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The National Library of Korea as Part of the Global Dublin Core Community

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Abstract



The National Library of Korea as Part of the Global Dublin Core Community

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History of Dublin Core



- In October 1994, informal discussion at 2nd WWW Conference, Chicago
- Identified a need for a “core” set of descriptors to help discover content on the Web
- 1-3 March 1995, OCLC/NCSA workshop in Dublin, Ohio

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Dublin Core: the idea



- A basic description mechanism that:
 - can be used in all domains
 - can be used for any type of resource
 - is simple , yet powerful
 - can be extended and can work with specific solutions
- Making it easier to find information wherever located (Internet/Intranets)

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Interoperability aspects



- Core semantics
 - Dublin Core metadata elements, extensions and refinements, controlled vocabularies
- Shared data model
 - DCMI Abstract Model: underlying grammar
- Implementation agreements
 - Application Profiles (under construction)

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Modular metadata: the Dublin Core vocabulary and model

Thomas Baker

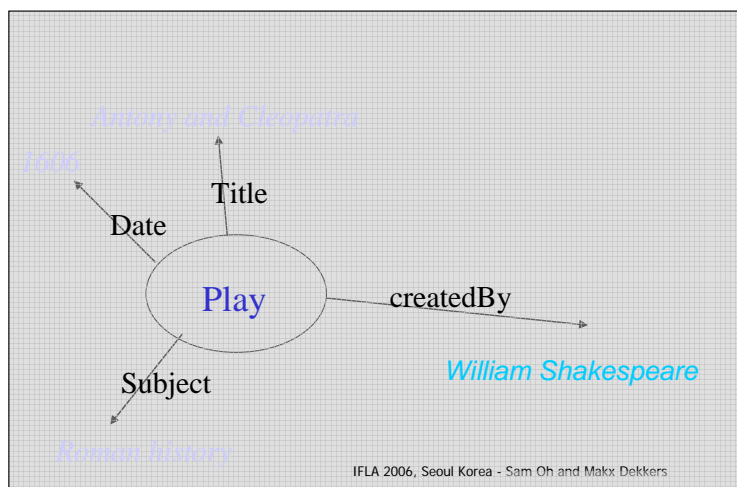
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Basic model Resource with properties



The Play has the title "Antony and Cleopatra", was written In 1606 by William Shakespeare, and is about "Roman history".

