

The 21st Workshop on Multiword Expressions (MWE 2025)

**Proceedings of the Workshop** 

The MWE organizers gratefully acknowledge the support from the following organizations.

## Gold



©2025 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 979-8-89176-243-5

#### Introduction

The 21st Workshop on Multiword Expressions (MWE 2025) took place on May 4, 2025, in Albuquerque, New Mexico, USA, and online, as a satellite event of the 2025 Annual Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics (NAACL 2025). The workshop was organized and sponsored by the Special Interest Group on the Lexicon (SIGLEX) (http://www.siglex.org) of the Association for Computational Linguistics (ACL)(https://www.aclweb.org/portal/).

The notion of multiword expressions (MWEs), i.e., word combinations that exhibit lexical, syntactic, semantic, pragmatic, and/or statistical idiosyncrasies, encompasses closely related phenomena: idioms, compounds, light-verb constructions, phrasal verbs, rhetorical figures, collocations, institutionalized phrases, etc. Given their irregular nature, MWEs often pose complex problems in linguistic modeling (e.g. annotation), NLP tasks (e.g. parsing), and end-user applications (e.g. natural language understanding and Machine Translation), hence still representing an open issue for computational linguistics.

For this 21st edition of the workshop, our call for papers focused particularly on the following topics:

- MWE processing to enhance end-user applications;
- MWE processing and identification in the general language, as well as in specialized languages and domains;
- MWE processing in low-resourced languages;
- MWE identification and interpretation in LLMs
- new and enhanced representation of MWEs in language resources and computational models of compositionality as gold standards for formative intrinsic evaluation.

For this edition, all submitted papers were peer-reviewed by international experts and 75% of the submitted papers were accepted. Barbu Mititelu et al. paints the current state of the art of MWE lexica designed for NLP purposes. A diachronic perspective is adopted by Alves et al. when investigating the syntagmatic productivity of MWEs in English scientific writing.

The interest in endangered and low-resourced languages is still visible in the papers that report the development of new resources, dedicated to such languages. Thus, the paper authored by Adkins et al. focuses on Irish and on the recognition of named entities in this language, for which a tool is developed, while also producing a small gold-standard corpus annotated with named entities. Galician is the language for which a dataset of 240 ambiguous noun-adjective MWEs, contextualized in two sets of sentences, is manually rated for compositionality at token level, being also added information about frequency, ambiguity, and productivity. Markantonatou et al. propose the first Standard Modern Greek Universal Dependencies treebank annotated with Verbal MWEs, while also using it to evaluate the performance of models in MWEs identification tasks. A new resource for European Portuguese, namely a corpus annotated for verbal idioms, is reported by Antunes et al.

The development of multilingual resources is also an area of research represented in this workshop: Sentsova et al. introduce MultiCoPIE, a multilingual corpus of potentially idiomatic expressions in Catalan, Italian, and Russian, as well as the cross-lingual transfer of the potentially idiomatic expressions disambiguation task from English to the three languages in this new resource.

LLMs are found in several tasks: Kissane et al. examine how LLMs capture lexical and syntactic properties of phrasal verbs and prepositional verbs at different neural network layers. Adkins et al. compare both monolingual and multilingual BERT models fine-tuned on named entity recognition task. LLMs are also used to generate synthetic idiom datasets and to evaluate their effectiveness in training task-specific models for idiomaticity detection.

Verginica Barbu Mititelu, Mathieu Constant, A. Seza Doğruöz, Voula Giouli, Gražina Korvel, Atul Kr. Ojha, Alexandre Rademaker (MWE-2025 Organizers and Co-Chairs)

## **Organizing Committee**

#### **Workshop Chairs**

Mathieu Constant, Université de Lorraine, CNRS, ATILF

A. Seza Doğruöz, Ghent University

Voula Giouli, Aristotle University of Thessaloniki and ILSP - "Athena" Research Center

Gražina Korvel, Vilnius University

Verginica Barbu Mititelu, Romanian Academy Research Institute for Artificial Intelligence

