



## Annotation of Multiword Expressions for Hate Speech Identification in the Domain of Sports over Social Media

Panagiotis Grigoriadis

Aristotle University of Thessaloniki, GREECE



ARISTOTLE UNIVERSITY  
OF THESSALONIKI



Τμήμα  
Γερμανικής Γλώσσας  
και Φιλολογίας  
ΦΙΛΟΣΟΦΙΚΗ ΣΧΟΛΗ

Abteilung  
für Deutsche Sprache  
und Philologie  
PHILOSOPHISCHE FAKULTÄT

### Goals

- To compare manifestation of hate speech in Greek and German by taking content over social media platforms into account.
- To enrich newswire texts that already exist in PARSEME.
- To create a corpus of hate speech annotated with Multiword Expressions (MWEs) extracted from the studied languages & develop models for automatic hate speech identification
- To extract a bilingual lexicon of hate speech expressions.

### Theoretical Background

- Multiword Expressions (MWEs) are lexical items characterized by lexical, syntactic, semantic, pragmatic or statistical idiosyncrasies
- Pervasive cross-linguistic phenomenon.
- Intense sentimental states of hate and intolerance lead to hate speech and violent practices.
- MWEs resonate with Computational Linguistics: corpora and tools exist since the early 80s and aim to achieve a systematic representation of MWES.
- Hate speech is not always confined to a single word with an explicitly negative / hateful meaning => hate speech detection should also be searched for in expressions or words of larger length.

### Corpus Description

Comparable corpus (EL – DE)  
Social media discourse  
Domain: Sports  
Manually extracted sentences  
ConLL-U format  
Sources: X, Facebook

#### The corpus in numbers:

Greek: 200 sentences, 1.649 words  
German: 150 sentences, 1.056 words

### Examples with MWEs

EL: **Θα το πάρω το διπλό!**  
**I will take it the double!**  
*lit. I will get the double!*  
Παοκάρρα, **έχω τρέλα μεσ' στο μυαλό!**  
Paokara, **I have craziness in my mind!**  
*lit. Big PAOK, I have totally lost it!*

DE: **Mach's gut** Leierkastenmann!  
**Do it well** Organ Grinder!  
*lit. Take care* Organ Grinder!  
Die Kurve geht weiter **mit breiter Brust!**  
The curve goes on **with a broad breast!**  
*lit. The curve goes on with great self-confidence!*

### Modelling Hate Speech

- Profanity / Offensive Speech  
EL: Δεν είστε οπαδοί, είστε δολοφόνοι και **πOUT@V@ς γιοι!**  
You are not fans, you are murderers and **a whore's sons!**  
*lit. You are not fans, you are murderers and sons of a bitch!*  
DE: **Die hässlichen Fratzen** des Fußballs  
**The ugly faces** of football.  
*lit. The ugly faces* of football.
- Threats / Hate Speech  
EL: Τούρκοι μούλοι, **θα σας φάμε το μεδούλι!**  
Turks crazy, **we will eat you the marrow!**  
*lit. You crazy turks, we will tear you apart!*  
DE: **Wir hacken euch die Beine ab!**  
**We will break you the legs!**  
*lit. We will break your legs!*
- Irony / Offensive Speech  
EL: **Στις αντιγραφές είστε καλές,** Τούρκοι αδερφές!  
**At rewriting you are good,** Turks sisters!  
*lit. You master the art of rewriting, gay Turks!*  
DE: **Dumm gegen doof!**  
**Stupid vs. idiot!**  
*lit. Stupid vs. idiot!*