

## Preface

Natural Language Processing as a truly interdisciplinary scientific endeavour can be characterised by relationships of cross-fertilisation as well as relationships of tension between its parental disciplines. In the past, linguistic insights have always had a strong impact on the shape of the field, starting from formal models of grammar in the early fifties and extending to aspects of semantics, discourse and pragmatics later on. In some cases, this intellectual heritage seemed to be so influential that computational issues were almost neglected. On the other hand, Natural Language Processing was also driven by application demands which frequently led to ad hoc solutions sacrificing linguistic adequacy in favor of technical feasibility.

Nevertheless, over the years a fairly stable balance of discipline specific contributions seemed to have emerged. Given the largely unsolved problem of knowledge acquisition for NLP, however, more recently the move towards more and more technically-oriented aspects appears to gain additional strength. With the advent of Machine Learning techniques, meant to overcome this bottleneck, linguistic influence seems to diminish further and a considerable share of scientific contributions to the field already prefer to speak about "data" instead of "language".

On this background the serious question arises, whether in the years to come Natural Language Processing will be able to benefit from linguistic research in a way it did in the past. Could it be that linguistic contributions to the field are simply reduced to annotations of corpus data which are used for the training of different automated processing components? Or could we envisage instead the linguist playing the role of a system architect, who drives the basic design decisions drawing on deep insights into the complexities and the different aspects of the language system?

Walther von Hahn, in whose honour this book is published, has been a major contributor to the field of Natural Language Processing for almost three decades, where he successfully combines his linguistic expertise in the area of language for special purposes with his particular interest in computational solutions, which might help to improve human-to-human communication or could be used to ease our lives by making mechanical devices or knowledge repositories more easily accessible to the layman. He was the initiator of important research initiatives and, even more important, has always been a driving force to strengthen cross-fertilization between the disciplines involved. In this sense, the title of the symposium

### Natural Language Processing between Linguistic Inquiry and Systems Engineering

together with the different contributions to this volume give a good idea of the broad range of topics to which Walther von Hahn has actively contributed. By investing his far-reaching visions, his scientific expertise and his strong personal commitment he was one of the few who shaped the field from the early pioneering attempts to a mature and acknowledged area of scientific investigation and technological development.