Where is the Semantics and where do we want it to be? Let the flaming begin!

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Abstract. Researchers interested in Semantic Web and Linked Data have put a great deal of effort in capturing, representing and sharing knowledge. Information Extraction research, in turn, has advanced techniques for using all of this materialized knowledge to better analyze meaning in natural language, as well as to expand and improve the available sources of semantic knowledge.

We have shared large cross-domain knowledge bases [4], enriched them with linguistic and distributional information [7, 5, 2] and created continuous evolution feedback loops that connect knowledge bases and relevant textual sources [3]. Enabled by these knowledge bases, we proposed live monitoring of concept streams [6], concept-based analysis of opinions [1] and message authoring guidance applications [8], among others.

These are only a few examples of what seems to be a common thread for most of the work in our research community: the challenge to understand pieces of information and relate them to each other in a way that is meaningful for a task at hand. But perhaps an even more central aspect in our community is our focus on building and sharing knowledge sources that will generalize beyond the specific application for which it was built.

How well have we been doing at that?

I argue that, even though we have made great progress, we have much more ground to cover. There is still a great deal of knowledge that remains hidden in our algorithms and applications. In this talk I discuss a few core “semantic analysis tasks” and invite the community to a (perhaps heated) conversation about how much knowledge should be shared in our knowledge bases, which formalisms should we use, which reasoning algorithms might be appropriate, and how can we evaluate the usefulness of our knowledge sources.

References


