

# MEDIA ZONE semantic navigation in multiple sources

Pia Jøsendal













Libraries, museums & archives : dealing with multimedia

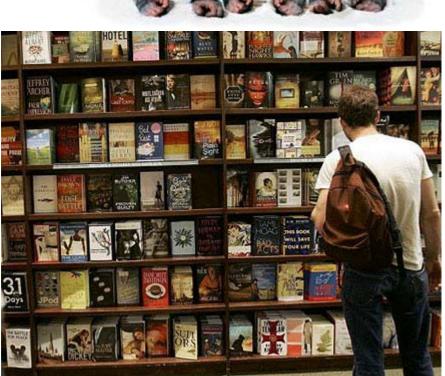
- Different standards
- Digital formats/media
- Proprietary issues
- IPR
- Security
- Availability
- Wide user base









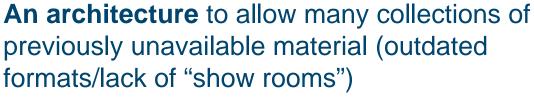


#### What has Media Zone contributed with?



Media Zone is a **tool to align** movies, texts, sound/music and pictures

→ ONE pair of glasses to look at the material



→ presented like ONE archive to the audience

#### Replaceable ontologies

→ flexible to thematic changes of view









#### The focus of direction





# What do I mean with data?



# ANYONE can say ANYTHING about ANYTHING

GPRS location

E-mail address

An author

Music titles

A type of chair My opinion on a book's genre



#### The semantic web



- With its explicit semantics
- ..is an extension of the existing web
- ..with meaningful relations new & old
- ..to tackle heterogeneous & partial data



# **The Semantic Web Layer Cake**



#### Don't eat the ENTIRE cake AT ONCE





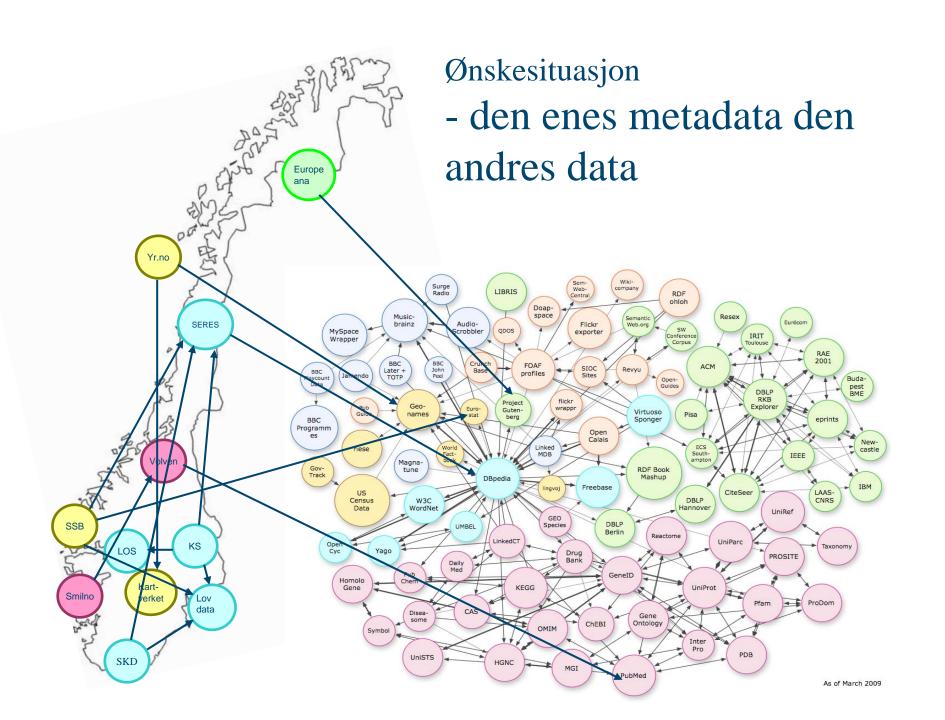












## Vocabulary



- Understand THE GLASS
- A glass with or without BEER IN IT

- It can have Coke in it as well...
- It is still a glass!



