

Knowledge Extraction and Linked Data: Playing with Frames

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Abstract. To understand somebody who speaks to us or a text we are reading, we identify the main entities, and how they relate to each other within relation schemas called frames. This means that we first recognise the occurrence of some frames and then we perform some contextualised reasoning over it, where the context is given by the recognised frames. Three main ingredients may enable machines to perform this process: knowledge extraction, knowledge representation and automated reasoning.

The Semantic Web and Linked Data paradigms provide a knowledge representation model enabling sophisticated automated reasoning. Nevertheless, the modelling trend in existing Linked Data ontologies is far from supporting a frame-based reasoning approach.

In this talk, I will describe projects that support frame-driven knowledge extraction and representation, both from a design and an empirical perspective.