ACL 2016

# The 54th Annual Meeting of the Association for Computational Linguistics

# Proceedings of the 12th Workshop on Multiword Expressions (MWE'2016)

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## Introduction

The 12th Workshop on Multiword Expressions (MWE'2016) took place on August 11, 2016 in Berlin, Germany, in conjunction with the 54th Annual Meeting of the Association for Computational Linguistics (ACL'2016) and was endorsed by the Special Interest Group on the Lexicon of the Association for Computational Linguistics (SIGLEX), as well as by the SIGLEX Section dedicated to the study and research of Multiword Expressions (SIGLEX-MWE).

The workshop has been held almost every year since 2003, in conjunction with ACL, EACL, NAACL, COLING, and LREC. It is the main venue of the field for interaction, sharing of resources and tools and collaboration efforts for advancing the computational treatment of Multiword Expressions (MWEs), attracting the attention of an ever-growing community from all around the world working on a variety of languages and MWE types.

MWEs include idioms (*storm in a teacup, sweep under the rug*), fixed phrases (*in vitro, by and large*), noun compounds (*olive oil, laser printer*), compound verbs (*take a nap, bring about*), among others. These, while easily mastered by native speakers, are a key issue and a current weakness for natural language parsing and generation, as well as for real-life applications that require some degree of semantic interpretation, such as machine translation, just to name a prominent one among many. However, thanks to the joint efforts of researchers from several fields working on MWEs, significant progress has been made in recent years, especially concerning the construction of large-scale language resources. For instance, there is a large number of recent papers that focus on the acquisition of MWEs from corpora, and others that describe a variety of techniques to find paraphrases for MWEs. Current methods use a plethora of tools such as association measures, machine learning, syntactic patterns, web queries, etc.

In the call for papers, we solicited submissions about major challenges in the overall process of MWE treatment, both from a theoretical and a computational viewpoint, focusing on original research related (but not limited) to the following topics:

- Lexicon-grammar interface for MWEs
- Parsing techniques for MWEs
- Hybrid parsing of MWEs
- Annotating MWEs in treebanks
- MWEs in Machine Translation and Translation Technology
- Manually and automatically constructed resources
- Representation of MWEs in dictionaries and ontologies
- MWEs and user interaction
- Multilingual acquisition
- Multilingualism and MWE processing
- Models of first and second language acquisition of MWEs
- Crosslinguistic studies on MWEs
- The role of MWEs in the domain adaptation of parsers
- Integration of MWEs into NLP applications
- Evaluation of MWE treatment techniques
- Lexical, syntactic or semantic aspects of MWEs

Submission modalities included long papers and short papers. From a total of 49 submissions, we accepted 4 long papers for oral presentation. We further accepted 5 short papers for oral presentation and another 8 short papers as posters. Thus the total number of accepted papers is 18, or an overall acceptance rate of 37%.

## Acknowledgements

We would like to thank the members of the Program Committee for the timely reviews and the authors for their valuable contributions.

Valia Kordoni, Kostadin Cholakov, Markus Egg, Stella Markantonatou, Preslav Nakov Co-Organizers

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### **Conference Program**

#### Thursday, 11 August 2016

00.50 07.00 Opening remains	08:50-09:00	<b>Opening remarks</b>
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#### **Oral Session 1**

- 09:00–09:30 *Learning Paraphrasing for Multiword Expressions* Seid Muhie Yimam, Héctor Martínez Alonso, Martin Riedl and Chris Biemann
- 09:30–10:00 *Exploring Long-Term Temporal Trends in the Use of Multiword Expressions* Tal Daniel and Mark Last
- 10:00–10:30 Lexical Variability and Compositionality: Investigating Idiomaticity with Distributional Semantic Models Marco Silvio Giuseppe Senaldi, Gianluca E. Lebani and Alessandro Lenci
- 10:30–11:00 Coffee Break

#### **Oral Session 2**

- 11:00–11:20 Filtering and Measuring the Intrinsic Quality of Human Compositionality Judgments
  Carlos Ramisch, Silvio Cordeiro and Aline Villavicencio
- 11:20–11:40 *Graph-based Clustering of Synonym Senses for German Particle Verbs* Moritz Wittmann, Marion Weller-Di Marco and Sabine Schulte im Walde
- 11:40–12:00 *Accounting ngrams and multi-word terms can improve topic models* Michael Nokel and Natalia Loukachevitch
- 12:00–13:00 Invited Talk
- 13:00-14:00 Lunch

#### Thursday, 11 August 2016 (continued)

#### 14:00–14:40 Poster Booster Session (5 minutes per poster)

*Top a Splitter: Using Distributional Semantics for Improving Compound Splitting* Patrick Ziering, Stefan Müller and Lonneke van der Plas

Using Word Embeddings for Improving Statistical Machine Translation of Phrasal Verbs

Kostadin Cholakov and Valia Kordoni

Modeling the Non-Substitutability of Multiword Expressions with Distributional Semantics and a Log-Linear Model Meghdad Farahmand and James Henderson

*Phrase Representations for Multiword Expressions* Joël Legrand and Ronan Collobert

*Representing Support Verbs in FrameNet* Miriam R L Petruck and Michael Ellsworth

Inherently Pronominal Verbs in Czech: Description and Conversion Based on Treebank Annotation Zdenka Uresova, Eduard Bejček and Jan Hajic

Using collocational features to improve automated scoring of EFL texts Yves Bestgen

A study on the production of collocations by European Portuguese learners Angela Costa, Luísa Coheur and Teresa Lino

#### Thursday, 11 August 2016 (continued)

14:40–15:30 Poster Session

15:30–16:00 Coffee Break

#### **Oral Session 3**

- 16:00–16:30 Extraction and Recognition of Polish Multiword Expressions using Wikipedia and Finite-State Automata Paweł Chrząszcz
- 16:30–16:50 *Impact of MWE Resources on Multiword Recognition* Martin Riedl and Chris Biemann
- 16:50–17:10 *A Word Embedding Approach to Identifying Verb-Noun Idiomatic Combinations* Waseem Gharbieh, Virendra Bhavsar and Paul Cook
- 17:10–17:20 Closing Remarks