

NAACL HLT 2009

Computational Approaches to Linguistic Creativity

Proceedings of the Workshop

June 4, 2009
Boulder, Colorado

Production and Manufacturing by
Omnipress Inc.
2600 Anderson Street
Madison, WI 53707
USA

©2009 The Association for Computational Linguistics

Order copies of this and other ACL proceedings from:

Association for Computational Linguistics (ACL)
209 N. Eighth Street
Stroudsburg, PA 18360
USA
Tel: +1-570-476-8006
Fax: +1-570-476-0860
acl@aclweb.org

ISBN 978-1-932432-36-7

Introduction

It is generally agreed upon that linguistic creativity is a unique property of human language. Some claim that linguistic creativity is expressed in our ability to combine known words in a new sentence, others refer to our skill to express thoughts in figurative language, and yet others talk about syntactic recursion and lexical creativity. Computational systems incorporating models of linguistic creativity operate on different types of data, including written text, audio/speech/sound, and video/images/gestures. Creativity-aware systems will improve the contribution Computational Linguistics has to offer to many practical areas, including education, entertainment, and engineering.

The idea behind the 2009 workshop on Computational Approaches to Linguistic Creativity (CALC) originated in our own previous activities, including the organization of the 2007 NAACL-HLT workshop on Figurative Language Processing and work within the Story Generator Algorithms project (German Research Foundation grant ME-1546/2-1). We are well aware of the fact that each single linguistic creativity phenomenon is challenging to describe, detect, or generate on its own. Consequently, the main goal of the present workshop is to provide a venue for researchers to inform each other and the NLP community at large of the state of the art of current systems.

Yet, linguistic creativity phenomena are intertwined with others, and with each other. To illustrate, metaphorical concepts are related to their lexical and syntactical surface realization; the events of a story are expressed by narrator and character speech; and humor involves semantic, situational, and cultural knowledge. With twelve peer-reviewed contributions covering a wide range of phenomena related to linguistic creativity, the workshop will thus strengthen research and foster collaboration in the field. At the same time, it will contribute to a better understanding of the new issues and challenges that need to be tackled.

For CALC 2009, we received a total of 19 submissions coming from 13 different countries. Eight papers were accepted for oral presentation and four were selected for a poster session. We are especially grateful to the authors who submitted excellent papers and to our hard working program committee. We would like to express our enormous gratitude to the U.S. National Science Foundation (IIS award #: 0906244) for the generous support of the workshop which allowed many participants from three continents to attend the workshop and present their work. Particular thanks go to the invited speaker, Nick Montfort (MIT), who kindly agreed to give a talk on Interactive Fiction, and whose paper is included in this volume. Last but not least, we want to thank Christy Doran and Eric Ringger, the publication chairs.

Anna Feldman and Birte Lönneker-Rodman

Organizers:

Anna Feldman, Montclair State University, USA
Birte Lönneker-Rodman, University of Hamburg, Germany

Program Committee:

Shlomo Argamon, Illinois Institute of Technology, USA
Roberto Basili, University of Roma, Italy
Amilcar Cardoso, University of Coimbra, Portugal
Afsaneh Fazly, University of Toronto, Canada
Eileen Fitzpatrick, Montclair State University, USA
Pablo Gervas, Universidad Complutense de Madrid, Spain
Sam Glucksberg, Princeton University, USA
Jerry Hobbs, ISI, Marina del Rey, USA
Sid Horton, Northwestern University, USA
Diana Inkpen, University of Ottawa, Canada
Mark Lee, University of Birmingham, UK
Hugo Liu, MIT, USA
Xiaofei Lu, Penn State University, USA
Ruli Manurung, University of Indonesia, Indonesia
Katja Markert, University of Leeds, UK
Rada Mihalcea, University of North Texas, USA
Anton Nijholt, University of Twente, The Netherlands
Andrew Ortony, Northwestern University, USA
Vasile Rus, The University of Memphis, USA
Richard Sproat, Oregon Health and Science University, USA
Gerard Steen, Vrije Universiteit, Amsterdam, The Netherlands
Carlo Strapparava, Istituto per la Ricerca Scientifica e Tecnologica, Trento, Italy
Juergen Trouvain, Saarland University, Germany

Additional Reviewers:

