

ACL 2010

CMCL 2010

**2010 Workshop on
Cognitive Modeling and Computational Linguistics**

Proceedings of the Workshop

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Introduction

The papers in these proceedings were presented at the ACL-2010 workshop on *Cognitive Modeling and Computational Linguistics* held in Uppsala on July 15th 2010. The aim of the workshop was to provide a specialized venue for work in computational psycholinguistics. ACL Lifetime Achievement Award winner Martin Kay characterized this research area as striving to “build models of language that reflect in some interesting way on the ways in which people use language.” The workshop continues a tradition of similar meetings held at the Cognitive Science Society annual meeting in 1997 and at ACL meetings in 1999 and 2004.

As organizer, I was happy to receive 23 submissions of which 10 were accepted. I would like to express my sincere thanks to the Program Committee for their help. Thank you — I look forward to seeing you at future CMCL workshops.

John T. Hale
July 2010

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Conference Program

Thursday July 15th 2010

Language change at multiple levels

9:00–9:30 *Using Sentence Type Information for Syntactic Category Acquisition*
Stella Frank, Sharon Goldwater and Frank Keller

9:30–10:00 *Did Social Networks Shape Language Evolution?
A Multi-Agent Cognitive Simulation*
David Reitter and Christian Lebiere

10:00–10:30 *Syntactic Adaptation in Language Comprehension*
Alex Fine, Ting Qian, T. Florian Jaeger and Robert Jacobs

10:30–11:00 Morning break

Parsing and memory

11:00–11:30 *HHMM Parsing with Limited Parallelism*
Tim Miller and William Schuler

11:30–12:00 *The Role of Memory in Superiority Violation Gradience*
Marisa Ferrara Boston

12:00–2:00 Lunch break

Corpus-based modeling

2:00–2:30 *Close = Relevant? The Role of Context in Efficient Language Production*
Ting Qian and T. Florian Jaeger

2:30–3:00 *Predicting Cognitively Salient Modifiers of the Constitutive Parts of Concepts*
Gerhard Kremer and Marco Baroni

3:00–3:30 *Towards a Data-Driven Model of Eye Movement Control in Reading*
Mattias Nilsson and Joakim Nivre

Thursday July 15th 2010 (continued)

3:30–4:00 Afternoon break

Information-theoretical approaches

4:00–4:30 *Modeling the Noun Phrase versus Sentence Coordination Ambiguity in Dutch:
Evidence from Surprisal Theory*
Harm Brouwer, Hartmut Fitz and John Hoeks

4:30–5:00 *Uncertainty Reduction as a Measure of Cognitive Processing Effort*
Stefan Frank