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Editorial

Special Issue on Semantic Web Interfaces

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With a growing number of Semantic Web data sources, spanning from small documents to large-scale knowledge bases, the question of how to reasonably interact with those sources becomes important. Interactive tools should span the whole lifecycle of Semantic Web sources, starting from end-user friendly authoring tools to applications consuming Semantic Web data and supporting users in making sense of such data. So far, only few high level interfaces exist that are available capable of supporting user navigation, manipulation and interaction with semantic technologies and datasets.

Although the major portion of Semantic Web research to date has been focused on the consumption of that data by machine agents, workshop series like *Human-Semantic Web Interaction*[1] or *Visualizations and User Interfaces for Knowledge Engineering and Linked Data Analytics*,[2] large-scale projects like *Visual Data Web*,[3] and activities the *Semantic Web Interfaces W3C Community*,[4] as well as older efforts such as the *Semantic Web Applications and Human Aspects* workshop,[5] which dates back to 2008, indicate that interest in human aspects of Semantic Web research has existed for quite some time and even grown in the recent past.

This special issue called to harvest the latest work in this research area and received a number of high quality submissions. The four papers accepted and collected in this special issue explore and evaluate both established and novel ideas in designing interaction methods, targeting single users as well as collaborating groups, for the Semantic Web:

- *OntoWiki – An Authoring, Publication and Visualization Interface for the Data Web* (Philipp Frischmuth, Michael Martin, Sebastian Tramp, Thomas Riechert, Sören Auer) revisits an established collaborative authoring toolkit for creating, editing and browsing Semantic Web data. They discuss different use cases from enterprise data integration to open data visualization, and show how scalability, functionality and usability are balanced to create a powerful, end-user friendly tool.
- *Collaborative multilingual knowledge management based on controlled natural language* (Kaarel Kaljurand, Tobias Kuhn, Laura Canedo) shows how Wiki documents can be mapped to ACE (Attempto Controlled English), allowing both for question answering over the contents captured in the Wiki, as well as for automatic translation into other languages. Ultimately, users speaking different natural languages are enabled to collaboratively edit a shared knowledge base.

[1] http://hswi.referata.com/
[2] http://linkedscience.org/events/visual2014/
[3] http://www.visualdataweb.org/
[4] http://www.w3.org/community/swisig/
[5] http://tinyurl.com/o3cg6vu

- *WYSIWYM – Integrated Visualization, Exploration and Authoring of Semantically Enriched Un-structured Content* (Ali Khalili, Sören Auer) compares three systems which can be used for annotating textual context, using, e.g., NLP methods, and visualizing the data created with such annotations, showing that the browsing experience of textual documents can be enhanced by enriching them with Semantic Web data.
- *Affective Graphs: The Visual Appeal of Linked Data* (Suvodeep Mazumdar, Daniela Petrelli, Khadija Elbedweihy, Vitaveska Lanfranchi, Fabio Ciravegna) discusses a number of design metrics used for visual knowledge representations. They evaluate existing Linked Data browsers according to those metrics, and develop a graph-based interface which can be used for exploring Linked Data.

Generally, this special issue collects some insights into this emerging and relevant area within the Semantic Web research community, and we hope that it will inspire further research activity on those topics, ultimately bringing the Semantic Web and its end users closer together. We would like to express our thanks to all people who contributed to compiling this issue, from all authors who submitted papers, whether ultimately accepted or not, through all reviewers, to the SWJ editorial staff.