Carmen Banea, University of North Texas, USA
Alessandro Valitutti, Istituto per la Ricerca Scientifica e Tecnologica, Trento, Italy

Invited Speaker:

Nick Montfort, Massachusetts Institute of Technology, USA

Table of Contents

<i>Discourse Topics and Metaphors</i>	
Beata Beigman Klebanov, Eyal Beigman and Daniel Diermeier	1
<i>Topic Model Analysis of Metaphor Frequency for Psycholinguistic Stimuli</i>	
Steven Bethard, Vicky Tzuyin Lai and James H. Martin	9
<i>Understanding Eggcorns</i>	
Sravana Reddy	17
<i>Automatically Extracting Word Relationships as Templates for Pun Generation</i>	
Bryan Anthony Hong and Ethel Ong	24
<i>Gaiku : Generating Haiku with Word Associations Norms</i>	
Yael Netzer, David Gabay, Yoav Goldberg and Michael Elhadad	32
<i>Automatic Generation of Tamil Lyrics for Melodies</i>	
Ananth Ramakrishnan A., Sankar Kuppan and Sobha Lalitha Devi	40
<i>Quantifying Constructional Productivity with Unseen Slot Members</i>	
Amir Zeldes	47
<i>Curveship: An Interactive Fiction System for Interactive Narrating</i>	
Nick Montfort	55
<i>Planning Author and Character Goals for Story Generation</i>	
Candice Solis, Joan Tiffany Siy, Emerald Tabirao and Ethel Ong	63
<i>An Unsupervised Model for Text Message Normalization</i>	
Paul Cook and Suzanne Stevenson	71
<i>Morphological Productivity Rankings of Complex Adjectives</i>	
Stefano Vegnaduzzo	79
<i>How Creative is Your Writing?</i>	
Xiaojin Zhu, Zhiting Xu and Tushar Khot	87
<i>'Sorry' is the hardest word</i>	
Allan Ramsay and Debora Field	94

Conference Program

Thursday, June 4, 2009

8:30–9:15 Coffee Session

9:15–9:20 Welcome and Introduction to CALC-09

Session 1: Metaphors and Eggcorns

9:20–9:45 *Discourse Topics and Metaphors*
Beata Beigman Klebanov, Eyal Beigman and Daniel Diermeier

9:45–10:10 *Topic Model Analysis of Metaphor Frequency for Psycholinguistic Stimuli*
Steven Bethard, Vicky Tzuyin Lai and James H. Martin

10:10–10:35 *Understanding Eggcorns*
Sravana Reddy

10:35–11:00 Morning break

Session 2: Generating Creative Texts

11:05–11:30 *Automatically Extracting Word Relationships as Templates for Pun Generation*
Bryan Anthony Hong and Ethel Ong

11:30–11:55 *Gaiku : Generating Haiku with Word Associations Norms*
Yael Netzer, David Gabay, Yoav Goldberg and Michael Elhadad

Thursday, June 4, 2009 (continued)

Poster Session 1

- 12:00–12:15 *Automatic Generation of Tamil Lyrics for Melodies*
Ananth Ramakrishnan A., Sankar Kuppan and Sobha Lalitha Devi
- 12:15–12:30 *Quantifying Constructional Productivity with Unseen Slot Members*
Amir Zeldes
- 12:30–14:00 Lunch

Invited Talk

- 14:00–15:00 *Curveship: An Interactive Fiction System for Interactive Narrating*
Nick Montfort

Poster Session 2

- 15:00–15:15 *Planning Author and Character Goals for Story Generation*
Candice Solis, Joan Tiffany Siy, Emerald Tabirao and Ethel Ong
- 15:15–15:30 *An Unsupervised Model for Text Message Normalization*
Paul Cook and Suzanne Stevenson
- 15:30–16:00 Afternoon Break

Session 3: From Morphology to Pragmatics to Text

- 16:00–16:25 *Morphological Productivity Rankings of Complex Adjectives*
Stefano Vegnaduzzo
- 16:25–16:50 *How Creative is Your Writing?*
Xiaojin Zhu, Zhiting Xu and Tushar Khot
- 16:50–17:15 *'Sorry' is the hardest word*
Allan Ramsay and Debora Field
- 17:15–17:30 Summary and General Discussion