Information-structurally driven syntactic configurations

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Information structure

- information structure
  - structure building effect (special syntactic positions)
  - interpretational effect (assertion-presupposition, alternatives etc.)
- the place of information structure in grammar
  - interfaces: syntax-semantics-pragmatics
  - universals vs. language specific aspects
- Van Valin (2014)
  - Italian: word order
  - English: subject selection
  - Kaluli: case marking
  - Japanese: ellipsis
- today: information structurally driven syntactic structure

Discourse configurationality

- grammatical functions (‘subject’ / ‘object’) are not marked by syntactic configurations
  
  (1) Mia szeret-i Tomi-t. Tomi-t szeret-i Mia.
  Mia love-3SG.DEF Tom-ACC Tom-ACC love-3SG.DEF Mia
  ‘Mia loves Tom.’

- surface order is related to the information structure of the sentence
  - syntactic positions driven by discourse-semantic functions: topic / focus
    ⇒ discourse-configurational languages
Discourse configurationality

Surányi 2015:430

“the property of discourse-configurationality holds of languages in which there is at least one phrase structure position such that all elements in that position are exclusively mapped to a unique information structural category that falls under the notions of Topic and Focus.”

- not necessarily a broad notion of topic/focus
- sub-categories can be mapped
- cross-category notions (contrast) can also be mapped
- the range of grammaticalizing discourse functions varies on a scale ⇒ different degrees and types [Sasse 1995, Ohl 2010, Surányi 2015] [see also talk by Latrouite & Van Valin]

Discourse configurationality

- **Hungarian:** preverbal focus position ↔ identificational focus
  
  (2) Jani be-mutta Mari-t Zsuzsi-nak.  
  John vprt-introduced Mary-ACC Sue-DAT  
  ‘John introduced Mary to Sue.’
  
  (3) Jani Mari-t mutatta be Zsuzsi-nak.  
  John Mary-ACC introduced vprt Sue-DAT  
  ‘It was Mary whom John introduced to Sue.’

- **Finnish:** left-peripheral position ↔ contrast
  
  (4) Tukholm-aan Pekka lensi Finnair-illa.  
  Stockholm-ILL Pekka flew Finnair-with  
  1. ‘To Stockholm, Pekka flew with Finnair.’ (contrastive topic)  
  2. ‘It is Stockholm that Pekka flew to with Finnair.’ (contrastive focus) [adapted from Surányi 2015]

Hungarian functional positions

- postverbal field → free word order
  
  (5) Be-mutta Péter az igazgató-t Mari-nak.  
  vprt-introduced Peter the director-ACC Mary-DAT  
  ‘Peter introduced the director to Mary.’ (all-new)

- preverbal field → word order by discourse-semantic functions
  
  TOPIC* > DistQ/UnivQ* > ID-FOCUS > Verb > ...  
  
  (6) Mari-nak tegnap mindenki az igazgató-t mutatta be.  
  Mary-DAT yesterday everyone the director-ACC introduced vprt  
  ‘As for Mary, it was the director that everyone introduced to her yesterday.’

- topic position(s): left-peripheral, iterable
- focus position: immediate preverbal position
  
  - narrow focus
  - identificational semantics (+ exhasutivity)
  - nuclear pitch accent (+ deaccenting after)
various focus types are relevant for sentence structure

- focus position: immediate preverbal position
  - narrow **identificational focus** → structurally marked
  - **information focus**: postverbal (“in situ”), merely prosodically marked
    
    "All and only identificational foci must be fronted to a dedicated left peripheral 
    pre-verbal position, and all and only plain information foci must remain in situ.”
    
    [Surányi 2015:432]

- **pragmatic focus** → related to but different from information focus
  - predicate focus → topic-comment structure
  - sentence focus → V-initial or SVO
  - associate of additive particles:
    - preverbal or postverbal
    - different range of focus (narrow, predicate, sentence)
    - outside of focus position and topic position

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**RRG: focus projection**

- **examples: narrow focus (a) and predicate focus (b) constructions**

(a) 

<table>
<thead>
<tr>
<th>SENTENCE</th>
<th>CLAUSE</th>
<th>CORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP</td>
<td>NUC</td>
<td>NP</td>
</tr>
<tr>
<td>Mia</td>
<td>kissed</td>
<td>a MAN</td>
</tr>
<tr>
<td>IU</td>
<td>IU</td>
<td>IU</td>
</tr>
</tbody>
</table>

(b) 

<table>
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**Some open questions:**

- representation of the topic-comment distinction
  - relevance, e.g., linearization constraints of additive particles
- how to link the representation of the focus structure to the semantics
  of the sentence
- how to derive the assertion-presupposition distinction
- how to distinguish structure building vs. mere interpretational effects
  of information structure

