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Information Resources

It is a fundamental human need to desire things. At an early age, children learn to yell, scream, cry and babble to draw the attention of those who can satisfy their desires. Eventually, based on feedback, they learn how to refer to the objects of their desire: "book", "ball", "cookie". When ambiguity arises, they learn to clarify by pointing in the direction to signify which book, ball or cookie they want.

It is to the immense credit of Tim Berners-Lee and those who helped him to design and build The Web, that this fundamental communication pattern was maintained. When you want something, you learn its name and you ask for it. The whole notion of disambiguation and resolvability are wrapped up in the design of *Uniform Resource Locators* [Berners-Lee et al., 1994].

- 2.1 Documents
- 2.2 Data
- 2.3 Services
- 2.4 Concepts
- 2.5 Identifiers
- 2.6 REST

Architectural style Stepping stone Hypermedia Content Negotiation Sub-Application Level Consistency

¹Buddhists explain this desire as the source of all suffering. Alas, their noble solution to avoid desire to avoid suffering will not solve our problems in the Information Technology space.

- 2.7 Scalability
- 2.8 Security
- 2.9 Versioning

Linking Information Resources

- 3.1 Hypermedia
- 3.2 Link Response Headers
- 3.3 RDF Model
- 3.4 RDF Serialization
- 3.5 Basic SPARQL Queries

Wrapping Legacy Systems

- 4.1 D2RQ/R2RML
- 4.2 Resource Abstractions Over Services
- 4.3 Term Alignment w/ SPARQL Construct and Protocol
- 4.4 Near Zero Effort Data Integration

Modeling Domains

- 5.1 RDF
- **5.2** RDFS
- 5.3 OWL

Linked Data Project

- 6.1 History
- 6.2 Approach
- 6.3 Benefits
- 6.4 Linked Data Profile

Data-Bearing Documents

- 7.1 Microformats
- 7.2 GRDDL
- 7.3 RDFa
- 7.4 Microdata
- 7.5 Schema.org
- 7.6 SVG
- 7.7 ODF

Unstructured Content

- 8.1 Documents
- 8.2 Calais
- 8.3 NLP
- 8.4 Stanbol

Reasoning

- 9.1 RDFS
- 9.2 RDFS+++
- 9.3 OWL Lite
- 9.4 OWL DL
- $9.5 \quad OWL \,\, EL/RL/QL$

Semantic Search

10.1 Documents

Semantic Platforms

11.1 Documents

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