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## **Foreword**

This eighth meeting of the international Wordnet community coincides with the 15th anniversary of the Global WordNet Association and the 30th anniversary of the Princeton WordNet. We are delighted to welcome old and new colleagues from many countries and four continents who construct wordnets, ontologies and related tools, as well as colleagues who apply such resources in a wide range of Natural Language Applications or pursue research in lexical semantics.

The number of wordnets has risen to over 150 and includes – besides all the major world languages – many less-studied languages such as Albanian and Nepali. Wordnets have become a principal tool in computational linguistics and NLP, and *wordnet*, *SemCor* and *synset* have entered the language as common nouns. Coming together and sharing some of the results of our work is an important part of the larger collaborative effort to better understand both universal and particular properties of human languages.

Many people have donated their time and effort to make this meeting possible: the review committee, the local organizers and their helpers (Eric Curea, Maria Mitrofan, Elena Irimia), our sponsors (PIM, QATAR Airways, Oxford University Press), EasyChair and our host, the Romanian Academy. Above all, thanks go to you, the contributors, for traveling to Bucharest to present your work, listen and discuss.

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Jan 2016

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### **Invited Speakers:**

Erhard Hinrichs, University of Tübingen

## Invited Talks

### **Erhard Hinrichs: The Awful German Language: How to cope with the Semantics of Nominal Compounds in GermaNet and in Natural Language Processing**

The title for my presentation borrows from Mark Twain’s well-known 1880 essay “The Awful German Language”, where Twain cites pervasive nominal compounding in German as one of the pieces of evidence for the “awfulness” of the language. Two much cited examples of noun compounds that are included in the Duden dictionary of German are Kraftfahrzeughaftpflichtversicherung (‘motor car liability insurance’) and Donaudampfschiffahrtsgesellschaft (‘Danube steamboat shipping company’). Any dictionary of German, including the German wordnet GermaNet, has to offer an account of such compound words. Currently, GermaNet contains more than 55,000 nominal compounds. As the coverage of nouns in GermaNet is extended, new noun entries are almost always compounds.

In this talk I will present an account of how to model nominal compounds in GermaNet with particular focus on the semantic relations that hold between the constituents of a compound, e.g., the WHOLE-PART relation in the case of Roboterarm (‘robot arm’) or the LOCATION relation in the case of Berghütte (‘mountain hut’). This account, developed jointly with Reinhild Barkey, Corina Dima, Verena Henrich, Christina Hoppermann, and Heike Telljohann, borrows heavily from previous research on semantic relations in theoretical linguistics, psycholinguistics, and computational linguistics.

The second part of the talk will focus on using the semantic modelling of nominal compounds in a word net for the automatic classification of semantic relations for (novel) compound words. Here, I will present the results of recent collaborative work with Corina Dima and Daniil Sorokin, using machine learning techniques such as support vector machines as well as deep neural network classifiers and a variety of publicly available word-embeddings, which have been developed in the framework of distributional semantics.

## Table of Contents

<b>Adverbs in Sanskrit Wordnet . . . . .</b>	<b>1</b>
<i>Tanuja Ajotikar and Malhar Kulkarni</i>	
<b>Word Sense Disambiguation in Monolingual Dictionaries for Building Russian WordNet . . . . .</b>	<b>9</b>
<i>Daniil Alexeyevsky and Anastasiya V. Temchenko</i>	
<b>Playing Alias - efficiency for wordnet(s) . . . . .</b>	<b>15</b>
<i>Sven Aller, Heili Orav, Kadri Vare and Sirli Zupping</i>	
<b>Detecting Most Frequent Sense using Word Embeddings and BabelNet . . . . .</b>	<b>21</b>
<i>Harpreet Singh Arora, Sudha Bhingardive and Pushpak Bhattacharyya</i>	
<b>Problems and Procedures to Make Wordnet Data (Retro)Fit for a Multilingual Dictionary . . . . .</b>	<b>26</b>
<i>Martin Benjamin</i>	
<b>Ancient Greek WordNet Meets the Dynamic Lexicon: the Example of the Fragments of the Greek Historians . . . . .</b>	<b>34</b>
<i>Monica Berti, Yuri Bizzoni, Federico Boschetti, Gregory R. Crane, Riccardo Del Gratta and Tariq Yousef</i>	
<b>IndoWordNet::Similarity- Computing Semantic Similarity and Relatedness using IndoWordNet . .</b>	<b>39</b>
<i>Sudha Bhingardive, Hanumant Redkar, Prateek Sappadla, Dhirendra Singh and Pushpak Bhattacharyya</i>	
<b>Multilingual Sense Intersection in a Parallel Corpus with Diverse Language Families . . . . .</b>	<b>44</b>
<i>Giulia Bonansinga and Francis Bond</i>	
<b>CILI: the Collaborative Interlingual Index . . . . .</b>	<b>50</b>
<i>Francis Bond, Piek Vossen, John McCrae and Christiane Fellbaum</i>	
<b>YARN: Spinning-in-Progress . . . . .</b>	<b>58</b>
<i>Pavel Braslavski, Dmitry Ustalov, Mikhail Mukhin and Yuri Kiselev</i>	
<b>Word Substitution in Short Answer Extraction: A WordNet-based Approach . . . . .</b>	<b>66</b>
<i>Qingqing Cai, James Gung, Maochen Guan, Gerald Kurlandski and Adam Pease</i>	
<b>An overview of Portuguese WordNets . . . . .</b>	<b>74</b>
<i>Valeria de Paiva, Livy Real, Hugo Gonçalo Oliveira, Alexandre Rademaker, Cláudia Freitas and Alberto Simões</i>	
<b>Towards a WordNet based Classification of Actors in Folktales . . . . .</b>	<b>83</b>
<i>Thierry Declerck, Tyler Klement and Antonia Kostova</i>	
<b>Extraction and description of multi-word lexical units in plWordNet 3.0 . . . . .</b>	<b>88</b>
<i>Agnieszka Dziob and Michał Wendelberger</i>	
<b>Establishing Morpho-semantic Relations in FarsNet (a focus on derived nouns) . . . . .</b>	<b>93</b>
<i>Nasim Fakoornia and Negar Davari Ardakani</i>	
<b>Using WordNet to Build Lexical Sets for Italian Verbs . . . . .</b>	<b>101</b>
<i>Anna Feltracco, Lorenzo Gatti, Elisabetta Jezek, Bernardo Magnini and Simone Magnolini</i>	
<b>A Taxonomic Classification of WordNet Polysemy Types . . . . .</b>	<b>106</b>
<i>Abed Alhakim Freihat, Fausto Giunchiglia and Biswanath Dutta</i>	
<b>Some strategies for the improvement of a Spanish WordNet . . . . .</b>	<b>115</b>
<i>Matias Herrera, Javier Gonzalez, Luis Chiruzzo and Dina Wonsever</i>	

