EC Working Group on Interoperability

and Multilingualism

Position statement on semantic interoperability of Digital Libraries

for DELOS/Multimatch WS

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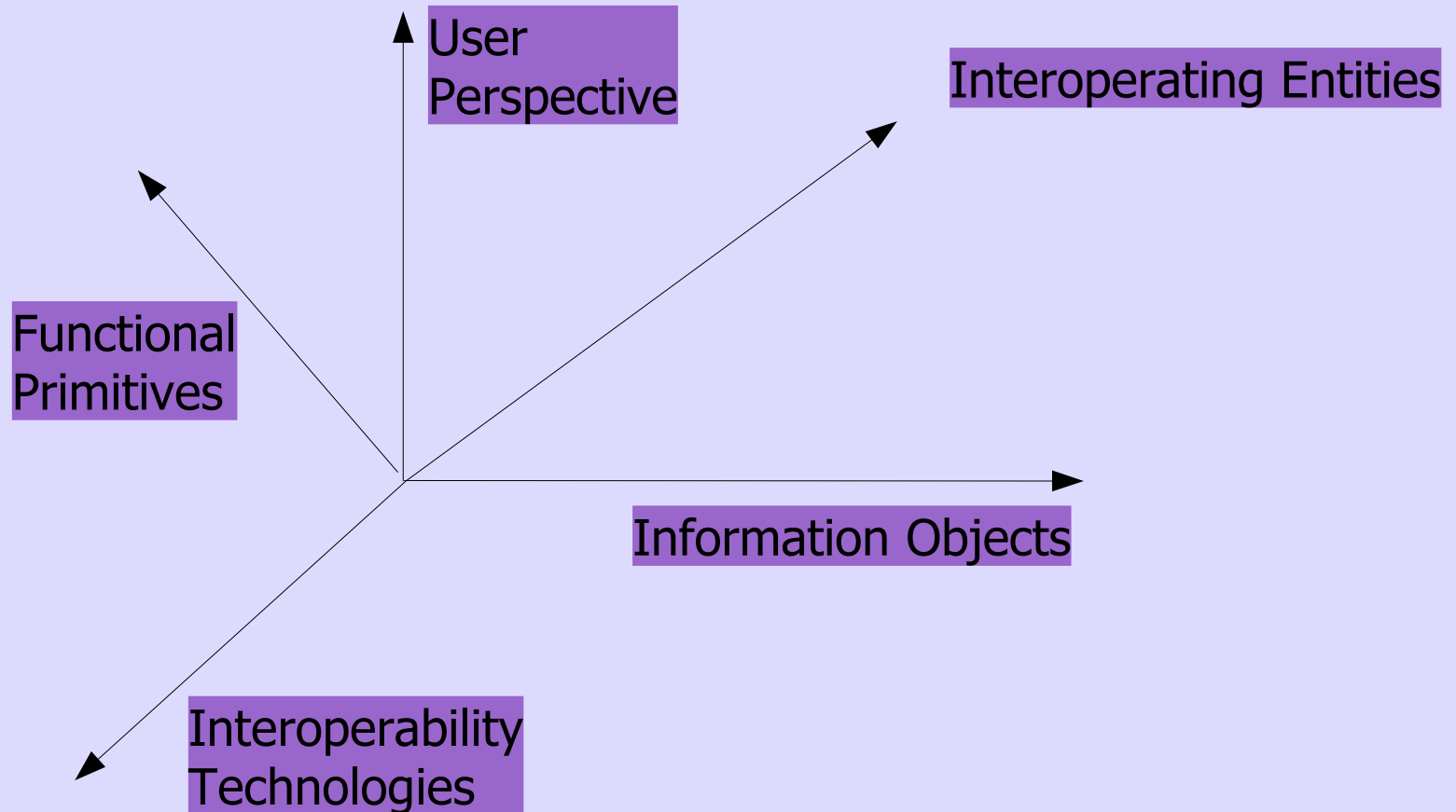European Commission / INFSO E3
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Pisa statement on Semantic Interoperaborability

- **WG context**

- WG methodology**: Conceptual matrix** composed of 5 dimensions and organised in four abstraction levels

- Specific **questions and issues** for the workshop

Pisa statement on Semantic Interoperaborability

- 🔴 i2010 DL agenda: the work of our group contributes to the setting up of the **European Digital Library** as a common multilingual access point to Europe's distributed digital cultural heritage including all types of cultural heritage institutions

- 🔴 Double WG mission:

  - 🔹 Contribute to the **short term agenda**
    - 2008: at least 2 million digital objects; multilingual; searchable and usable; work towards including archives.
    - 2010: at least 6 million digital objects; including also museums and private initiatives.
    - => identify areas for short term action and recommend elements of an action plan (**list of prioritised feasible options**, March 2007!)

