbf{die}(x)) \rightarrow \textbf{ScAs}(P(x), d, A))) \rangle
\end{bmatrix} \\
\text{coll} & \begin{bmatrix} \text{lic} & \left\langle \begin{bmatrix} \text{lid} & \textit{result-de} \\ \text{head} & [\text{sel|cont} \begin{bmatrix} \text{index} & d \\ \text{main} & \alpha^* \end{bmatrix}] \end{bmatrix} \right\rangle \end{bmatrix}
\end{bmatrix}$$

- means **die**, ...which occurs in the CI only!
- collocation (Soehn, 2009): requires result-*de*
  - access to main clause predicate α^* and extent d
  - *very*-assertion
- CI: there is a predicate P, similar to the matrix predicate and if P results in dying, then P's extent is high.

Type 3: minimizer NPIs with purely intensifier meaning

- Analysis just like *de mor*.
- NPI-requirement satisfied inside the CI!

(36) Mi-e foame de nu te văd.

(lit.: I am hungry that I cannot see you.) 'I am extremely hungry.'

$$\left[\begin{array}{ll}
\text{phon} & \langle \text{văd} \rangle \\
\text{syns} & \left[\text{cont} \left[\text{main} \ \textbf{see}\right]\right] \\
\text{lrs} & \left[\begin{array}{ll}
\text{ai} & \boxed{1}\ \textbf{ScAs}(\alpha[\alpha^*], d, A) \\
\text{pres} & \langle \exists A(A = \{\text{d}' \mid \Diamond[\lambda d.\alpha](d')\} \wedge \gamma[\![\boxed{1}]\!]) \rangle \\
\text{ci} & \left\langle \begin{array}{l} \delta \wedge \forall P \exists A\,(\alpha \approx P(x) \\ \rightarrow (\textbf{ResOp}\, d(P(d,x) : \textbf{ScAs}(\beta[\textbf{see}, \textbf{min-range}, A']) \rightarrow \textbf{ScAs}(P(d,x), d, A))) \end{array} \right\rangle
\end{array}\right] \\
\text{coll} & \left[\text{lic} \left\langle \left[\begin{array}{ll} \text{lid} & \textit{result-de} \\ \text{head} & \left[\text{sel|cont} \left[\begin{array}{ll} \text{index} & d \\ \text{main} & \alpha^* \end{array}\right]\right] \end{array}\right], \ \ldots \right\rangle\right]
\end{array}\right]$$

Type 3: Tests

(37) Mi-e foame de nu te văd.
(lit.: I am hungry that I cannot see you.) 'I am extremely hungry.'

- Test 1: Incomplete meaning outside RCI, unless use of ordinary *mor*.
- Test 2: N/A.
- Test 3: Coll-requirement blocks variation between *încât* and *de*.
- Test 4: Literal, result reading only occurs inside a conditional CI.

Summary

- New data on Romanian result clauses and NPIs.
- High-degree readings of result clauses
- Difference between result clause complementizers (*încât*, *de*)
- Reformulation of pragmatic accounts of emphatic NPIs in a representational framework – but: different analysis for non-emphatic NPIs.
- Semantics of result clauses in a surface-oriented, constraint-based framework.
- Purely intensifying result clauses as mixed expressives with non-at-issue literal meaning.

Thank you for your attention!

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ANNEX - Other examples of E-NPIs in high-degree RCXs

- Type 1: *(de) nu ai loc să arunci un ac* '(that) not have space throw.SJ a needle' (lit.: (that) one does not have enough space to throw a needle), *(de) nu se aude nici musca* '(that) not RCL.ACC.PASS.3SG hears even fly.the' (lit.: (that) not even the fly is heard), etc.
- Type 2: E-NPI1: *de nu-ți vine să dai nici măcar un câine afară din casă* 'that not-CL.DAT.2SG feel.like throw.SJ even a dog out of house' (lit.: that one cannot even throw a dog out of the house); *de nu-ți poți crede ochilor* 'that not-CL.DAT.2SG you.can belive eyes.the.DAT' (lit.: that one can't believe their eyes), etc.
- Type 3: *de nu-și mai încape în piele* 'that not-REFL anymore fit in skin' (lit.: that one cannot fit in their skin anymore); *de nu se poate* 'that not REFL be.possible' (lit.: that it cannot be); *de nu-i vezi picioarele* 'that not-CL.DAT.3SG you.see legs.the' (lit.: that one cannot see their legs), etc.