<b>An Analysis of WordNet's Coverage of Gender Identity Using Twitter and The National Transgender Discrimination Survey</b>	123
<i>Amanda Hicks, Michael Rutherford, Christiane Fellbaum and Jiang Bian</i>	
<b>Where Bears Have the Eyes of Currant: Towards a Mansi WordNet</b>	131
<i>Csilla Horváth, Ágoston Nagy, Norbert Szilágyi and Veronika Vincze</i>	
<b>WNspell: a WordNet-Based Spell Corrector</b>	136
<i>Bill Huang</i>	
<b>Sophisticated Lexical Databases - Simplified Usage: Mobile Applications and Browser Plugins For Wordnets</b>	144
<i>Diptesh Kanojia, Raj Dabre and Pushpak Bhattacharyya</i>	
<b>A picture is worth a thousand words: Using OpenClipArt library for enriching IndoWordNet</b>	150
<i>Diptesh Kanojia, Shehzaad Dhuliawala and Pushpak Bhattacharyya</i>	
<b>Using Wordnet to Improve Reordering in Hierarchical Phrase-Based Statistical Machine Translation</b>	155
<i>Arefeh Kazemi, Antonio Toral and Andy Way</i>	
<b>Eliminating Fuzzy Duplicates in Crowdsourced Lexical Resources</b>	162
<i>Yuri Kiselev, Dmitry Ustalov and Sergey Porshnev</i>	
<b>Automatic Prediction of Morphosemantic Relations</b>	169
<i>Svetla Koeva, Svetlozara Leseva, Ivelina Stoyanova, Tsvetana Dimitrova and Maria Todorova</i>	
<b>Tuning Hierarchies in Princeton WordNet</b>	178
<i>Ahti Lohk, Christiane Fellbaum and Leo Vohandu</i>	
<b>Experiences of Lexicographers and Computer Scientists in Validating Estonian Wordnet with Test Patterns</b>	185
<i>Ahti Lohk, Heili Orav, Kadri Vare and Leo Vohandu</i>	
<b>African WordNet: A Viable Tool for Sense Discrimination in the Indigenous African Languages of South Africa</b>	193
<i>Stanley Madonsela, Mampaka Lydia Mojapelo, Rose Masubelele and James Mafela</i>	
<b>An empirically grounded expansion of the supersense inventory</b>	199
<i>Hector Martinez Alonso, Anders Johannsen, Sanni Nimb, Sussi Olsen and Bolette Pedersen</i>	
<b>Adverbs in plWordNet: Theory and Implementation</b>	209
<i>Marek Maziarz, Stan Szpakowicz and Michal Kalinski</i>	
<b>A Language-independent Model for Introducing a New Semantic Relation Between Adjectives and Nouns in a WordNet</b>	218
<i>Miljana Mladenović, Jelena Mitrović and Cvetana Krstev</i>	
<b>Identifying and Exploiting Definitions in Wordnet Bahasa</b>	227
<i>David Moeljadi and Francis Bond</i>	
<b>Semantics of body parts in African WordNet: a case of Northern Sotho</b>	234
<i>Mampaka Lydia Mojapelo</i>	
<b>WME: Sense, Polarity and Affinity based Concept Resource for Medical Events</b>	243
<i>Anupam Mondal, Dipankar Das, Erik Cambria and Sivaji Bandyopadhyay</i>	
<b>Mapping and Generating Classifiers using an Open Chinese Ontology</b>	249

