

SW language compatibility breakout

Evan Wallace scribing
Starting 1:50 PM 9 November

Identifier key:

Bijan – Bijan Parsia
DER – Dave Reynolds
DF – Dieter Fensel
Evan – Evan Wallace
Jos – Jos de Bruijn
PPS – Peter F. Patel-Schneider
Sandro – Sandro Hawke
Uli – Uli Sattler

Note – this is not a participant list. More were present than shown in the above list.

Sandro chairing

Sandro: my question is whether OWL compatibility is going to really be hard or not.

PPS: do we have any Herbrand imperialists here.

Sandro: should we have two documents, one for each language

Bijan and Evan: No.

Bijan: Different sections are OK.

What are the questions about phase I that effect compatibility?

DF: Horn fragment. Most languages don't reason about Horn fragments.

Bijan: interop doesn't necessarily mean a shared core.

Bijan: A Hilog person might be looking for having access to RDF data or OWL ontologies.

DF: Enumerate the possible ways of combining. Identifying a subfragment –vs- id'ing an interface between them.

Bijan: All of these are ways of taking DL...

PPS: there are diff ways of providing semantics for Horn clauses that matter in certain cases but not in others.

Bijan: query language discussion: identical in grnd entailments but not all entailments

Uli: several of these choices have already been described but they result in different consequences.

Sandro: I m hoping that we can postpone the differences until phase II.

PPS: The differences could be invisible from certain viewpoints. But some in this room are concerned about the viewpoints that expose these differences.

Bijan: SPARQL is an issue. It is enough to expose the difference.

Sandro: I need to see the details to understand the differences.

I am not sure that SPARQL at that level.

Bijan: if we don't address SPARQL compatibility then will have not addressed the issue of compat with relevant W3C stds which would be a dependency normally in a w3c grp.

DF: describe the difference of the semantics in the interface to sparql for example.

Bijan: We probably cannot defer the issue of semantic heterogeneity to phase II.

We have discussed some approaches to this. Different operators, Global Flags (identifying the semantics), K operator, ...

Jos: it is tricky though if you allow the mixing of these things (operator)

PPS the tricky bit is combing things from different systems. The Chinese menu problem.

Bijan: in interchange scenarios the global flags work.

DF: Let's look at the givens with the sem web. Mixing is a fundamental sue case.

Sandro: I worry about trying to sell this to the rest of the world.

Uli: I understood that you wanted a single phase I semantics.

Sandro: definitely.

DF: even if you have a not in your query language you will run into the problem of different negation operators.

DER: Do we have negation in SPARQL already?

Bijan: It has existentials which gets you there.

Discussion of allowing Bnodes in SPARQL queries.

DER: we could define a fragment of SPARQL which avoids the problem, when it's used.

DF: One approach: we don't specify the sem of the language but define it in terms of sparql.

Sandro: we could pick one of the semantics in phase I with the assumption that we will allow more semantics later which could lead to these problems in interop.

Sandro: I don't think that the users will want to see this. It will look like there is no real standard.

Bijan: So?

Uli: [Paraphrasing]: If we know that there is different semantics then we can identify the different assumption and answers that we will get and deal with them.

Sandro: You aren't proposing to let a thousand languages bloom?

Bijan: Why not?

PPS: I am thinking of tagging with the semantics used, not the tool name/version.

PPS: There is a fairly decent overview on this called "Deviant Logics"

Sandro: I hear a consensus emerging that "We need a semantic extensibility point from the beginning and only two semantics for phase I."

PPS/Bijan: one could identify inclusion relations for combinations.

Bijan: Saying something like "import ALlog'ishly"

[Paraphrasing]: Based on a survey of the languages and their semantics. We could define a set of apriori relation classes.

Bijan: I doubt that we could rule this down to one subsuming all others.

DER: we need to strive

Discussion: a two bit flag is needed to cover intersection | union | ??.

Uli: it would be better to have possibility too many and have one drop out from disuse then to have to redesign.

Df: white box vs black box

Sandro: [approaches to this work] We could have an OWL compatibility task force or we have editors who just talk to people or ...

Consensus: create a task force but use the wg mailing list with a task force tag prefix in the subject line.

Bijan: the charter is written so that we extend a language. An alternative is that we create the superset and subset it.

Bijan: let me argue the meta-logical approach. We at least have a chance that our work is verifiable because we will capture it formally.

Uli: I would then prefer to have some not so perfect extensions to overload (test) the kernel.

This other thing: having some sort of description language to describe each language.

PPS: We are explicitly allowed to have a different external form that gets transformed before used.

Tagging a set of rules may have some challenges.

Bijan: sparql already has named graphs.

Sandro: Can we talk about RDF?

Jos: How do we have to interoperate with RDF? The question is how to consume it.

Bijan: Different requirements: Be able to use RDF facts. Are RDF names syntactic carriers for our operators.

N-ary predicate issue.

DER: is there a need for an export as well as an import capability?

Sandro: some other ones are lists? How do list structures of these other languages map into the rdf lists.

Then there are datatypes.

Alternate concrete syntaxes discussion.

Sandro: It is too soon to deprecate rdf/xml.

Bijan: three possibility: encode all facts, or encode all rdf facts, Need literals as subjects.

What is the possibility of getting this fixed in rdf/xml?

Sandro: It depends on how objectionable the members find it.

Can this group fix user defined datatypes?

DF: integration with OWL is about integrating with DL whereas integration RDF is about integrating with the triple model.

RDF points: syntax, n-ary and semantics

DER: people who work with RDF now, treat bnodes as names. But in other languages these are treated differently.

