



# Putting things together: Correlating discourse relations with other types of linguistic data



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## Main aim

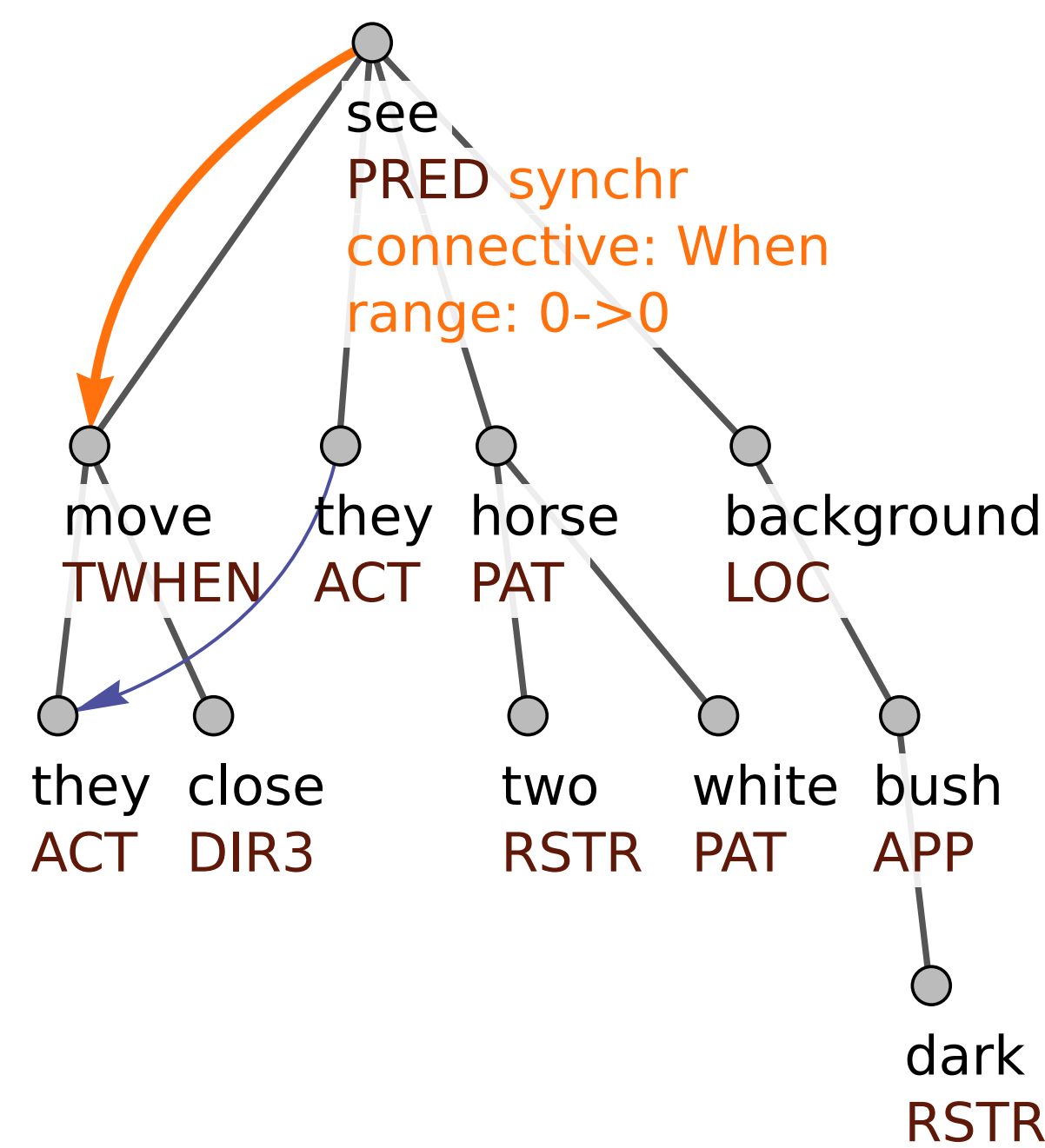
To document, analyze and employ **the interplay** of intra-sentential and inter-sentential relations

- ▶ Deep syntax
- ▶ Information structure
- ▶ Coreference and bridging
- ▶ Discourse relations

## Deep syntactic relations (tectogrammatrics)

Tectogrammatical representation (TR) of the sentence

(1) *When they moved closer, they saw two white horses at the background of dark bushes.*



