Preface

This volume contains the proceedings of the Satellite Events of the 20th International Conference on Knowledge Engineering and Knowledge Management (EKAW 2016), held in Bologna, Italy, during November 19–23, 2016. This edition of the conference was concerned with the impact of time and space on the representation of knowledge. Knowledge engineering has mostly been about creating static, universal representations. Yet the world is rarely static: Everything changes, including the models, and real-world systems need to evolve along with the surrounding world. Moreover, what makes some representations valid in some contexts may make them invalid elsewhere (e.g., jurisdiction for laws).

The special focus of this year's EKAW was "evolving knowledge," which concerns all aspects of the management and acquisition of knowledge representations of evolving, contextual, and local models. This includes change management, trend detection, model evolution, streaming data and stream reasoning, event processing, time- and space-dependent models, contextual and local knowledge representations, etc.

EKAW 2016 also put a special emphasis on the evolvability and localization of knowledge and the correct usage of these limits.

In addition to this specific focus, EKAW as usual covered all aspects of eliciting, acquiring, modeling, and managing knowledge, the construction of knowledge-intensive systems and services for the Semantic Web, knowledge management, e-business, natural language processing, intelligent information integration, personal digital assistance systems, and a variety of other related topics.

For the main conference we invited submissions for research papers that presented novel methods, techniques, or analysis with appropriate empirical or other types of evaluation, as well as in-use papers describing applications of knowledge management and engineering in real environments. We also invited submissions of position papers describing novel and innovative ideas that were still at an early stage. Papers accepted for the main conference are published as regular research papers in the EKAW 2016 Springer conference proceedings (LNAI 10024). Position papers are included in this volume.

In these proceedings we have gathered papers related to the other satellite events at EKAW 2016.

The main event hosted the following satellite workshops:

- OWLED-ORE 2016 — 13th OWL: Experiences and Directions Workshop and 5th OWL Reasoner Evaluation Workshop
- EKM – Second International Workshop on Educational Knowledge Management
- Drift-a-LOD – First Workshop: Detection, Representation and Management of Concept Drift in Linked Open Data
- LK&SW-2016 – Third Workshop on Legal Knowledge and the Semantic Web.

The organizers of the EKM and Drift-a-LOD workshops have provided summaries. They also selected the best papers of their workshops whose carefully revised versions are included in these proceedings.

Moreover, there were two tutorials:

– Mapping Management and Expressive Ontologies in Ontology-Based Data Access, by Diego Calvanese, Benjamin Cogrel, and Guohui Xiao, and
– Modeling, Generating and Publishing Knowledge as Linked Data, by Anastasia Dimou, Pieter Heyvaert, and Ruben Verborgh (included in this volume).

The workshop and tutorial programs were chaired by Matthew Horridge from Stanford University, USA, and Jun Zhao from the University of Lancaster, UK.

This volume also contains the accepted contributions for the EKAW 2016 demo and poster sessions. We asked for contributions that were likely to stimulate critical or lively discussions about any of the areas of the EKAW conference series. We also invited developers to showcase their systems and the benefit they can bring to a particular application. The demo and poster program of EKAW 2016 was chaired by Tudor Groza from the Garvan Institute of Medical Research, Australia, and Mari Carmen Suarez-Figueroa of the Universidad Politecnica de Madrid, Spain.

Last but not least, the EKAW 2016 program included a doctoral consortium that provided PhD students working on the topics of the conference with an opportunity to present their research ideas and results in a stimulating environment, to get feedback from mentors who are experienced research scientists in the community, to explore issues related to academic and research careers, and to build relationships with other PhD students from around the world. The doctoral consortium was intended for students at each stage of their PhD. The presenters had an opportunity to present their work to an international audience, to be paired with a mentor, and to discuss their work with experienced scientists from the research community. All accepted papers are included in this volume. The doctoral consortium was organized by Mathieu d'Aquin from the Open University, UK, and Valentina Presutti from ISTC-CNR in Italy.

The conference organization staff also included the program chairs, Fabio Vitali from the University of Bologna, Italy, and Eva Blomqvist from Linköping University, Sweden. Silvio Peroni, University of Bologna, Italy, was the sponsorship chair. Angelo Di Iorio and Silvio Peroni from the University of Bologna, Italy, took care of local arrangements. Andrea Giovanni Nuzzolese, ISTC-CNR, Italy, acted as Web presence chair, and Francesco Poggi, University of Bologna, Italy, acted as proceedings chair. Paolo Ciancarini, University of Bologna, Italy, was the general chair of EKAW 2016.

We want to thank EasyChair and Springer for their excellent cooperation regarding, respectively, supporting our conference organization and the publication of the proceedings.

Thanks to everybody, including attendees at the conference, for making EKAW 2016 a successful event.

March 2017   Paolo Ciancarini
                                                                      Francesco Poggi
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                                                         Mari Carmen Suarez-Figueroa
                                                                     Mathieu d'Aquin
                                                                   Valentina Presutti