Proceedings of the
10th European Workshop on Natural Language Generation (ENLG-05)

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Edited by
Graham Wilcock, Kristiina Jokinen,
Chris Mellish and Ehud Reiter
Preface

We are happy to introduce the proceedings of the 10th European Workshop on Natural Language Generation (ENLG-05). This workshop is the tenth in a biennial series of workshops on natural language generation that has been running since 1987. Previous European workshops have been held at Royaumont, Edinburgh, Judenstein, Pisa, Leiden, Duisburg, Toulouse and Budapest. The series provides a regular forum both for NLG specialists and for researchers who may not think of themselves as part of the NLG community.

The 2005 workshop, immediately following IJCAI-2005 in Edinburgh, spans the interest areas of natural language generation and artificial intelligence. We have selected 16 full papers and 12 poster papers covering a wide range of topics, including research that integrates NLG with AI, with ontologies, and with spoken and multimodal dialogue systems, in addition to new research on mainstream NLG issues.

We would like to thank the members of the program committee for their timely reviews of the exceptionally large number of submitted papers. In particular, we thank Kevin Knight, our invited speaker. We also thank SIGGEN for endorsing the workshop, and both EPSRC and the University of Aberdeen for their support.

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Contents

Invited Talk

*Tree Transducers for Machine Translation and Generation*
Kevin Knight 11

Full Papers

*Statistical Generation: Three Methods Compared and Evaluated*
Anja Belz 15

*Interactive Authoring of Logical Forms for Multilingual Generation*
Ofer Biller, Michael Elhadad, Yael Netzer 24

*Ten Years After: An Update on TG/2 (and Friends)*
Stephan Busemann 32

*Real-Time Stochastic Language Generation for Dialogue Systems*
Nathanael Chambers 40

*Generating and Selecting Grammatical Paraphrases*
Claire Gardent, Eric Kow 49

*Generating Referential Descriptions Under Conditions of Uncertainty*
Helmut Horacek 58
A Context-dependent Algorithm for Generating Locative Expressions in Physically Situated Environments
John Kelleher, Geert-Jan Kruijff 68

Incremental Generation of Multimodal Deixis Referring to Objects
Alfred Kranstedt, Ipke Wachsmuth 75

Context-sensitive Utterance Planning for CCG
Geert-Jan Kruijff 83

Narratological Knowledge for Natural Language Generation
Birte Lönneker 91

Discrete Optimization as an Alternative to Sequential Processing in NLG
Tomasz Marciniak, Michael Strube 101

Explorations in Sentence Fusion
Erwin Marsi, Emiel Krahmer 109

Natural Language Directed Inference in the Presentation of Ontologies
Chris Mellish, Xiantang Sun 118

Computational Mechanisms for Pun Generation
Graeme Ritchie 125

Evaluation of an NLG System using Post-Edit Data: Lessons Learnt
Somayajulu Sripada, Ehud Reiter, Lezan Hawizy 133

Generating Readable Texts for Readers with Low Basic Skills
Sandra Williams, Ehud Reiter 140
Poster Papers

Exploiting OWL Ontologies in the Multilingual Generation of Object Descriptions
Ion Androutsopoulos, Spyros Kallonis, Vangelis Karkaletsis 150

Towards Generating Procedural Texts: An Exploration of their Rhetorical and Argumentative Structure
Farida Aouladomar, Patrick Saint-Dizier 156

The Types and Distributions of Errors in a Wide Coverage Surface Realizer Evaluation
Charles Callaway 162

An Evolutionary Approach to Referring Expression Generation and Aggregation
Raquel Hervás, Pablo Gervás 168

Using a Corpus of Sentence Orderings Defined by Many Experts to Evaluate Metrics of Coherence for Text Structuring
Nikiforos Karamanis, Chris Mellish 174

When must Should Be Chosen
Ralf Klabunde 180

Reversibility and Re-usability of Resources in NLG and Natural Language Dialog Systems
Martin Klarner 185

An Experiment Setup for Collecting Data for Adaptive Output Planning in a Multimodal Dialogue System
Ivana Kruijff-Korbayová, Nate Blaylock, Ciprian Gerstenberger, Verena Rieser, Tilman Becker, Michael Kaißer, Peter Poller, Jan Schehl 191

Answer Generation with Temporal Data Integration
Véronique Moriceau 197


*Chart Generation Using Production Systems*
Sebastian Varges 203

*Spatial Descriptions as Referring Expressions in the MapTask Domain*
Sebastian Varges 207

*Searching for Grammaticality: Propagating Dependencies in the Viterbi Algorithm*
Stephen Wan, Robert Dale, Mark Dras, Cécile Paris 211

Index of Authors 217
Invited Talk
Tree Transducers for Machine Translation and Generation

Kevin Knight
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Abstract: Probabilistic finite-state methods have been very successful for natural language processing (NLP) problems like tagging, entity identification, and transliteration. These methods have also been packaged in very useful software toolkits. However, they are not so good for attacking problems with large-scale reordering (translation, generation, paraphrasing, question answering, etc.) and sensitivity to syntax. Over the past three years, new probabilistic tree-based models have been built and tested for a variety of NLP applications. Many of these models turn out to be instances of tree transducers, a formal automata model first described by W. Rounds and J. Thatcher in 1970. This opens up new opportunities for us to marry deeper representations, automata theory, and machine learning, and to create general-purpose tools that can be applied to many NLP problems. This talk will cover new learning algorithms for tree automata, and large-scale natural language experiments.

Note: In addition to the invited talk at ENLG-05, Kevin Knight will give a tutorial on Statistical Machine Translation and Generation the day after the workshop.
Full Papers