

Workshop on Discourse Theories for Text Planning

Text or document planning as the mechanism of ordering messages in a coherent way for achieving a cohesive text has traditionally been realized by schemas or the establishment of rhetorical relations between messages and message sequences. Inspired by the descriptions of a comprehensive set of rhetorical relations in Rhetorical Structure Theory (RST), these relations have often been realized as planning operators for achieving a complete text. The rise of machine learning approaches for NLG tasks seems to hide the fact that RST-oriented text planning is by far not the only method for achieving linguistically relevant text plans.

Formal semantics and pragmatics offer a number of different theories on text organization and coherence phenomena whose explanatory power goes beyond the justified grouping of informational units, among them (Segmented) Discourse Representation Theory (SDRT), Question-under-discussion (QUD) approaches, and probabilistic approaches to meaning. This workshop addresses the relevance of these theories for text planning.

For example, QUD approaches to text structuring provide expressive theories facilitating concise analyses of a group of different pragmatic phenomena, ranging from the analysis of focus/background structures to dialogue moves, but they did not receive much attention for text planning issues in NLG. QUDs are the central concept in analyses that explain linguistic regularities as a consequence of the assumption that the sentences and text segments with which the regularities are associated are answers to an explicitly or implicitly asked question. QUDs were early on used for explaining possible sequences of dialogue moves (Carlson, 1983; Ginzburg, 1996), clarifying information structural concepts (e.g. the topic/focus distinction), temporal progression and foreground-background relations in narration, information structural constraints on implicatures (van Kuppevelt, 1996), representing discourse goals and defining contextual relevance (Roberts, 1996), and for analysing structure and coherence of discourse, of both text and dialogue (van Kuppevelt, 1995). Since then, QUDs have been firmly established as an analytic tool, leading to fruitful applications for a wide range of linguistic phenomena.

The aim of this workshop is to explore the interplay of linguistic theories of text planning-related phenomena with computational approaches to text planning,

be it rule-based or learning approaches, in order to bring these fields of expertise together.

Invited Speakers:

Jonathan Ginzburg (Université de Paris, CNRS)

Program Committee:

Nicholas Asher (IRIT Toulouse)
Anton Benz (ZAS Berlin)
Kees van Deemter (Utrecht University)
Claire Gardent (CNRS / LORIA Nancy)
Christoph Hesse (ZAS Berlin)
Ralf Klabunde (Ruhr University Bochum)
Maurice Langner (Ruhr University Bochum)
Tatjana Scheffler (Potsdam University)

Workshop Program:

The workshop took place on Tuesday December 15, 2020.

- 12:00-12:30 *Monological Text from Dialogue?*
Jonathan Ginzburg
- 12:30-13:00 *Automatic planning of the dialogue between human and machine using discourse trees*
Boris Galitsky & Dmitry Ilvovsky
- 13:00-13:30 *Neural Micro-Planning for Data to Text Generation Produces more Cohesive Text*
Roy Eisentadt & Michael Elhadad
- 13:30-13:50 break
- 13:50-14:20 *Annotating QUDs for generating pragmatically rich texts*
Christoph Hesse, Anton Benz, Maurice Langner, Felix Theodor, Ralf Klabunde
- 14:20-14:50 *Towards Domain-Independent Text Structuring*
Grigorii Guz & Giuseppe Carenini