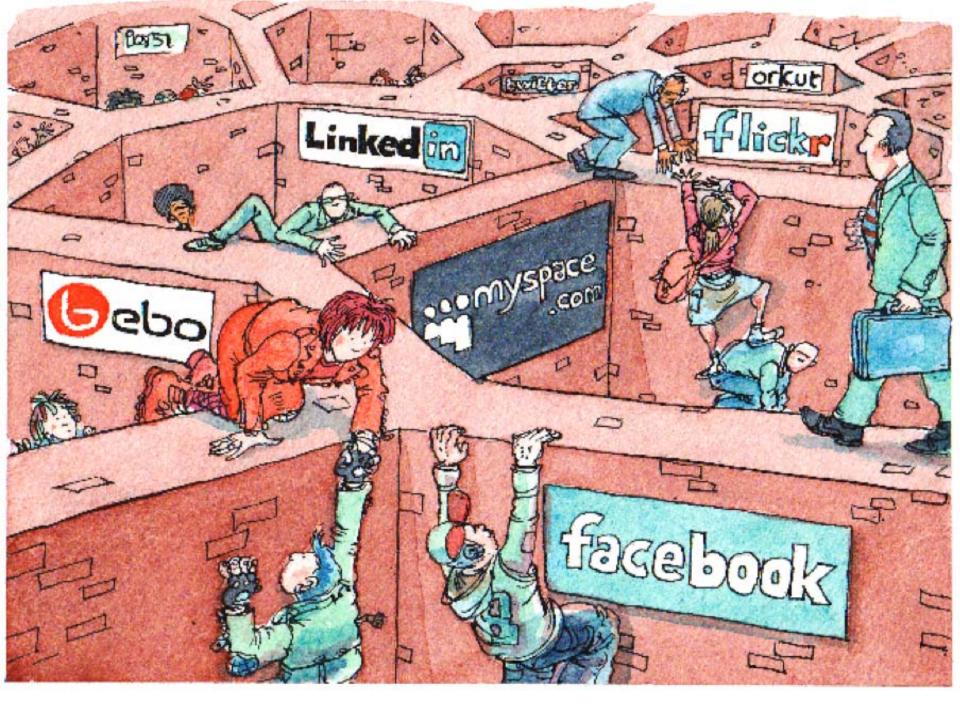












# Open your data



- Giving people access
- Recycle what is already there
  - Use existing ontologies
  - Share the vocabulary
- URI's ground RDF to the web.



### **Ontologies**

# Defines what one thing is in relation to something else

A "vocabulary" to ensure...

"Specification of a conceptualisation"

► E.g. Foaf, Dublin Core, SKOS, lingvoj, Dbpedia

..communication on equal terms..

eg. Viking

➤Old norse men? A restaurant? Fotball club? A car rescue service?

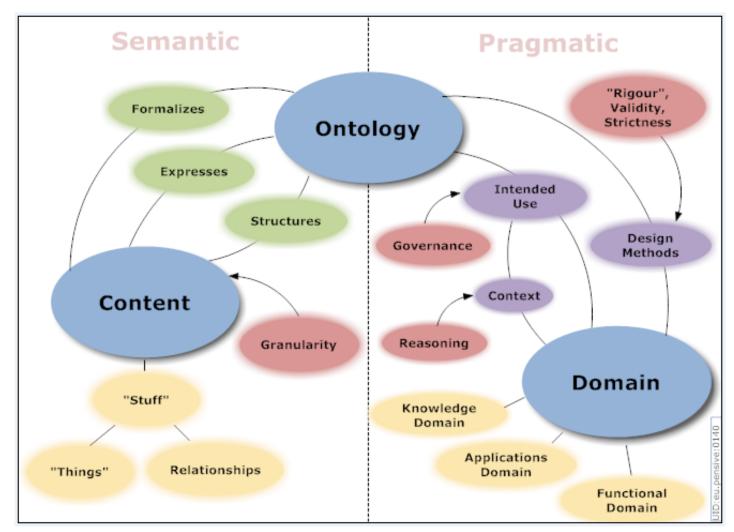
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..for people and computers.