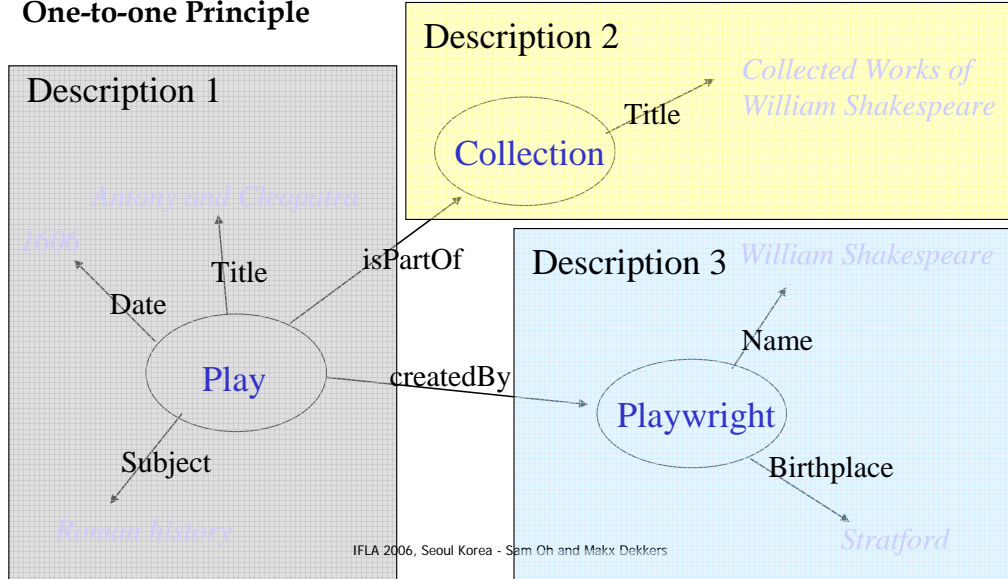




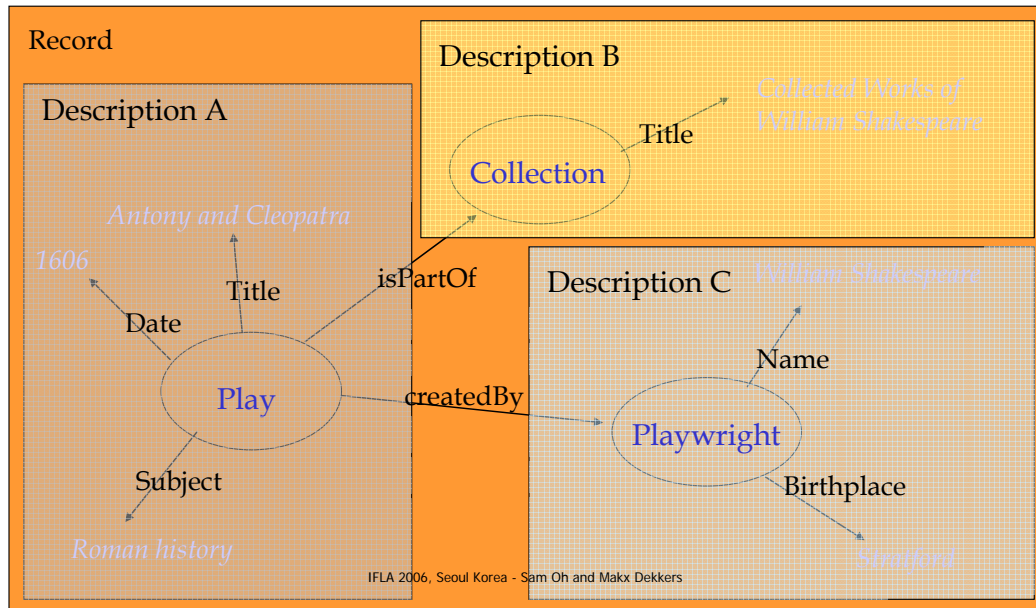
...related to other resources



One-to-one Principle

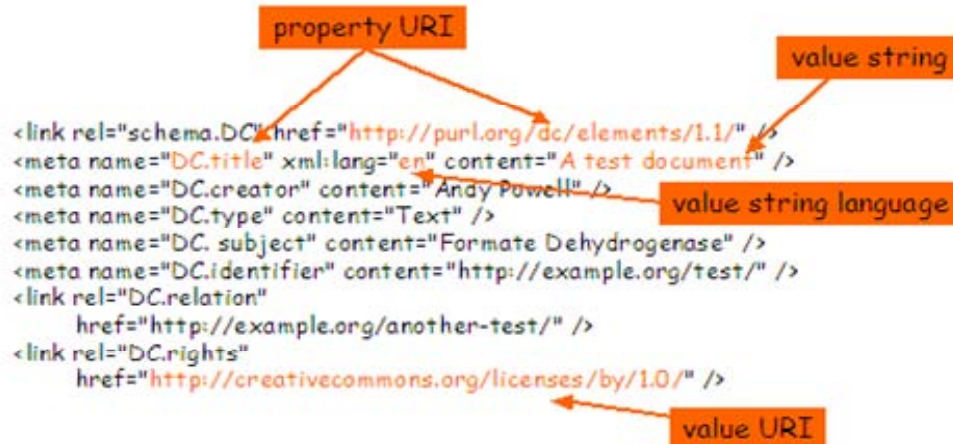


Three Descriptions in a Record





A basis for comparing syntax options



Example of Simple Dublin Core in XHTML

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One model, many ways to implement



- **Choose what's best for you**
 - HTML, XML, XHTML, Databases...: appropriate for different contexts
- **Interoperability depends on shared model**
 - Evolving guidelines for Dublin Core in HTML, XML, XHTML...

