

II 45426

## Preface

Starting with the aim to implement semantic structure within the actual content of the World Wide Web, the "Semantic Web" activities recently attracted a large, significant and specialized research community consisting of computer scientists, computational linguists, logicians, knowledge and ontology specialists, programmers, e-commerce etc.

Semantic Web needs human language technology and human language technology will highly benefit from the Semantic Web. The first issue is based on the fact that the structure of the Semantic Web is realized by ontologies and their corresponding natural language designators, which, e.g., will mediate human cognition and real world situations. The latter is justified by the large number of interested on-line application fields like machine translation, information retrieval and text summarization, as well as natural language interfaces. These applications, for the moment, use empirical information retrieval methods for accessing support from the Web, but they lack genuine semantic information and sometimes still have minor quality compared to corresponding self contained and stand-alone systems with autonomous resources.

The development of ontologies for the Semantic Web, their search mechanisms, and the standard formal (e.g. RDF) annotation of large pieces of data on the web, are of high value for monolingual and multilingual natural language web-applications.

The current volume contains papers presented at the workshop "Applied Natural Language Processing - possible applications for the Semantic Web", by graduate and PhD students. This workshop is part of the EUROLAN 2003 Summer School „The Semantic Web and Language Technology“. The papers illustrate the deep interest of young researchers in one of the above sketched directions, like:

- Problems and solutions for multilingual ontologies (development of WordNet resources, semantic annotations, lexical acquisition for ontologies);
- On-line applications, which can be profitably linked to the Semantic Web (machine-translation, document indexing, language understanding)

The purpose of this volume is to give a wider audience to the young authors and to encourage other young researchers to pursue ideas of Semantic Web development.

Hamburg, July 2003

Walther v. Hahn  
Cristina Vertan