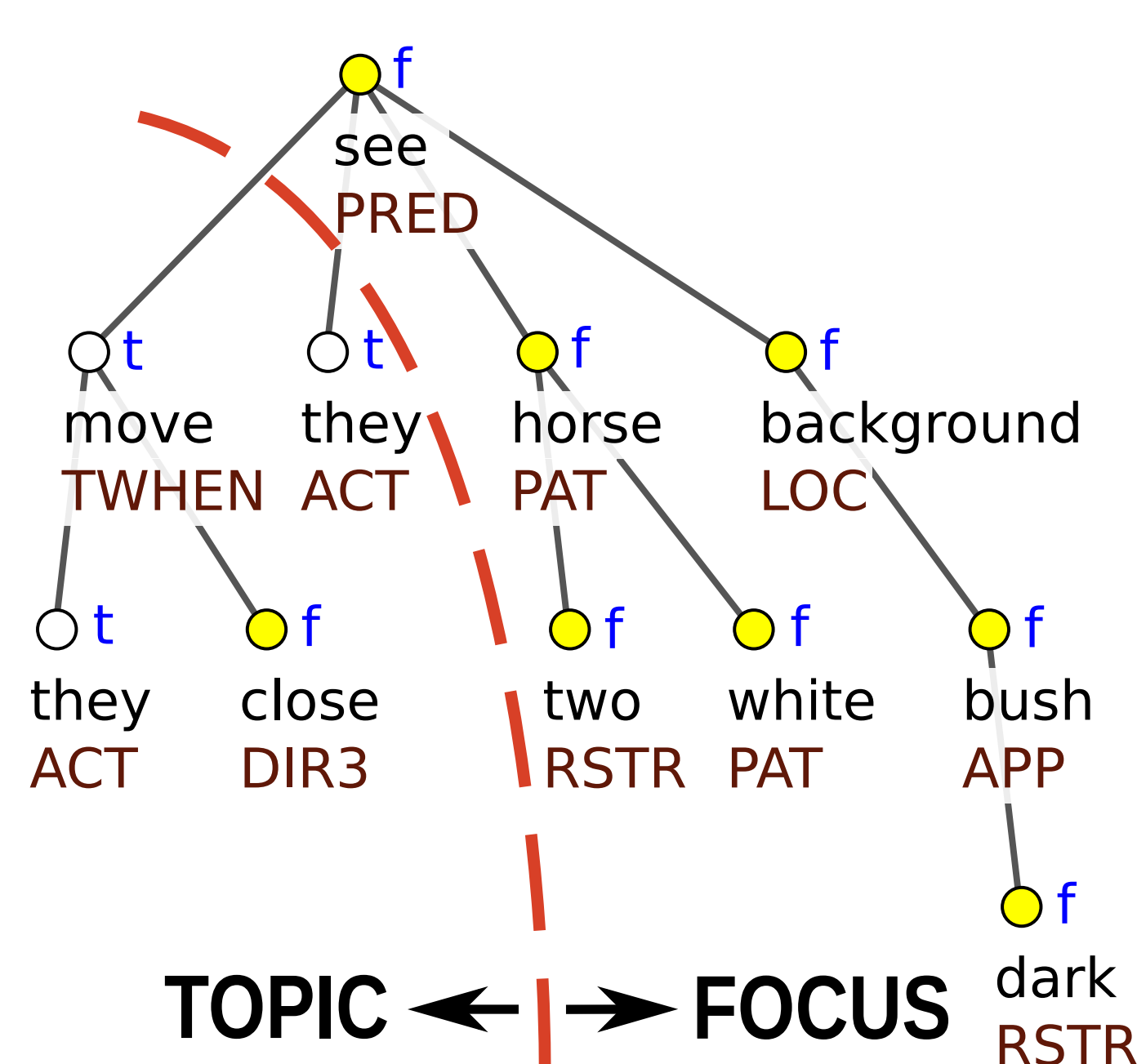
- ▶ dependency relations
- ▶ discourse relations
- ▶ coreference

## Information structure

Preceding context:

*One Saturday afternoon the children walked along Turkey river.*

Values of information structure added to the TR of (1):

