



# Investigation of authoring tools for the Semantic Web

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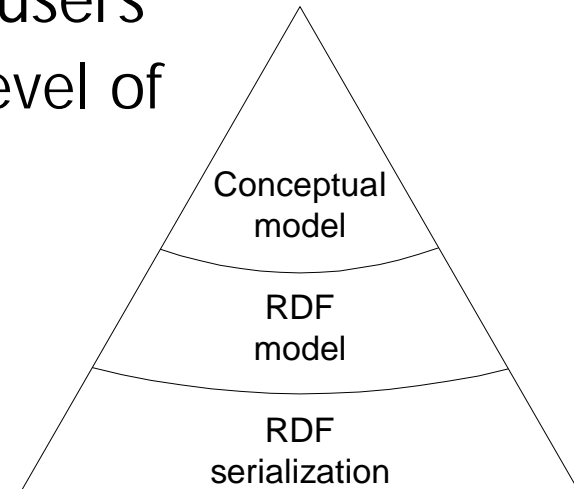
- General
  - XML serialization of RDF a barrier to adoption and implementation of Semantic Web based technologies.
    - Authoring tools aid in tackling this problem.
- SIMILE
  - Sections of the Schema and Meta-data Instance lifecycles, and Heterogeneous Schema and Instance data support Use case can be supported by such tools.

- RDF Editors
  - IsaViz
  - RDFAuthor
- Ontology Visualisation
  - OntoRama
  - VIUM
  - OntoSaurus
- Schema Editors
  - OilEd
  - Protege-2000
  - KAON OI-Modeller
  - Ontolingua
- Application profile editors
  - SCART: The MEG Registry Client
- Meta-data instance editors
  - Haystack
  - SHAME
  - SIC
- Thesaurus construction
  - Webchoir TCS-8
  - Thesaurus Builder
  - MultiTes
  - Term Tree

# Software Review (Conclusions 1)



- RDF Model too low level for most end-users
  - Need software to allow users work at level of a conceptual model
- Terminology used in tools is obscure
- Use of tabs helps break down task of defining Ontologies
- Need to draw distinction between element sets and controlled vocabularies
  - OWL uses classes to represent both!

