From Functional Granularity To People Interoperability

Applied Collection Description in the SCONE Project

Dennis Nicholson / Gordon Dunsire
(1) Collection Level Metadata and Functional Granularity

Gordon Dunsire
Overview (Part 1)

- Collection Level Metadata
- Functional Granularity
- Cross-searching
SCONE

- Scottish Collections Network
- Operational, but embryonic, service arising from the SCONE project (RSLP)
- Collections located in Scotland, and about Scottish topics
- 3500 collection level descriptions
- Range from official publications of Albania to the National Library
Description: Collection of official publications of Albania, as defined by the Scottish Working Group on Official Publications (SWOP).

Notes: Statistics.

Type: Collection.Library.Text.User

Location: Strathclyde University. The Andersonian Library Curran Building 101 St James Road Glasgow (City of Glasgow, Scotland) G4 0NS

Access: Contact before a visit is not required.

Item creators: Albania

Subjects: Albania

Part of: Strathclyde University. Library SWOP collection

Catalogues: Strathclyde University WebPAC
Description | A small collection of 25 books from the library of John Buchan (1875-1940) …
Size | 25 v. + mss.

Administrative history

<table>
<thead>
<tr>
<th>Date</th>
<th>Transferred from</th>
<th>To</th>
<th>Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1940</td>
<td>John Buchan …</td>
<td>National Library …</td>
<td>Bequest</td>
</tr>
<tr>
<td>1977</td>
<td>Tweedsmuir …</td>
<td>National Library …</td>
<td>Donation</td>
</tr>
<tr>
<td>1985</td>
<td>Tweedsmuir …</td>
<td>National Library …</td>
<td>Donation</td>
</tr>
</tbody>
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Location | National Library of Scotland
| George IV Bridge

City centre location, Waverley rail station, bus …

Collectors | John Buchan (Baron … [Collecting: closed]
Item creators | John Buchan (Baron Tweedsmuir) (1875-1940)
Part of | National Library of Scotland collection (main)
Catalogues | National Library of Scotland WebPAC
SCONE metadata

- Structure based on Heaney’s e-r model
  - ‘Analytical model of collections and their catalogues’
  - RSLP guidelines
- 3+ entities
  - Collections
  - Agents (personal and corporate)
  - Locations (physical and virtual)
  - + Subjects now developed with HILT project
- Collections metadata not new, but not given focus until recently
  - A, L, S familiar from item level metadata
Entity relationships

- Location access and opening hours
  - Agent-Administers-Location

- Accrual status and policy
  - Agent-Collects-Collection

- History of custodianship
  - Agent-Sells[Collection]To-Agent
  - Agent-Delegates[Collection]To-Agent
Collections and sub-collections

- What is a collection?
  - Heaney’s concept of ‘functional granularity’
  - “level of detail required [for] resources discovery or collection management”

- Defined by users, owners and managers
  - Discovery
  - Marketing
  - Collaboration
SCONE findings

- Multi-level granularity
  - SWOP collections have 6 levels
- Most named special collections have a general (organisational) parent
  - Mono-hierarchy with only one parent at each level
  - Such a ‘backbone’ may form the basis of organisation-based collection services
    - Regional or sectoral
Polyhierarchy

- But distributed and ‘assembled’ collections require additional virtual parents
  - Edward Clark Collection has Napier University Merchiston Learning Centre collection as physical parent
  - And Bookhad project ‘collection’ as virtual parent
  - And ‘Rare book collections in Scotland’ collection as virtual (potential) parent, etc.
Cross-searching

- Collection-Collection relationships
  - Parent/child
  - Catalogue/Finding aid
  - Other (splits)
- Standard collection name or other identifier?
- Pre-coordinate forms for other entities
  - Name authority files (via extended warrant)
  - Gazetteers
  - Subjects!
Pre-coordination

- Local, service-specific pre-coordination needs to take account of the general
  - All service-scope boundaries will be leaky
    - Research collections held by public libraries
    - Lifelong learning resources held by FE/HE
    - Collections located in a region, and collections about a region (but located elsewhere) (SCONE)
Data management

- Functional granularity implies duplication of A, L, S entity metadata
- Volatility differs from item-level
  - Persistent locations; dynamic administrators
- Range of agents wider
  - Collectors, administrators as well as creators
- And collection entities likely to multiply
- Suggests need for coordination
  - Scope and definitions
  - Authoritative headings
(2) Collection Strength and People interoperability

