From P7-Tokyo:
Summary of Metadata Element Definitions Discussion
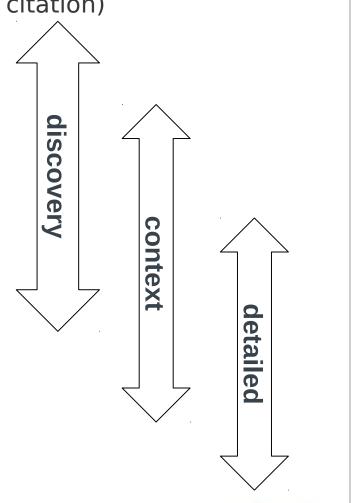and other related actiivity

Ray Plante

research data sharing without barriers
rd-alliance.org

From P7-Tokyo...

Open Data: Purposing the elements

- Unique Identifier (for later use including citation)
- Location (URL)
- Description
- Keywords (terms)
- Temporal coordinates
- Spatial coordinates
- Originator (organisation(s) / person(s))
- Project
- Facility / equipment
- Quality
- Availability (licence, persistence)
- Provenance
- Citations
- Related publications (white or grey)
- Related software
- Schema
- Medium / format

discovery

context

detailed

research data sharing without barriers
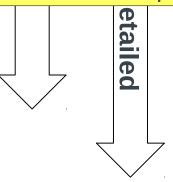rd-alliance.org

RDA
RESEARCH DATA ALLIANCE

Open Data: Purposing the elements

- Unique Identifier (for later use including citation)
- Location (URL)
- Description
- Keywords (terms)
- Temporal coordinates
- Spatial coordinates
- Originator (organisation(s) / person(s))
- Project
- Facility / equipment
- Quality
- Availability (licence, persistence)
- Provenance
- Citations
- Related publications (white or grey)
- Related software
- Schema
- Medium / format

Caveats

- Values can be…
  - Multivalued (list)
  - Complex/structured
  - Multilingual
- Part of a data model with roles and relationships

etailed

Reacting to the List

- Questions were posed:
  - Do you use or collect any of these terms
  - Could you use these terms to describe your datasets?
- Ray: hard to answer these questions without definitions
  - Turned list into a spreadsheet
    - Added definitions
    - Columns comments from members
  - Editable on GoogleDocs
- Discussion
  - See https://rd-alliance.org/group/metadata-ig/post/slides-and-notes-joint-meeting-tokyo-p7.html#comments
  - Related Efforts
    - Common metadata patterns: http://aboutdata.org/patterns.html
      (Arhur Smith)
    - Core Scientific Metadata for Facilities: http://purl.org/net/csmd   (B. Matthews)
    - Vasily Bunakov:
      - Metadata design needs an "operational perspective"
      - Better served by small core and a framework for annotations
        (Linked Data approach?)

research data sharing without barriers
rd-alliance.org

Metadata for the International Materials Resource Registry WG

- Deliverable: a demonstration of a resource registry federation for discovery of useful materials data and services

  - A federation of registries can exchange descriptions of resources (Datasets, databases, portals, services...) via OAI-PMH
  - Need a schema that captures both general resource metadata *and* domain-specific (materials science) metadata for rich discovery.

- Key metadata requirement: extensibility

  - Don't need to create a comprehensive schema/ontology before we start using it.
  - Build an extensible core; add more terms as needed
  - Support *non-disruptive* evolution and extension over time
    - Schema additions do not break existing applications/consumers
  - Strategy successfully applied in astronomical data federation (Virtual Observatory)

research data sharing without barriers
rd-alliance.org

Extensible Resource Metadata Framework

- https://github.com/usnistgov/mgi-resmd

- Based on extensible metadata definition patterns
  - Supporting XML Schema, JSON Schema, JSON-LD
    - With patterns for translating between them
  - Linking to concepts defined in semantic vocabularies/ontologies
  - Core metadata compatible with Datacite metadata

- Extendible sub-groups of metadata:
  - Identity – how is the resource refered to?
  - Role – what type of resource is it?
  - Publication – who is responsible?
  - Content – what is the resource about?
  - Access – how do you get at it?
  - Applicability – how is it relevent to a particular domain/community?
    - Contains domain-specific metadata
    - Multiple occurances can speak to different communities

research data sharing without barriers
rd-alliance.org

RDA
RESEARCH DATA ALLIANCE