

Modeling Events on the Semantic Web

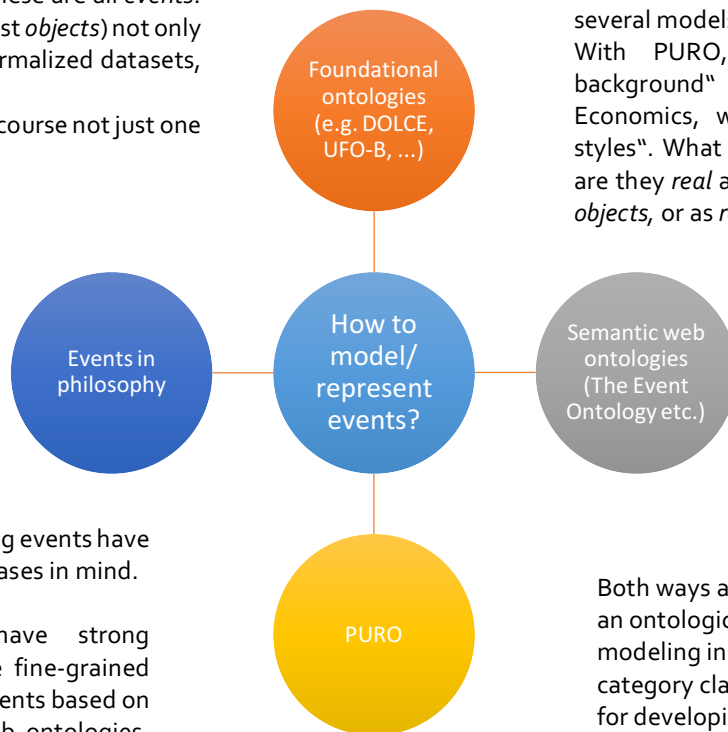
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Football games, conferences, battles, weddings, saying „hi“ or playing a chord on the guitar – these are all *events*. We need to talk about events (and not just *objects*) not only in our everyday speeches but also in formalized datasets, particularly on the semantic web. But *how* to talk about them? There is of course not just one possible way.

Even if we take just the semantic web ontologies we still have several models of events which differ in some details. With PURO, a metamodeling approach for „ontological background“ which is being developed at the University of Economics, we can reconcile some differences in „modelling styles“. What remains is the crucial dilemma of modeling events: are they *real* and independent entities? Should we model them as *objects*, or as *relations*?



Several different approaches to modeling events have been surveyed with semantic web use cases in mind.

Foundational ontologies usually have strong philosophical background and provide fine-grained classifications of all entities including events based on metaphysical categories. Semantic web ontologies, on the other hand, are at home on the „wild“ web. They are easy to use but they often put everything we call an „event“ under one general category with vague ontological status. This can lead to inconsistencies and not very logical representations.

What we need is something in between the intricate and the rudimentary.

Both ways are possible and both can be correct. We argue that events are not an ontologically homogeneous category, which has implications for their modeling in both semantic web ontologies and in PURO. We suggest a four category classification which can (along with our other findings) serve as a base for developing a future semantic web ontology for events.

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