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DCMI features



- **Core semantics**
 - The Dublin Core and related vocabularies
- **Data model**
 - Abstract Model a DCMI Recommendation since March 2005
- **Application Profiles**
 - Use core semantics
 - Based on the Abstract Model
 - Customize for specific purposes

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Three legs of Interoperability



- **Shared semantics**
 - Everyone understands a Core
- **Shared model (independent of syntax)**
 - DCMI Abstract Model
- **Content-level agreement**
 - Same way to write a date (“2005-09-12”), a name (“Baker, Thomas”)...

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Like a language



- **Small vocabulary (like a pidgin)**
 - Without shared words, no understanding
- **Basic grammar**
 - Without Subject – Verb – Object, no sentences
- **Jargons and styles**
 - Emerging agreement within communities

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Core and extension vocabularies



- **Core-like RDF vocabularies**
 - SKOS Core: about knowledge systems
 - Dublin Core: about information resources
 - FOAF: about people and organizations
 - Shared underlying (RDF) model
 - Shared mechanisms for extensibility
- **Extension-like vocabularies**
 - Web as context for community creation of vocabularies

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DCMI as an organization



- **Core elements** for describing information
 - Find, share, manage information
- **Formal framework** for interoperability
 - The “grammar” of metadata language
- **Support for communities**
 - Community usage in application profiles
 - Documentation for usage in different areas
 - Platforms for people to come together to share experiences.

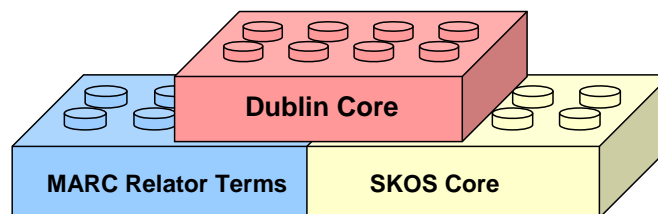
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Flexible modularity



- Modularity, Flexibility, Reusability, Interoperability of Metadata
- Model-based re-combinability



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Dublin Core Community



- Since 1995, workshops and conferences in USA, UK, Australia, Finland, Germany, Japan, Italy, China, Spain
- **DC-2006: University of Colima, Mexico: 3-6 October 2006** in Manzanillo, Colima
- Participation from many sectors (libraries, research, governments, companies) and from more than fifty countries

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Standardization



- 1998: Dublin Core Element Set version 1.0
- 1998: Internet RFC2413
- 1999: Dublin Core Element Set version 1.1
- 2000: EU Recommendation: CEN CWA 13874
- 2001: US National Standard: NISO Z39.85
- 2003: International standard: ISO 15836
- National standards and recommendations (e.g. Australia, Denmark, Netherlands, UK)

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Dublin Core on the Web



- Successful standard on the Web
- Growing use in specific communities with high quality requirements:
 - Public Sector and Government Information
 - Corporate knowledge management
- May be seen as an essential building block for Semantic Web(s)

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Dublin Core Metadata Initiative



- From group of interested volunteers to a more formal organization
- Governance structure (DCMI by-laws)
 - DCMI Board of Trustees
 - DCMI Directorate
 - DCMI Usage Board
 - DCMI Advisory Board

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DCMI Board of Trustees



- Membership
 - Representatives of DCMI Affiliates
 - Three independent experts
 - One representative DCMI Host (OCLC)
- Oversees the DCMI Directorate
 - Strategic directions
 - Financial management