**Proposal:**

- formalized RRG with decompositional frames
- the link established via the IUs and the respective semantic contents
  of the sentence parts
- abstract information structure frame replacing the focus projection
Formalized RRG

- tree nodes illustrated with feature structures
- **interface features**: establish a link between syntax and the semantics
- semantic representation: **decompositional frames**

  ($\approx$ conceptual models, conceptual structures)

- **compositionality**
  - semantic composition on a par with syntactic composition
  - syntactic operations trigger unification in the semantics
  - mediated by interface features ($I, P$)

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Information structure projection

- Mia $^T$ kissed [a MAN]$^{AFD}$.  
  $Mia \upharpoonright \begin{array}{c} f \downarrow \text{[IU]} \downarrow \text{[IU]} \downarrow \text{[IU]} \downarrow \text{[COM]} \end{array}$

- Mia $^T$ [kissed a MAN]$^{AFD}$.  
  $Mia \upharpoonright \begin{array}{c} f \downarrow \text{[IU]} \downarrow \text{[IU]} \downarrow \text{[IU]} \downarrow \text{[COM]} \end{array}$

- [Mia kissed a MAN]$^{AFD}$.  
  $Mia \upharpoonright \begin{array}{c} f \downarrow \text{[IU]} \downarrow \text{[IU]} \downarrow \text{[IU]} \downarrow \text{[COM]} \end{array}$

- [MIA]$^{AFD}$ kissed a man.  
  $Mia \upharpoonright \begin{array}{c} f \downarrow \text{[IU]} \downarrow \text{[IU]} \downarrow \text{[IU]} \downarrow \text{[COM]} \end{array}$

- representation of the topic-comment distinction

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Information units

- minimal phrasal units in the syntactic representation
- carry their corresponding semantic content + the information about being an argument or a predicate

- **Information units [IU]**s:

- $IU_1$ Mia (argument):
  
  - state-of-affair
  - $\Theta$ person $\text{[NAME]}$ mia

- $IU_2$ kissed (predicate):
  
  - $\uparrow$ kiss $\text{[ACTOR]}$

- $IU_3$ a man (argument):
  
  - state-of-affair
  - $\Theta y$ person $\text{[GENDER]}$ male

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Formalized RRG: example

- SENTENCE$^{[p=a]}$

<table>
<thead>
<tr>
<th>CLAUSE$^{[p=a]}$</th>
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<tbody>
<tr>
<td>CORE$^{[p=a]}$</td>
</tr>
<tr>
<td>NUC$^{[p=a]}$</td>
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<tr>
<td>RP$^{[p=x]}$</td>
</tr>
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</tbody>
</table>

- Mia kissed a man.

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Information units $[IU]$s:

- minimal phrasal units in the syntactic representation
- carry their corresponding semantic content + the information about being an argument or a predicate
Focus structure

Mia kissed [a MAN]_{AFD}.

**focus** = AFD (IU₃):

<table>
<thead>
<tr>
<th>state-of-affair</th>
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<tbody>
<tr>
<td>person</td>
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<tr>
<td>y</td>
</tr>
<tr>
<td>GENDER</td>
</tr>
<tr>
<td>male</td>
</tr>
<tr>
<td>L-STAGE</td>
</tr>
<tr>
<td>adult</td>
</tr>
</tbody>
</table>

**background** = (IU₁ ⊔ IU₂):

<table>
<thead>
<tr>
<th>name</th>
</tr>
</thead>
<tbody>
<tr>
<td>mia</td>
</tr>
<tr>
<td>UND</td>
</tr>
</tbody>
</table>

**assertion** = focus ⊔ background = (IU₁ ⊔ IU₂) ⊔ IU₃

✓ link the representation of the focus structure to the semantics of the sentence
✓ derive the assertion-presupposition distinction

InfS-frame overlay

**Proposal:**

- InfS-frame overlay generally
- **structure building:**
  - InfS-functions linked to syntactic positions
  - determined by constructional schemas
- **mere interpretational effect:**
  - InfS-functions linked to IUs
  - not in constructional schemas

Information structurally driven syntactic positions

- Hungarian: (a-)topic and (id-)focus positions
- proposal: generalized information structure frame as an overlay on syntactic positions
  - representing: TOP, COMM, AFD, NF (COMM = PFD)
  - overlay → direct linking of InfS-functions and syntactic positions
  - determined by constructional schemas

✓ structure building vs. mere interpretational effects of InfS
☑ two representations of information structure

Summary

- discourse configurational languages
- distinguishing structure building and mere interpretational effects of InfS in the grammar architecture
- extensions to (classical) RRG’s focus projection
  - representing topic-comment distinction
  - information units represented in more detail
  - focus structure linked to the semantics
  - deriving and representing assertion and presupposition uniformly

Thank you for your attention!
References

- Surányi, B. 2015.