

## SparQL Closure Property:

In order to support queries over non-materialized views, via query composition, we required a query language which exhibits the closure property (e.g. the data model of the results is the same as that of the source data). One of our first questions, with regard to SparQL was, can it produce results in RDF (sufficient since all RDFS and OWL ontologies are also valid RDF).

Not all SparQL queries produce RDF, however, all SparQL CONSTRUCT queries do. So, it is possible that CONSTRUCT queries could be used as a way of defining non-materialized ontology views.

As an example, here is a simple FMA OWL CONSTRUCT query:

```
CONSTRUCT
{
  fma:Heart fma:regional_part ?object .
  fma:Heart fma:FMAID ?id .
}
WHERE
{
  fma:Heart fma:regional_part ?object .
  fma:Heart fma:FMAID ?id .
}
```

Here is a snippet of the results:

```
<rdf:Description rdf:about="../../../fmaOwlDIComponent_2_0#Heart">
  <fma:FMAID rdf:datatype="http://www.w3.org/2001/XMLSchema#string">7088</fma:FMAID>
  <fma:regional_part rdf:resource="../../../fmaOwlDIComponent_2_0#Right_side_of_heart"/>
  <fma:regional_part rdf:resource="../../../fmaOwlDIComponent_2_0#Left_side_of_heart"/>
</rdf:Description>
```