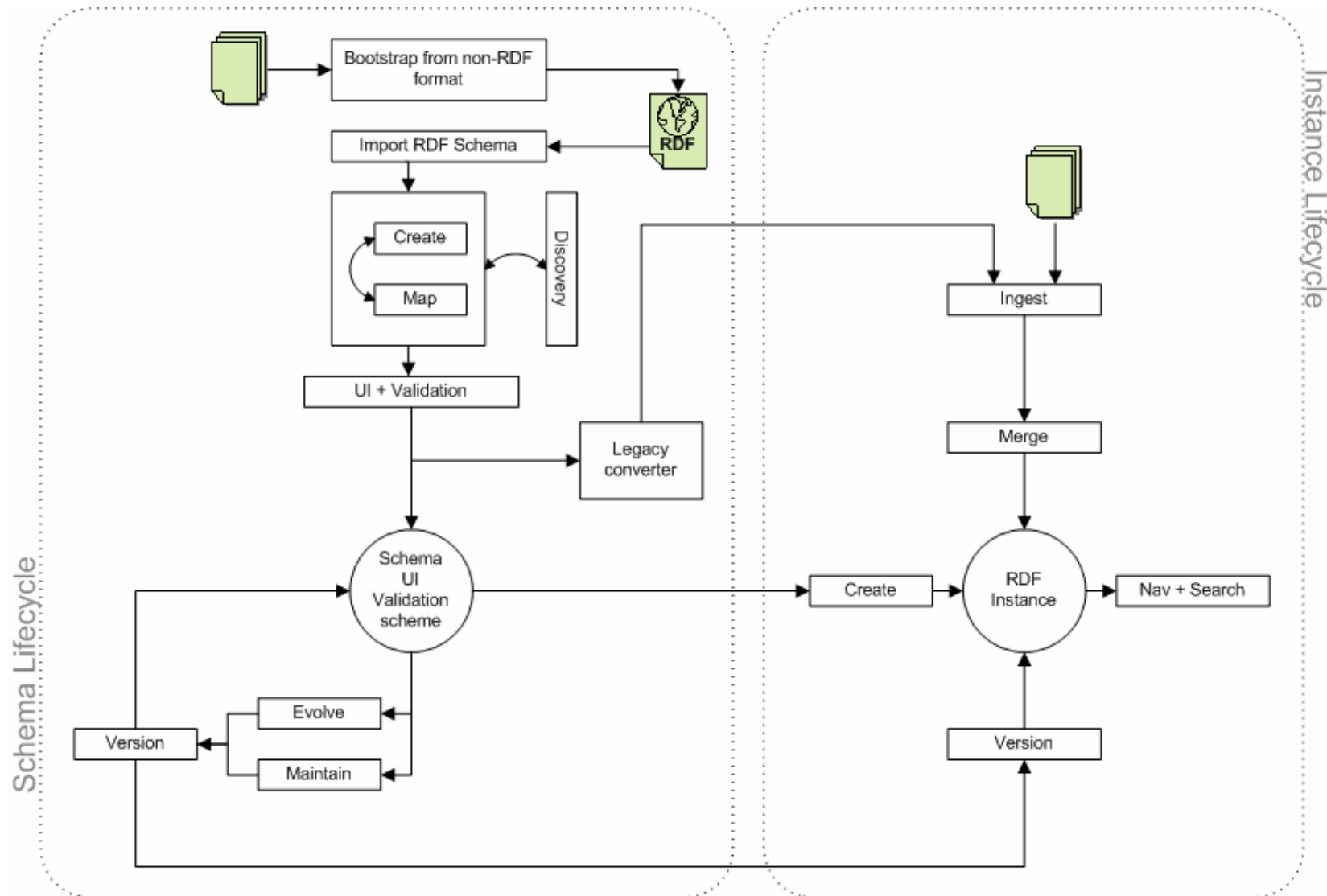


# Software Review (Conclusions 2)

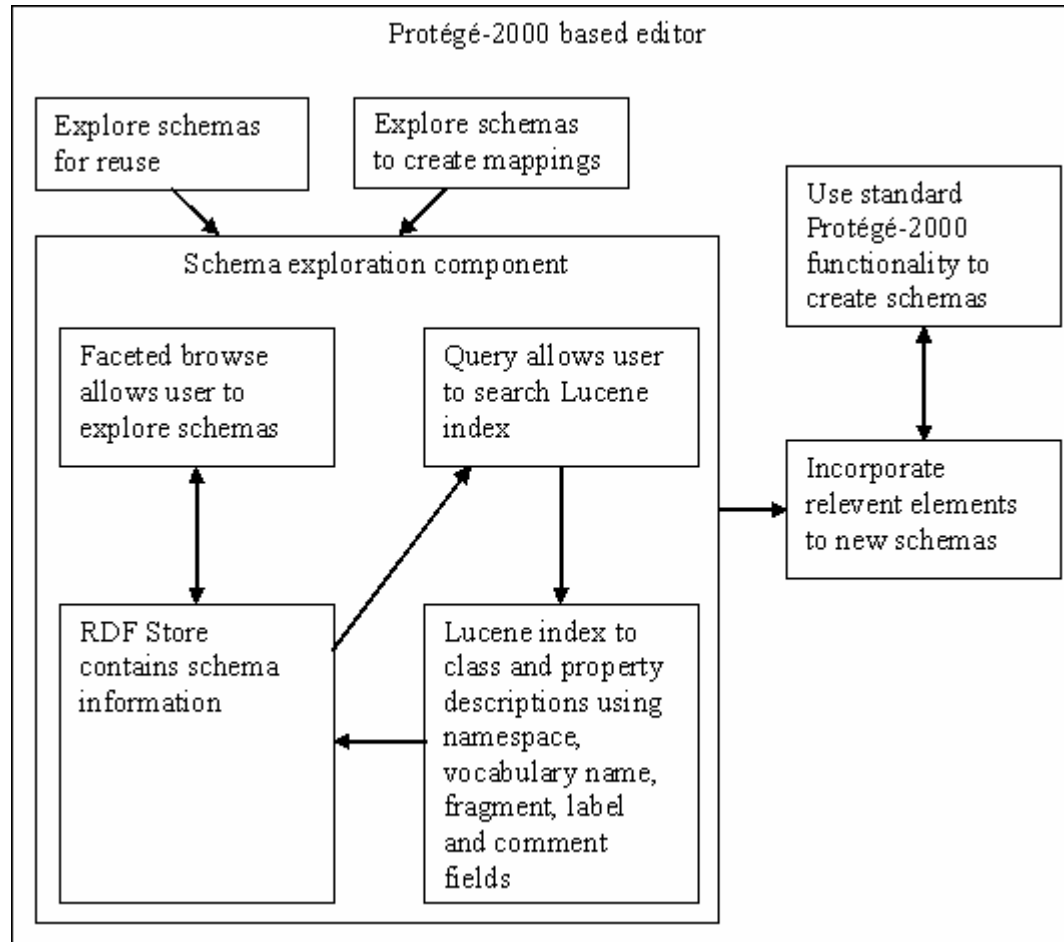


- Existing tools do not provide support for schema modelling
- Work remains to be done on incorporating re-use of existing elements
  - Problem has been looked at by MEG Registry project, but targeted at wrong application
- Best visualisations are tree-based
  - Several variations on 'tree'
  - Multiple visualisations provided by most tools

# Heterogeneous schema & instance data support use case



# Architecture to support element re-use



# Faceted element discovery (demo)



## element repository

Search

all items  within current results

### Element Type

[Class](#) | [Property](#)

### Namespace

[Dublin Core](#) | [VRA Core](#) | [IMS General](#) | [IMS lifecycle](#) | [IMS meta meta-data](#) | [IMS technical](#) | [IMS educational](#) | [IMS rights](#) | [IMS relational](#) | [IMS annotation](#) | [IMS classification](#)

### Fragment Identifier

[Design](#) | [Dimensions](#) | [Discovery Site](#) | [Dynasty](#) | [educational](#) | [Format](#) | [Former Accession](#) | [Former Repository](#) | [Former Site](#) | [general](#) | [Group](#) | [ID Number](#) | [Identifier](#) | [Identity](#) | [Language](#) | [Larger Entity](#) | [lifecycle](#) | [Location](#) | [Material](#) |

[\[See all\]](#)

### VRA Core: creator (Property)

<http://www.vraweb.org/core/#creator>

