

ACL 2012

**Proceedings of the Workshop on
Extra-Propositional Aspects of Meaning in
Computational Linguistics
(ExProM 2012)**

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Introduction

Until recently, research in Natural Language Processing (NLP) has focused predominantly on propositional aspects of meaning, such as extracting factual information about who did what to whom. However, understanding language fully also requires awareness and comprehension of Extra-Propositional Aspects of Meaning (EPAM), such as factuality, uncertainty, subjectivity, and irony. The same propositional meaning can be expressed in various linguistic forms reflecting different extra-propositional meaning aspects, e.g.:

- The earthquake adds further threats to the global economy.
- Does the earthquake add further threats to the global economy?
- The earthquake will probably add further threats to the global economy.
- Who could possibly think the earthquake adds further threats to the global economy?
- It has been denied that the earthquake adds further threats to the global economy.

Recently, work on EPAM has received increasing attention in the NLP community, especially in the context of sentiment processing. However, while there is a growing amount of research on phenomena like subjectivity and factuality, other phenomena like the detection of sarcasm have received less attention.

With this workshop we aim to bring together scientists working on EPAM from any area related to computational language learning and processing and thereby help to consolidate this emerging area of research. We received 14 submissions; 10 papers were selected for inclusion in the workshop. The papers cover a wide range of topics, including the detection of factuality, subjectivity and speculation, annotation issues related to EPAM, or cognitive processing and EPAM. Several papers contain empirical studies that take a closer look at the linguistic expression of EPAM and how it relates to what the speaker/writer intends to convey (e.g., the diagnostic correctness in a medical setting) or what the listener/reader understands (e.g., the perceived subjectivity or the influence on opinion forming). An invited talk by Bonnie Webber on "Alternatives and Extra-Propositional Meaning" completes the workshop program.

We would like to thank all authors who submitted papers for the hard work that went into their submissions. We are also extremely grateful to the members of the program committee for their thorough reviews, and to the ACL 2012 organizers, especially the Workshop Chairs Massimo Poesio and Satoshi Sekine. Special thanks to our invited speaker Bonnie Webber and to the PASCAL2 Network for their generous sponsorship of the workshop. This workshop is a follow-up to Negation and Speculation in Natural Language Processing (NeSp-NLP 2010) held in Uppsala, Sweden, in July 2010.

Roser Morante and Caroline Sporleder

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Invited Speaker:

Bonnie Webber, University of Edinburgh

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Conference Program

Friday July 13, 2012

8:45 Welcome

Morning session

9:00 *Disfluencies as Extra-Propositional Indicators of Cognitive Processing*
Kathryn Womack, Wilson McCoy, Cecilia Ovesdotter Alm, Cara Calvelli, Jeff B. Pelz, Pengcheng Shi and Anne Haake

9:30 *How do Negation and Modality Impact on Opinions?*
Farah Benamara, Baptiste Chardon, Yannick Mathieu, Vladimir Popescu and Nicholas Asher

10:00 *Linking Uncertainty in Physicians' Narratives to Diagnostic Correctness*
Wilson McCoy, Cecilia Ovesdotter Alm, Cara Calvelli, Jeff B. Pelz, Pengcheng Shi and Anne Haake

10:30 Coffee break

11:00 *Factuality Detection on the Cheap: Inferring Factuality for Increased Precision in Detecting Negated Events*
Erik Velldal and Jonathon Read

11:30 *Improving Speculative Language Detection using Linguistic Knowledge*
Guillermo Moncecchi, Jean-Luc Minel and Dina Wonsever

12:00 *Bridging the Gap Between Scope-based and Event-based Negation/Speculation Annotations: A Bridge Not Too Far*
Pontus Stenetorp, Sampo Pyysalo, Tomoko Ohta, Sophia Ananiadou and Jun'ichi Tsujii

12:30 Lunch

Friday July 13, 2012 (continued)

Afternoon session

- 14:00 PASCAL2 Invited talk by Bonnie Webber: Alternatives and Extra-Propositional Meaning
- 15:00 *Statistical Modality Tagging from Rule-based Annotations and Crowdsourcing*
Vinodkumar Prabhakaran, Michael Bloodgood, Mona Diab, Bonnie Dorr, Lori Levin,
Christine D. Piatko, Owen Rambow and Benjamin Van Durme
- 15:30 Coffee break
- 16:00 *Annotating the Focus of Negation in terms of Questions Under Discussion*
Pranav Anand and Craig Martell
- 16:30 *Hedge Detection as a Lens on Framing in the GMO Debates: A Position Paper*
Eunsol Choi, Chenhao Tan, Lillian Lee, Cristian Danescu-Niculescu-Mizil and Jennifer
Spindel
- 17:00 *Recognizing Arguing Subjectivity and Argument Tags*
Alexander Conrad, Janyce Wiebe and Rebecca Hwa
- 17:30 Discussion