Dennis Nicholson
Overview (part 2)

- Scotland and Collection strength: Conspectus, Collaborative Collecting, User Navigation
- Known problems and SCONE solutions:
  - Long term/new systems: automated CS indices
  - Meanwhile: SCAMP-mediated constrained professional judgement for legacy metadata
  - Linked by ‘people interoperability’
- Importance of human level processes:
  - Lessons from CAIRNS and SCONE
  - A CoSMiC example…
Collection Strength in Scotland

- A Scottish Conspectus, used for:
- Collaborative Collecting:
  - SCURL, Conspectus, CCD policies
- User Navigation
  - Research Collections Online
  - CAIRNS distributed catalogue and dynamic landscaping
- SCONE to examine known problems and propose solutions (amongst other things)
Known Problems

- A selective list:
  - Lack of objectivity and consistency, so navigational information could be better
  - Labour intensive
  - Subject scheme incompatibilities between:
    - Service schemes/Conspectus; Services
  - Snapshots - data not current
  - No information on coverage overlap
  - Misleading: small collections with unique items
  - Data insufficient for deep resource sharing
  - Granularity level less than user’s query
  - How do user terminologies map to schemes?
SCONE Solutions (2)

- Long term/new systems: automated CS indices
- Systems to include this item level metadata:
  - DDC number to a reasonable granularity level
  - An agreed subject term for the number (HILT)
  - MEG educational level
  - Unique object identifier
  - Data on format (e.g. electronic only)
  - Charging policies
  - Service exclusion policy
  - Language(s) of content
- Each will build CS index containing these elements for cross-searching
SCONE Solutions (2)

- Solves a number of the known problems:
  - Relatively objective
  - Relatively consistent
  - Able to indicate overlap (unique identifier)
  - Shows small collections with unique items
  - Up to the minute currency
  - Single subject scheme at CS and item level across all services
  - Support for deeper resource sharing
  - CS description to low granularity levels used by users
  - Marginal cost if built into system

- Leaves user terminologies mapping to HILT
SCONE Solutions (1)

- Automated CS indices will work for new systems and in the long term legacy metadata systems
- Meanwhile: SCAMP-mediated constrained professional judgement for legacy metadata systems (Objectivity via CCD, user needs, agreed methodologies, peer review)
- Not as good as automated but an improvement on current situation:
  - Should be more objective
  - Should be more consistent
  - Less labour intensive (but still poorer results than automated approach with more effort)
SCONE Solutions (1)

- Can show small collections with unique items if special provision agreed
- Unable to indicate overlap
- Better currency but still a snapshot
- Subjects inter-compatibility problem remains
- Data insufficient for deep resource sharing
- CS description granularity levels still poor
- Doesn’t solve user terminologies to schemes problem (HILT could solve but at higher cost than automated approach)

- Added advantage – a human level process place leading to in time to fully automated approach
- People interoperability…
Why Human Processes Matter

- Lessons from CAIRNS and SCONE:
  - Users increasingly use/need distributed resources, finding tools so co-operation now essential as well as desirable:
    - Distributed networked collections need collaborative management
    - Coherent distributed virtual ‘libraries’ won’t just happen – we must co-operate to manage retrieval/user environments
    - People interoperability a pre-requisite of technical and metadata interoperability
    - Design people into the system
    - Small is beautiful where people are the key
A CoSMiC example...

- Building people into the (SCONE) system:
  - CoSMiC, SCAMP, a Co-operative Infrastructure
- A quality service needs good inter-compatible metadata maintained by collection managers
- Harvesting whatever turns up won’t do the job
- To deal with ‘people factor’, need processes to:
  - Actively monitor problems and promote progress
  - Agree common terminological and other metadata standards, apply them in a standard way, input them in the same form; ensure adherence through central input with local output; currency control…
  - Make any necessary standards changes jointly
  - Train to think globally before acting locally
Thank you!

- [http://scone.strath.ac.uk/](http://scone.strath.ac.uk/)
- [http://scone.strath.ac.uk/service/index.cfm](http://scone.strath.ac.uk/service/index.cfm)
- [http://scone.strath.ac.uk/scamp/index.html](http://scone.strath.ac.uk/scamp/index.html)
- [http://cosmic.cdlr.strath.ac.uk/](http://cosmic.cdlr.strath.ac.uk/)
  - [http://hilt.cdlr.strath.ac.uk/](http://hilt.cdlr.strath.ac.uk/)
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