Atul Kr. Ojha, Insight Research Ireland Centre for Data Analytics, DSI, University of Galway,

Ireland and Panlingua Languague Processing LLP, India

Alexandre Rademaker, School of Applied Mathematics of Getulio Vargas Foundation

#### **Program Committee**

Agata Savary, Université Paris-Saclay

Beata Trawinski, Leibniz Institute for the German Language

Carlos Ramisch, LIS - Laboratoire d'Informatique et Systèmes

Chikara Hashimoto, Rakuten Institute of Technology

Cvetana Krstev, University of Belgrade, Faculty of Philology

Eric G C Laporte, Université Gustave Eiffel

Francis Bond, Palacký University Olomouc

Gaël Dias, University of Caen Normandy

Gražina Korvel, Vilnius University

Irina Lobzhanidze, Ilia Chavchavadze State University

Ismail El Maarouf, Imprevicible

Ivelina Stoyanova, Deaf Studies Institute

Jan Odijk, Utrecht University

John Philip McCrae, University of Galway

Kenneth Church, Northeastern University

Manfred Sailer, Johann Wolfgang Goethe Universität Frankfurt am Main

Mathieu Constant, Université de Lorraine, CNRS, ATILF

Matthew Shardlow, The Manchester Metropolitan University

Meghdad Farahmand, University of Genoa

Miriam Butt, Universität Konstanz

Paul Cook, University of New Brunswick

Pavel Pecina, Charles University

Petya Osenova, Sofia University St. Kliment Ohridski

Ranka Stanković Stanković, University of Belgrade

Sabine Schulte im Walde, University of Stuttgart

Shiva Taslimipoor, University of Cambridge

Stan Szpakowicz, University of Ottawa

Stella Markantonatou, ATHENA RIC

Tiberiu Boros, Adobe Systems

Tunga Gungor, Bogazici University

# **Keynote Talk: Meaning Construction at the Syntax-Lexis Nexus**

#### **Nathan Schneider**

Associate Professor of Linguistics and Computer Science at Georgetown University (USA)

**Abstract:** When words and grammar come into contact, things sometimes get messy: idiosyncratic expressions and patterns disobey ordinary principles of regularity and compositionality. A useful point of reference is the theoretical perspective of Construction Grammar, which exhorts us to view linguistic knowledge in terms of form-function mappings—at all levels of granularity. How can this perspective inform a broad-coverage, multilingual approach to lexicosyntactic conundrums? First, I will discuss implications for corpus annotation: while some multiword expressions and names (e.g. "at least", "in order to", "Chapter 1") test the limits of categorical annotation standards like Universal Dependencies, UD treebanks nevertheless enable empirical investigation of some functionally-defined constructions across languages. Second, I will discuss efforts to interpret the latent representations of constructional form and meaning in transformer language models, with the NPN construction (noun-preposition-noun, as in "face to face") as a case study.

**Bio:** Nathan Schneider is a computational linguist. As Associate Professor of Linguistics and Computer Science at Georgetown University, he leads the NERT lab, looking for synergies between practical language technologies and the scientific study of language, with an emphasis on how words, grammar, and context conspire to convey meaning. He is the recipient of an NSF CAREER award to study NLP vis-à-vis metalinguistic enterprises like language learning, linguistics, and legal interpretation. Recently, he has weighed in on specific interpretive debates in U.S. law; one of these analyses was cited by U.S. Supreme Court justices in a major firearms case. He is active in the NLP community—especially ACL's SIGANN and SIGLEX—and the Universal Dependencies project; and cofounded the SOLID forum for empirical research on legal interpretation. Prior to Georgetown, he inhabited UC Berkeley, Carnegie Mellon University, and the University of Edinburgh. Apart from annotation scheming and computational modeling, he enjoys classical music and chocolate chip cookies.