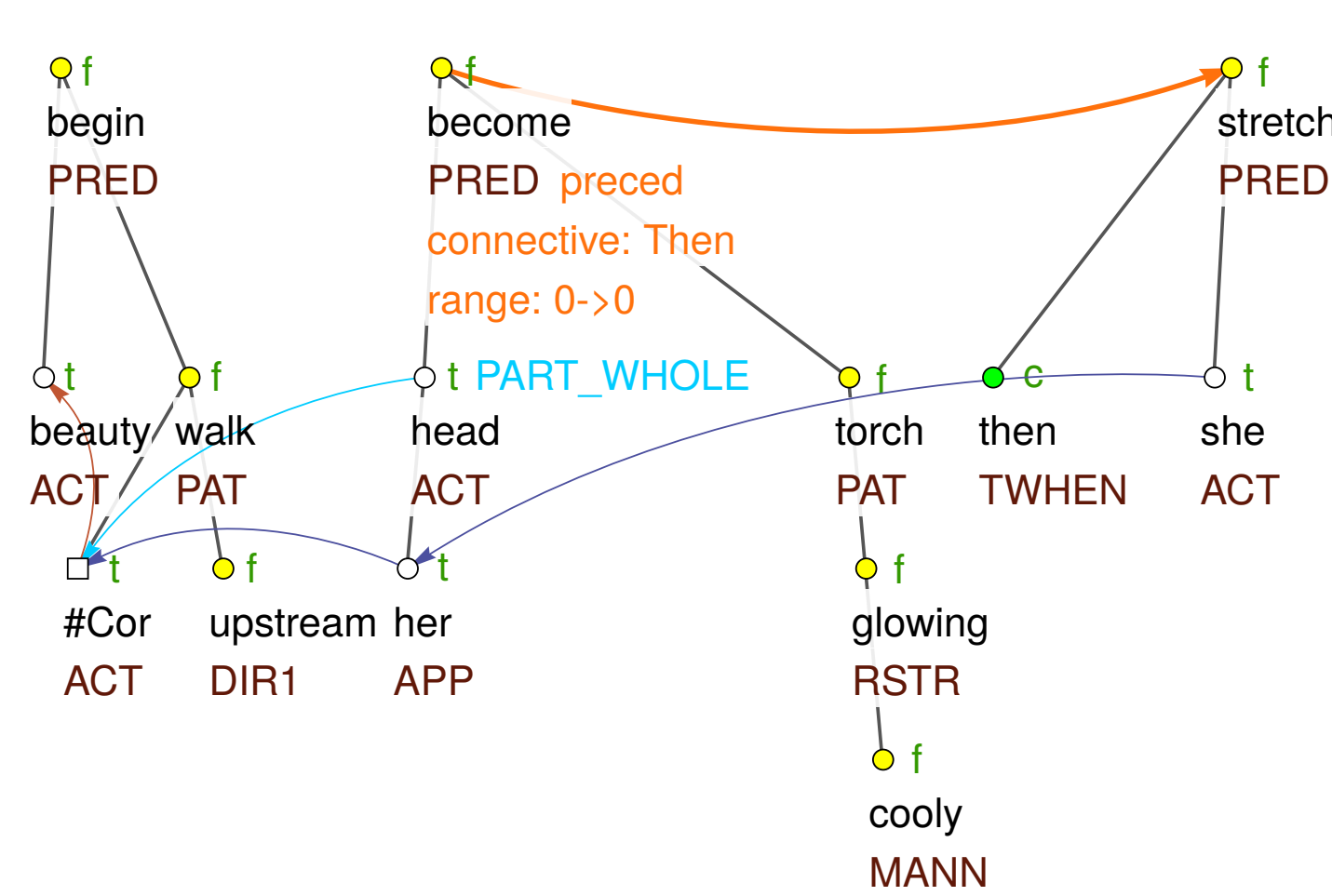


- ▶ t = contextually bound
- ▶ c = contrastively contextually bound
- ▶ f = contextually non-bound

## Coreference and bridging

Discourse segment:

*The beauty began to walk upstream. Her head became a cooly glooming torch. She stretched.*



- ▶ discourse relations
- ▶ grammatical coreference
- ▶ textual coreference
- ▶ bridging

