

Preface

It was early in 2013 that we learnt that Michael Zock was retiring after more than 30 years of research. Retired? Michael? For those who have had the chance to know Michael, to work with him or just to share a little bit of his time (during a conference, a dinner, a coffee break, etc.) these two words together make no sense. Michael is a passionate and an experienced researcher, a trusted colleague with a stellar career, an untiring worker, a globetrotter fascinated by different cultures, and an easygoing man disseminating humanistic values wherever he goes.

It is thus a great pleasure and honor to present him this festschrift, *Language Production, Cognition, and the Lexicon*, on the occasion of his retirement. We, the editors, have tried to bring together well-known researchers whose contributions reflect Michael's interests at the crossroads of psycholinguistics, cognitive science, natural language processing, and computer science. We hope and believe that he will like the volume, which contains 30 chapters written by 49 authors from 16 countries on four continents, and that the book will lead to fruitful scientific interaction and exchange.

The volume is organized into six different parts, preceded by a personal and introductory chapter presenting Michael's career (by Mark T. Maybury). They include scientific papers grouped into specific domains at the intersection of theoretical and applied research, language engineering, and advanced text technology.

- Part I begins with a paper on sentiment analysis and opinion mining (by Ed Hovy) from the perspective of *Natural Language Processing* and providing a long-term Cognitive View on Opinion. This part also overviews the field of Cognitive Natural Language Processing (by Bernadette Sharp), as well as Artificial Intelligence and Cognitive Modelling (by Sergei Nirenburg).
- Part II addresses the *Lexicon and Lexical Analysis*. Alain Polguère makes a theoretical contribution arguing against dogmatic contextualism in lexical studies; Marie-Claude L'Homme investigates predicative lexical units in terminology; Mathieu Lafourcade and Alain Joubert present an application of lexical access, namely the tip-of-the-tongue problem; Olivier Ferret studies the type of relations that can be found in distributional thesauri; Chu-Ren Huang

and Ya-Min Chou elaborate on conceptual access to a multilingual lexicon based on shared orthography (the ideographic aspect of the Chinese writing system and its borrowed version in the Japanese writing system); Yves Lepage addresses the issue of proportional analogy applied to natural language processing. Pushpak Bhattacharyya's paper addresses the issue of multilingual projection whereby an annotated resource of one language can be used for the processing of another language, with a case study in word sense disambiguation in a multilingual framework (Indian languages WordNets).

- Part III is about *Semantics* by and large. Gregory Grefenstette discusses the notion of personal semantics, an idea which one of the reviewers thinks “provides much food for thought”; Didier Schwab, Jérôme Goulian, Gilles Sérasset, and Andon Tchechmedjiev cast a new light on evaluating semantic relatedness by considering the task of word sense disambiguation; Yorick Wilks sheds light on metaphor detection and interpretation in large-scale corpora in different languages (cross-linguistically and cross-culturally); Rodolfo Delmonte proposes a linguistic and computational perspective on the crucial notions of recursion and ambiguity.
- Part IV is devoted to *Language and Speech Generation*. Kumiko Tanaka-Ishii verifies the statistical structure underlying text through the analysis of the role of vowels and consonants. Rebecca Smaha and Christiane Fellbaum raise concerns about the analysis of artificial languages compared to natural ones. Rolf Schwitter investigates how defaults and exceptions can be incorporated into an existing controlled natural language; Line Jakubiec-Jamet disusses issues on natural language generation by presenting a resource integrating a linguistically motivated ontology; Kristiina Jokinen describes an interactive open-domain spoken dialog system generating speech using Wikipedia as knowledge source. Nicolas Daoust and Guy Lapalme propose a system that allows its user to generate French text to be easily integrated into web pages (dynamic output depending on the content of the page).
- Part V concerns *Reading and Writing Technologies*. Sanja Štajner, Ruslan Mitkov, and Gloria Corpas Pastor explore existing readability formulae applied to assess the level of simplification offered by a text simplification system; Juyeon Kang and Patrick Saint-Dizier present some general ideas related to an interactive system, which assists technical writers with requirements when producing documents; Cerstin Mahlow describes ongoing research on analyzing complex writing errors for improving writing technology.
- Part VI is focused on *Language Resources and Language Engineering*. Joseph Mariani and Gil Francopoulo propose a general survey of language resources available in Europe; Eric Wehrli and Luka Nerima report on a multilingual parser which can be used for any natural language application which requires lexical, morphological or syntactic information; Dan Tufis and Verginica Barbu Mititelu present an ontology for Romanian; Dan Cristea and collaborators describe collective work aimed to build a corpus including annotations of semantic relations; Dominique Estival contributes with an Australian corpus for

human communication science collaboration; Asanee Kawtrakul describes a framework for handling knowledge extraction and integration across websites.

Thanks to these contributions, we have been able to edit a book which is not only a Festschrift, but also serves as an excellent reference for the current state of the research in the areas Michael has worked on. Many have referred to his work, so we think that this has been a good way to honor a great researcher and colleague.

In closing, we would like to acknowledge the support from the Laboratoire d'Informatique Fondamentale (LIF) and from the projects AutoWordNet and DynNetLAc which took place within the seventh European Community Framework Programme. We would also like to sincerely acknowledge the excellent and very pleasant cooperation with Springer, in particular with Federica Corradi dell'Aqua, but also with Alice Blanck, series editor Nancy Ide, and the production team. We likewise wish to thank the reviewers whose feedback was indispensable to select and improve the contributions. Particular thanks also go to Ed Hovy, Christian Boitet, and Debela Tesfaye for their advice and support. Last but not least, we would like to thank our authors for their enthusiasm, encouragement, and for their high quality contributions.

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