  - 🔹 Contribute to the **long term agenda**
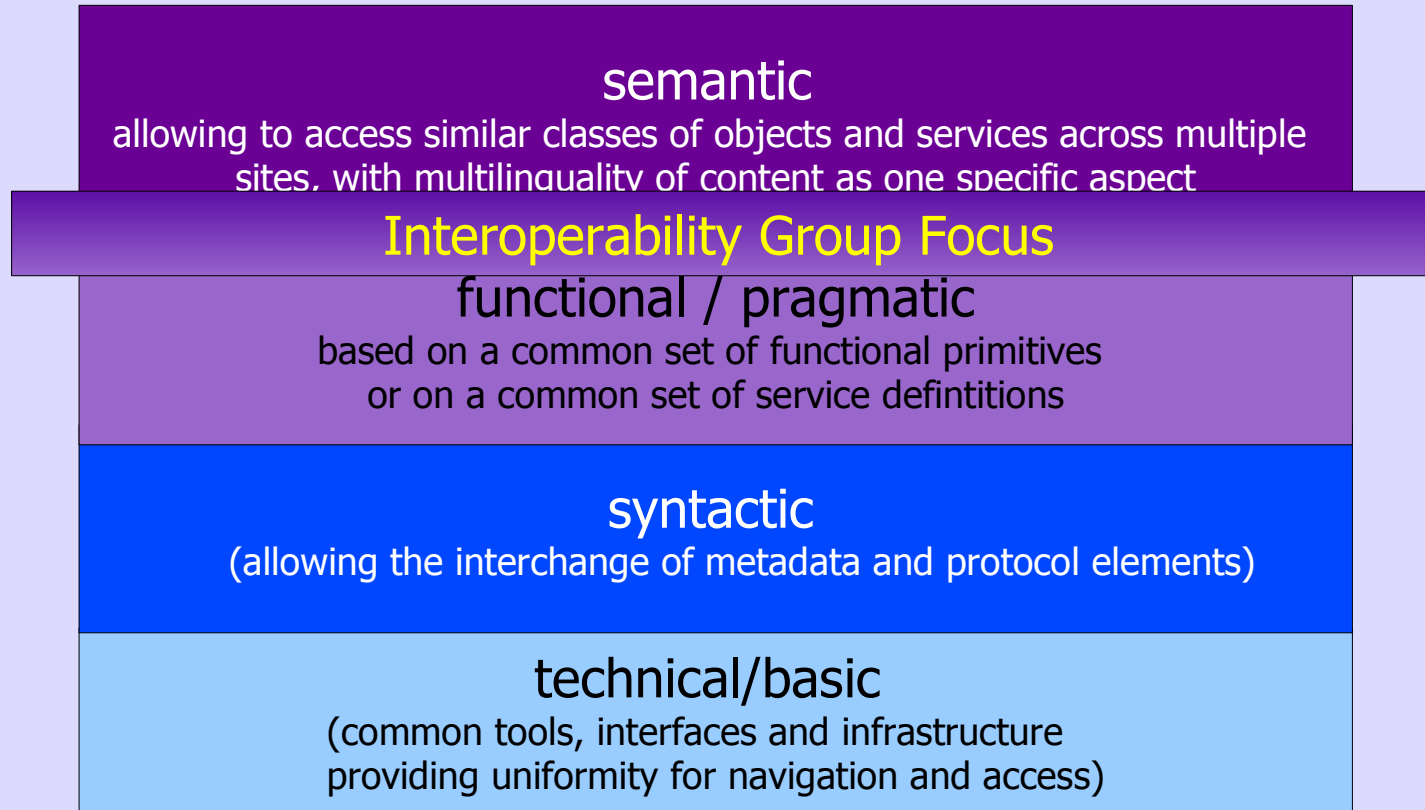   - => produce recommendations for a **long term strategy** by June 2007

Conceptual Framework of Interoperability WG

- In order to identify more precisely the determining factors of lacking interoperability we use a **conceptual matrix** composed of 5 vectors / paradigms / perspectives / dimensions:

User Perspective

Interoperating Entities

Functional Primitives

Information Objects

Interoperability Technologies

Interoperability Abstraction Levels

Abstract

semantic
allowing to access similar classes of objects and services across multiple
sites, with multilinguality of content as one specific aspect

Interoperability Group Focus

functional / pragmatic
based on a common set of functional primitives
or on a common set of service defintions

syntactic
(allowing the interchange of metadata and protocol elements)

technical/basic
(common tools, interfaces and infrastructure
providing uniformity for navigation and access)

Physical

Pisa statement on Semantic Interoperaborability

- **Empirical foundations** vs. **interpretation function**?
- **Ontologies** vs. **Language:** ontologies and multilingualism. Denotation based Semantic Interoperability vs. Controlled Misunderstanding.
- As to the more pragmatic and stimulating issues: there is European money available for **doing things**!
    - EC invites people to experiment the use of existing semantic tools in current MLA environments => support from eContent+ (out of a total 93 M€)!
    - EC invites people to experiment longer term semantics based approaches to solve interoperability issues in future complex DL / MLA environments => support from IST/FP7 (out of a total 193 M€)!
- Semantic technology is important, because it creates interoperability on **object level** which in turn should receive focus rather than organisational interoperability
    - **Thank you for patience and attention!**