## Acknowledgement

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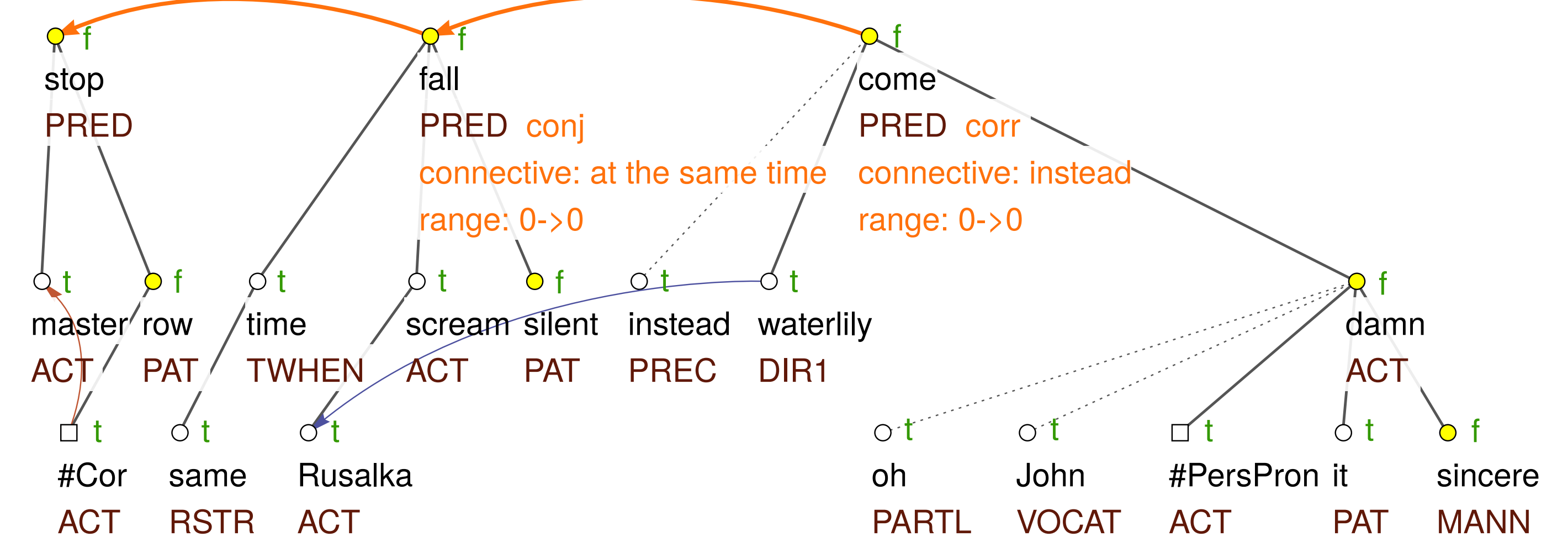
## References

Zikánová Šárka, Hajičová Eva, Hladká Barbora, Jínová Pavlína, Mírovský Jiří, Nedoluzhko Anna, Poláková Lucie, Rysová Kateřina, Rysová Magdaléna, Václ Jan. *Discourse and Coherence. From the Sentence Structure to Relations in Text*. Praha, Czechia. 2015.

## Sources

Škvorecký Josef. *Dvorak in Love. A light-hearted dream*. Transl. from the Czech original *Scherzo capriccioso* by Paul Wilson. Toronto: Lester & Orpen Dennys. 1985.

## Discourse relations



Discourse segment:

*The master stopped rowing. At the same time, Rusalka's scream fell silent. Instead, a sincere "Oh, damn it, John!" came from the waterlily.*

- ▶ grammatical coreference
- ▶ textual coreference
- ▶ range: scope of arguments, range  $0 > 0$  = relation holds between arguments represented only by trees where discourse arrow begins and ends

▶ discourse relation conj

▶ conjunction (connective *at the same time* = translation of Czech *rovněž* (as well, lit. equally) which has in this context conjunction meaning, one event and also another one happened)

▶ discourse relation corr

▶ correction (connective *instead* = translation of Czech *místo toho* (instead of that), some event is replaced by another)

## CASE STUDIES

### Coherence disruption (work in progress)

#### Weak coherence and coherence disruptions

How is coherence established in cases where:

- ▶ no explicit or implicit discourse relation is present,
- ▶ no coreferential or bridging relation is present?

#### New types of relations

(not annotated yet):

- ▶ text organizing devices: e.g. title - text
- ▶ attribution: source of information - information *We extract from the decisive arrangements: Until March 31 the procedure runs ...*
- ▶ question - answer *Is the government going to follow its original plans? Yes.*

#### Reader's expectation as coherence factor:

- ▶ thematic continuity: e.g. list of events following the title: *Week among computers*
- ▶ genre rules: e.g. a standardized weather report enumerating location, days etc.
- ▶ reconstruction of ellipses *The state spends 1,6 - 1,8 % of GDP on the support of small enterprise. (Subtitle) Regional aspects [deleted: on the support]*

## Salience

(1) *Across the river Magda and Kovarik could now see a fire with two figures beside it. (2) When they moved closer, (3) they could make out two white horses against the background of the dark bushes. ... (11) He looked at Magda.*