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DCMI Usage Board



- Membership
 - seven invited experts from range of domains, backgrounds and geographies
- Manages the 'orderly development of the Dublin Core standards'
 - evaluates proposals from the community
 - maintains authoritative documentation

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DCMI Advisory Board



- Currently 43 members, 14 countries
 - Working Group chairs
 - Affiliate representatives
 - Invited experts and liaisons
- Technical and operational advice
 - Coherence of work
 - Avoidance of conflicts
 - Technical reviews

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DCMI operational model



- Basic philosophy:
 - basic results (standards, documentation) available for free, no usage restrictions
 - participation open to all, at no cost
- Community ownership
 - Voluntary effort from DCMI participants
 - Support from DCMI Host (OCLC)
 - Shared ownership: DCMI Affiliates

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DCMI Affiliates



- National (or regional) organizations
- Represent stakeholder communities within their region
- Established on contractual basis (3/5 yr)
- Rights and responsibilities defined in Affiliate Agreement
- Annual Affiliate fees to fund central organisation and subcontracted work

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Affiliate activities



- Maintenance of local documentation
- National standardization
- Promotion and outreach to local community, feedback to global level
- DC-branded training and services
- Strategic influence through voting rights on DCMI Board of Trustees

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Affiliate models



- Finland, Singapore, Korea
 - National Libraries
- United Kingdom (consortium)
 - Museums, Libraries and Archives Council and JISC (higher education)
- New Zealand (consortium)
 - National Library, National Archives and State Services Commission (eGovernment)

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Strengthening the value



- Challenges:
 - Better identify community needs
 - Adapt organization to deliver value
- Mission:
 - Develop international, open standards for resource description and discovery
 - Support world-wide community
 - Promote widespread use of Dublin Core

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DCMI Activities



- Standards maintenance and support
 - protect the core assets and maintain stability
 - provide documentation and implementation guidelines
- Forum
 - enable sharing of experience, solicit feedback and input for development and review processes
- Marketing and awareness
 - promote and explain (business cases, guidance)

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Sharing Ownership



- Develop the Affiliate Program beyond current partners
 - Finland (2003), UK (2004), Singapore (2005), New Zealand (2005), Korea (2006)
- Investigate other funding options
 - grants, projects, sponsorship
- Based on small central organization, value for money

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DCMI Relationships



- Internal partnerships:
 - DCMI Affiliates and Host
 - DCMI Participants and contributors
- External liaisons:
 - Other standards organizations (IEEE-LOM, W3C, OASIS, CEN)
 - Implementers, vendors, consultants, service providers

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The National Digital Library (NDL) of Korea



- NDL Vision
 - Implementing an environment that enables users to perform integrated searching of all the digital libraries in the world and functioning as a comprehensive library portal.
 - NDL intends to build collaborative partners with world DLs and to manage high quality digital assets available in the world and provides users with easy access to them.

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NDL Operating Principles



- 7 NDL Operating Policies
 - Providing a portal service that guarantees easy access to high quality resources without physical boundaries.
 - Offering easy and comfortable search interface to the system.
 - Observing international standards to ensure interoperability among other DLs in the world.
 - Continuing to build a large digital collection to provide quality services to users.
 - Employing a collection development policy based on participation and sharing.
 - Investing in long-term preservation of digital assets and provides retrieval services to them.
 - Keeping abreast with the next generation technology to provide better services to users.

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The Role of The National Metadata Center



- Maintaining the official translation of DCMI documents in Korean.
- Providing a leadership as the national library
- Developing necessary standards and tools for libraries exploiting semantic web technology.
- Keeping an eye on emerging international standards that affect library services and actively participating international standard developments.
- Operating the national metadata and ontology registry that anyone can look up before they implement any application profiles.
- Supporting metadata and ontology research to publish annual guidelines.

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The National Library of Korea

<http://www.nl.go.kr/>

The Dublin Core Metadata Initiative

<http://dublincore.org/>

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