The names, appellations, or other identifiers assigned to an individual, group, corporate body, or other entity that has contributed to the design, creation, production, manufacture, or alteration of the work or image. Data Values (controlled): recommend ULAN and AAAF (LC authority files).

[\[more details\]](#)

### VRA Core: title (Property)

<http://www.vraweb.org/core/#title>

The title or identifying phrase given to a Work or an Image. For complex works or series the title may refer to a discrete unit within the larger entity (a print from a series, a panel from a fresco cycle, a building within a temple complex) or may identify only the larger entity itself. A record for a part of a larger unit should include both the title for the part and the title for the larger entity. For an Image record this category describes the specific view of the depicted Work.

[\[more details\]](#)

### VRA Core: Work (Class)

<http://www.vraweb.org/core/#Work>

A work record is used for physical or created objects

[\[more details\]](#)



# Faceted element discovery (demo)



## element repository

 all items  within current results

## restrictions

**Element Type:** Property [remove](#)

### Element Type >

#### Property

[Property](#) | [ObjectProperty](#) | [DatatypeProperty](#)

### Namespace

[Dublin Core](#) | [VRA Core](#) | [IMS General](#) | [IMS lifecycle](#) | [IMS meta meta-data](#) | [IMS technical](#) | [IMS educational](#) | [IMS rights](#) | [IMS relational](#) | [IMS annotation](#) | [IMS classification](#)

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