MWE 2021

# The 17th Workshop on Multiword Expressions

**Proceedings of the Workshop** 

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## Introduction

The MWE 2021 workshop (MWE 2021)<sup>1</sup> took place in an online format on August 6, 2021 in conjunction with ACL-IJCNLP  $2021^2$ . This was the 17th edition of the Workshop on Multiword Expressions (MWE 2021). The event was organized and sponsored by the Special Interest Group on the Lexicon (SIGLEX)<sup>3</sup> of the Association for Computational Linguistics (ACL).

Multiword expressions (MWEs) are word combinations, such as *in the middle of nowhere*, *hot dog, to make a decision* or *to kick the bucket*, displaying lexical, syntactic, semantic, pragmatic and/or statistical idiosyncrasies. Because of their unpredictable behavior, notably their non-compositional semantics, MWEs pose problems in linguistic modelling (e.g. treebank annotation, grammar engineering), Natural Language Processing (NLP) pipelines (in particular when orchestrated with parsing), and end-user NLP applications such as natural language understanding, machine translation, information extraction, and social media mining.

The special topic in this edition was the role of MWEs in end-user applications. On the one hand, the PARSEME shared tasks (Ramisch et al. 2020<sup>4</sup>, Ramisch et al. 2018<sup>5</sup>, Savary et al. 2017<sup>6</sup>), among others, fostered significant progress in MWE identification, providing datasets, evaluation measures and tools that now allow fully integrating MWE identification into end-user applications. On the other hand, NLP seems to be shifting towards end-to-end neural models capable of solving complex end-user tasks with little or no intermediary linguistic symbols, questioning the extent to which MWEs should be implicitly or explicitly modelled. Therefore, one goal of this workshop was to bring together and encourage researchers in various NLP subfields to submit MWE-related research, so that approaches that deal with MWEs in various applications could benefit from each other.

## **Traditional MWE topics**

- Computationally-applicable theoretical work on MWEs and constructions in psycholinguistics and corpus linguistics
- MWE and construction annotation and representation in resources such as corpora, treebanks, elexicons and WordNets
- Processing of MWEs and constructions in syntactic and semantic frameworks (e.g. CCG, CxG, HPSG, LFG, TAG, UD, etc.)
- Discovery and identification methods for MWEs and constructions
- MWEs and constructions in language acquisition, language learning, and non-standard language (e.g. tweets, speech)
- Evaluation of annotation and processing techniques for MWEs and constructions
- Retrospective comparative analyses from the PARSEME shared tasks on automatic identification of MWEs

## Topics on MWEs and end-user applications

• Processing of MWEs and constructions in end-user applications (e.g. MT, NLU, summarisation, social media mining, computer assisted language learning)

<sup>&</sup>lt;sup>1</sup>https://multiword.org/mwe2021/

<sup>&</sup>lt;sup>2</sup>https://2021.aclweb.org/

<sup>&</sup>lt;sup>3</sup>https://siglex.org/

<sup>&</sup>lt;sup>4</sup>https://www.aclweb.org/anthology/2020.mwe-1.14/

<sup>&</sup>lt;sup>5</sup>https://www.aclweb.org/anthology/W18-4925/

<sup>&</sup>lt;sup>6</sup>https://www.aclweb.org/anthology/W17-1704/

- Implicit and explicit representation of MWEs and constructions in end-user applications
- Evaluation of end-user applications concerning MWEs and constructions
- Resources and tools for MWEs and constructions (e.g. lexicons, identifiers) in end-user applications

Pursuing the MWE Section's tradition of synergies with other communities and in accordance with ACL-IJCNLP 2021's theme track on NLP for social good, a joint discussion panel was organized with the Workshop on Online Abuse and Harm (WOAH)<sup>7</sup>.

This year, we received 19 submissions, among which 7 were accepted for presentation. The overall acceptance rate was 36%. In addition to the presentations, the workshop featured an invited talk that was given by Vered Shwartz, University of Washington.

We are grateful to the paper authors for their valuable contributions, the members of the Program Committee for their thorough and timely reviews, all members of the organizing committee for the fruitful collaboration, and all the workshop participants for their interest in this event. Our thanks also go to the ACL-IJCNLP 2021 organizers for their support, as well as to SIGLEX for their endorsement.

Paul Cook, Jelena Mitrović, Carla Parra Escartín, Ashwini Vaidya, Petya Osenova, Shiva Taslimipoor, Carlos Ramisch

<sup>&</sup>lt;sup>7</sup>https://www.workshopononlineabuse.com/

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## **Invited Speaker**

Vered Shwartz, University of Washington

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## Workshop Program

## August 6, 2021

[All times are in CEST (UTC+2)]

14:00-14:10	Welcome and Preparation
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## 14:10–15:50 Session 1: Long Papers

- 14:10–14:30 *Where Do Aspectual Variants of Light Verb Constructions Belong?* Aggeliki Fotopoulou, Eric Laporte and Takuya Nakamura
- 14:30–14:50 *Data-driven Identification of Idioms in Song Lyrics* Miriam Amin, Peter Fankhauser, Marc Kupietz and Roman Schneider
- 14:50–15:10 (From Findings of ACL 2021) Transforming Term Extraction: Transformer-Based Approaches to Multilingual Term Extraction Across Domains Christian Lang, Lennart Wachowiak, Barbara Heinisch, Dagmar Gromann
- 15:10–15:30 Contextualized Embeddings Encode Monolingual and Cross-lingual Knowledge of Idiomaticity Samin Fakharian and Paul Cook
- 15:30–15:50 *PIE: A Parallel Idiomatic Expression Corpus for Idiomatic Sentence Generation and Paraphrasing* Jianing Zhou, Hongyu Gong and Suma Bhat
- 15:50-16:05 Break

## 16:05–17:05 Invited Talk

- 16:05–17:05 *A Long Hard Look at MWEs in the Age of Language Models* Vered Shwartz
- 17:05-17:20 Break

#### 17:20–18:05 Session 2: Short Papers

- 17:20–17:35 *Lexical Semantic Recognition* Nelson F. Liu, Daniel Hershcovich, Michael Kranzlein and Nathan Schneider
- 17:35–17:50 *Finding BERT's Idiomatic Key* Vasudevan Nedumpozhimana and John Kelleher
- 17:50–18:05 Light Verb Constructions and Their Families A Corpus Study on German 'stehen unter'-LVCs Jens Fleischhauer

#### 18:05-18:20 Break

August 6, 2021 (continued)

- 18:20–19:00 Joint session with WOAH
- 19:00–19:20 Community discussion