# **Table of Contents**

Syntagmatic Productivity of MWEs in Scientific English Diego Alves, Stefan Fischer and Elke Teich	1
Probing Internal Representations of Multi-Word Verbs in Large Language Models  Hassane Kissane, Achim Schilling and Patrick Krauss	7
WWE identification with models trained on GUD (a UDv.2 treebank of Standard Modern Greek) Stella Markantonatou, Vivian Stamou, Stavros Bompolas, Katerina Anastasopoulou, Irianna I aki Vasileiadi, Konstantinos Diamantopoulos, Yannis Kazos and Antonios Anastasopoulos	Linar-
Using LLMs to Advance Idiom Corpus Construction  Doğukan Arslan, Hüseyin Anıl Çakmak, Gulsen Eryigit and Joakim Nivre	21
Gathering Compositionality Ratings of Ambiguous Noun-Adjective Multiword Expressions in Gal Laura Castro and Marcos Garcia	
Urvey on Lexical Resources Focused on Multiword Expressions for the Purposes of NLP  Verginica Mititelu, Voula Giouli, Gražina Korvel, Chaya Liebeskind, Irina Lobzhanidze, Rus Makhachashvili, Stella Markantonatou, Aleksandra Markovic and Ivelina Stoyanova	
European Portuguese corpus annotated for verbal idioms  David Antunes, Jorge Baptista and Nuno J. Mamede	58
AultiCoPIE: A Multilingual Corpus of Potentially Idiomatic Expressions for Cross-lingual PIE Di iguation  Uliana Sentsova, Debora Ciminari, Josef Van Genabith and Cristina España-Bonet	
Jamed Entity Recognition for the Irish Language  Jane Adkins, Hugo Collins, Joachim Wagner, Abigail Walsh and Brian Davis	82

### **Program**

#### Sunday, May 4, 2025

09:15 - 09:30	Welcome and Introduction to 21st MWE Workshop
09:30 - 10:30	Invited Talk
10:30 - 11:00	Coffee Break
11:00 - 12:30	Oral Session-I

Survey on Lexical Resources Focused on Multiword Expressions for the Purposes of NLP

Verginica Mititelu, Voula Giouli, Gražina Korvel, Chaya Liebeskind, Irina Lobzhanidze, Rusudan Makhachashvili, Stella Markantonatou, Aleksandra Markovic and Ivelina Stoyanova

#### Named Entity Recognition for the Irish Language

Jane Adkins, Hugo Collins, Joachim Wagner, Abigail Walsh and Brian Davis

Gathering Compositionality Ratings of Ambiguous Noun-Adjective Multiword Expressions in Galician

Laura Castro and Marcos Garcia

VMWE identification with models trained on GUD (a UDv.2 treebank of Standard Modern Greek)

Stella Markantonatou, Vivian Stamou, Stavros Bompolas, Katerina Anastasopoulou, Irianna Linardaki Vasileiadi, Konstantinos Diamantopoulos, Yannis Kazos and Antonios Anastasopoulos

12:30 - 14:00 Lunch

14:00 - 15:00 *Oral Session-II* 

A European Portuguese corpus annotated for verbal idioms

David Antunes, Jorge Baptista and Nuno J. Mamede

MultiCoPIE: A Multilingual Corpus of Potentially Idiomatic Expressions for Cross-lingual PIE Disambiguation

Uliana Sentsova, Debora Ciminari, Josef Van Genabith and Cristina España-Bonet

Probing Internal Representations of Multi-Word Verbs in Large Language Models Hassane Kissane, Achim Schilling and Patrick Krauss

## Sunday, May 4, 2025 (continued)

	Syntagmatic Productivity of MWEs in Scientific English Diego Alves, Stefan Fischer and Elke Teich
15:30 - 16:00	Coffee Break
16:00 - 18:00	Oral Session III, panel and community discussion
	Using LLMs to Advance Idiom Corpus Construction  Doğukan Arslan, Hüseyin Anıl Çakmak, Gulsen Eryigit and Joakim Nivre
16:21 - 17:20	Panel: Tokenization in the era of LLMs
17:21 - 17:50	Community discussion
17:51 - 18:00	Best Paper Awards and Concluding Remarks