27.10.2009

## The Semantic Balancing Act





DeborahMacPherson











## Media Zone - general outline



- Project for Deichmanske library
- Developed by OKADO and Esis and Computas
- Finished in June 2009
- Bleeding edge semantic technology
- A touch screen UI that enables you to:
  - Search, navigate, watch and download
- Multimedia content
  - Film, music, texts and pictures

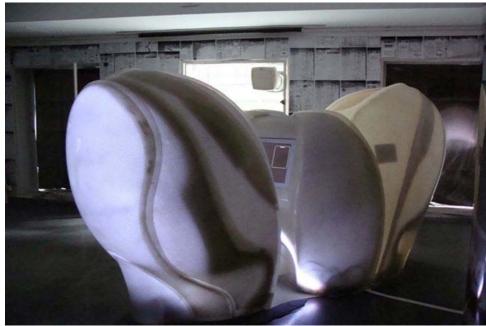


# Demo - Media Zone





















#### **SUMMARY**



- REUSE Metadata driven architecture
- UNITING Presenting several archives as ONE
- FLEXIBILITY Replaceable ontology















### Pia Jøsendal - pvj@computas.no

Computas AS Lysaker Torg 45, pb 482 Fax +47 67 83 10 01 1327 Lysaker Norway

Tel +47 67 83 10 00

Org.nr: NO 986 352 325 MVA

www.computas.com











## **An Open Architecture**



- Open source
  - Sublima prosjektet (tomcat)
  - Jena
  - Pellet
  - Protegé
- Open standards
  - RDF/Turtle
  - SPARQL
  - OWL
- Open licences
  - Creative Commons

- Open vocabularies:
  - Foaf
  - MusicOntology
  - Skos
  - Dct
  - GeoNames
- Open sources:
  - LOD/DBPedia

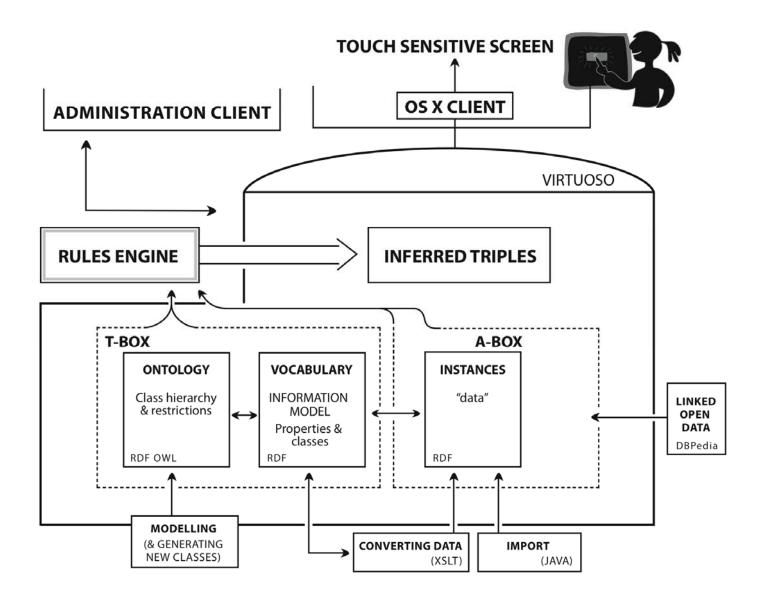


#### General technical overview



- Mac OSX client
- Semantic architecture backend
  - Metadata extraction and convertion (java, XSLT)
  - Metadata converted to Turtle (RDF syntaks)
  - Replaceable ontologies (OWL DL)
  - Reasoning the ontology(Pellet)
  - Query language (SPARQL)
- Administration interface for resource management (SUBLIMA)





#### Information model