<i>Luis Morgado Da Costa, Francis Bond and Helena Gao</i>	
<i>IndoWordNet Conversion to Web Ontology Language (OWL)</i>	257
<i>Apurva Nagvenkar, Jyoti Pawar and Pushpak Bhattacharyya</i>	
<i>A Two-Phase Approach for Building Vietnamese WordNet</i>	261
<i>Thai Phuong Nguyen, Van-Lam Pham, Hoang-An Nguyen, Huy-Hien Vu, Ngoc-Anh Tran and Thi-Thu-Ha Truong</i>	
<i>Extending the WN-Toolkit: dealing with polysemous words in the dictionary-based strategy</i>	267
<i>Antoni Oliver</i>	
<i>A language-independent LESK based approach to Word Sense Disambiguation</i>	275
<i>Tommaso Petrolito</i>	
<i>plWordNet in Word Sense Disambiguation task</i>	282
<i>Maciej Piasecki, Paweł Kędzia and Marlena Orlińska</i>	
<i>plWordNet 3.0 – Almost There</i>	292
<i>Maciej Piasecki, Stan Szpakowicz, Marek Maziarz and Ewa Rudnicka</i>	
<i>Open Dutch WordNet</i>	302
<i>Marten Postma, Emiel van Miltenburg, Roxane Segers, Anneleen Schoen and Piek Vossen</i>	
<i>Verifying Integrity Constraints of a RDF-based WordNet</i>	311
<i>Alexandre Rademaker and Fabricio Chalub</i>	
<i>DEBVisDic: Instant Wordnet Building</i>	320
<i>Adam Rambousek and Ales Horak</i>	
<i>Samāsa-Kartā: An Online Tool for Producing Compound Words using IndoWordNet</i>	325
<i>Hanumant Redkar, Nilesh Joshi, Sandhya Singh, Irawati Kulkarni, Malhar Kulkarni and Pushpak Bhattacharyya</i>	
<i>Arabic WordNet: New Content and New Applications</i>	333
<i>Yasser Regragui, Lahsen Abouenour, Fettoum Krieche, Karim Bouzoubaa and Paolo Rosso</i>	
<i>Hydra for Web: A Browser for Easy Access to Wordnets</i>	342
<i>Borislav Rizov and Tsvetana Dimitrova</i>	
<i>Towards a methodology for filtering out gaps and mismatches across wordnets: the case of plWordNet and Princeton WordNet</i>	347
<i>Ewa Rudnicka, Wojciech Witkowski and Łukasz Grabowski</i>	
<i>Folktale similarity based on ontological abstraction</i>	355
<i>Marijn Schraagen</i>	
<i>The Predicate Matrix and the Event and Implied Situation Ontology: Making More of Events</i>	364
<i>Roxane Segers, Egoitz Laparra, Marco Rospocher, Piek Vossen, German Rigau and Filip Ilievski</i>	
<i>Semi-Automatic Mapping of WordNet to Basic Formal Ontology</i>	373
<i>Selja Seppälä, Amanda Hicks and Alan Ruttenberg</i>	
<i>Augmenting FarsNet with New Relations and Structures for verbs</i>	382
<i>Mehrnoosh Shamsfard and Yasaman Ghazanfari</i>	
<i>High, Medium or Low? Detecting Intensity Variation Among polar synonyms in WordNet</i>	389
<i>Raksha Sharma and Pushpak Bhattacharyya</i>	

<b>The Role of the WordNet Relations in the Knowledge-based Word Sense Disambiguation Task . . .</b>	<b>396</b>
<i>Kiril Simov, Alexander Popov and Petya Osenova</i>	
<b>Detection of Compound Nouns and Light Verb Constructions using IndoWordNet . . . . .</b>	<b>404</b>
<i>Dhirendra Singh, Sudha Bhingardive and Pushpak Bhattacharyya</i>	
<b>Mapping it differently: A solution to the linking challenges . . . . .</b>	<b>411</b>
<i>Meghna Singh, Rajita Shukla, Jaya Saraswati, Laxmi Kashyap, Diptesh Kanodia and Pushpak Bhattacharyya</i>	
<b>WordNet-based similarity metrics for adjectives . . . . .</b>	<b>419</b>
<i>Emiel van Miltenburg</i>	
<b>Toward a truly multilingual GlobalWordnet Grid . . . . .</b>	<b>424</b>
<i>Piek Vossen, Francis Bond and John McCrae</i>	
<b>This Table is Different: A WordNet-Based Approach to Identifying References to Document Entities</b>	<b>432</b>
<i>Shomir Wilson, Alan Black and Jon Oberlander</i>	
<b>WordNet and beyond: the case of lexical access . . . . .</b>	<b>441</b>
<i>Michael Zock and Didier Schwab</i>	