Beyond Preservation to Trust

Toward an Application Profile for Authenticity Metadata

Corinne Rogers

SAA 2011 – Research Day

Research Team: Joe Tennis, U Washington; Corinne Rogers, UBC; Elizabeth Shaffer, UBC

Outline

+ Why an application profile for authenticity~theoretical underpinnings

+ Functional requirements

+ Domain models

+ Metadata elements

+ Crosswalks to existing schemas

+ Next steps

Why an application profile for authenticity?

+ Metadata are human- and machine-readable assertions about information resources, discussed primarily in the context of access and retrieval, and preservation

+ The need for authenticity of those resources and the ability to authenticate them is recognized, but as yet not systematized

The Goal: 1) develop an application profile grounded in the findings of the InterPARES that connects theory with functional requirements for authenticity metadata, and 2) test it in the context of cIRcle, the University Institutional Repository at UBC

Context of this research

+ International Research on Permanent Authentic Records in Electronic Systems 3 (InterPARES 3)

+ University Institutional Repositories: Copyright and Long-Term Preservation

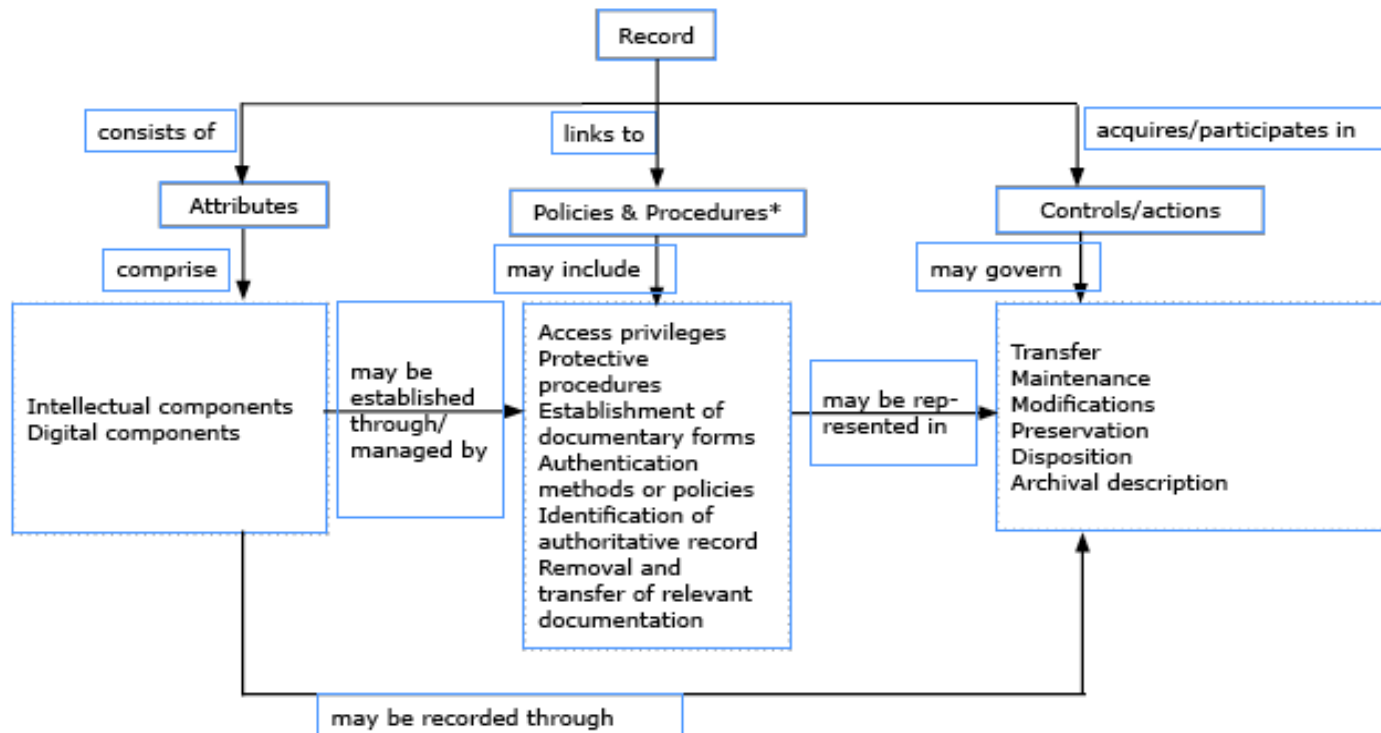+ cIRcle @ UBC

+ City of Vancouver Archives & Archivematica

Functional Requirements

+ Presumption of authenticity

+ Interoperability

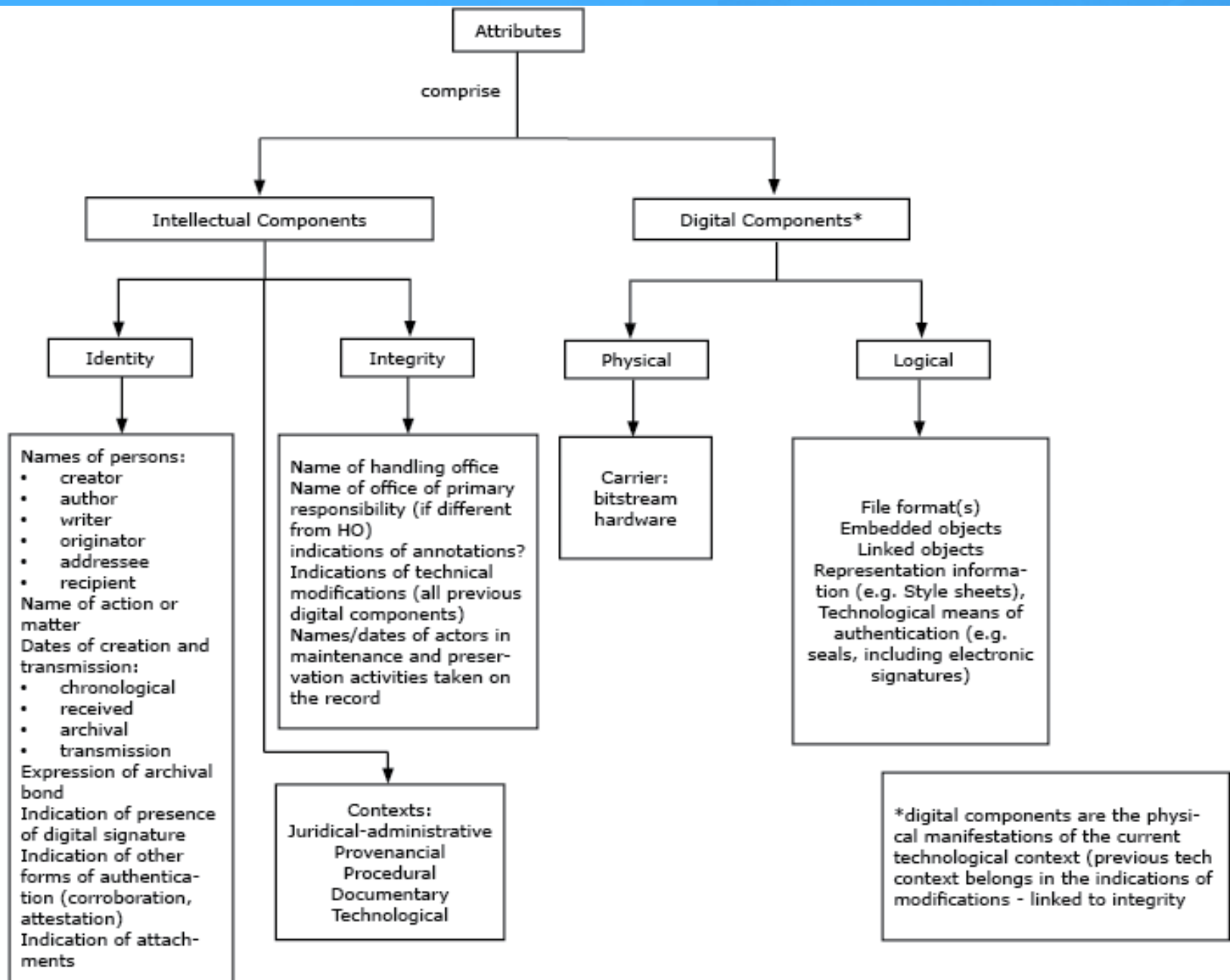+ Description

+ Retrieval

+ Meaningful display

+ Parsimony

Authenticity

+ The trustworthiness of a record as a record; i.e., the quality of a record that is what it purports to be and that is free from tampering or corruption

+ Authenticity = Identity + Integrity

+ Identity: The whole of the characteristics of a document or a record that uniquely identify it and distinguish it from any other

+ Integrity: The quality of being complete and unaltered in all essential respects

Domain models

Record

consists of | links to | acquires/participates in

Attributes | Policies & Procedures* | Controls/actions

comprise | may include | may govern

Intellectual components
Digital components

may be established through/ managed by

Access privileges
Protective procedures
Establishment of documentary forms
Authentication methods or policies
Identification of authoritative record
Removal and transfer of relevant documentation

may be represented in

Transfer
Maintenance
Modifications
Preservation
Disposition
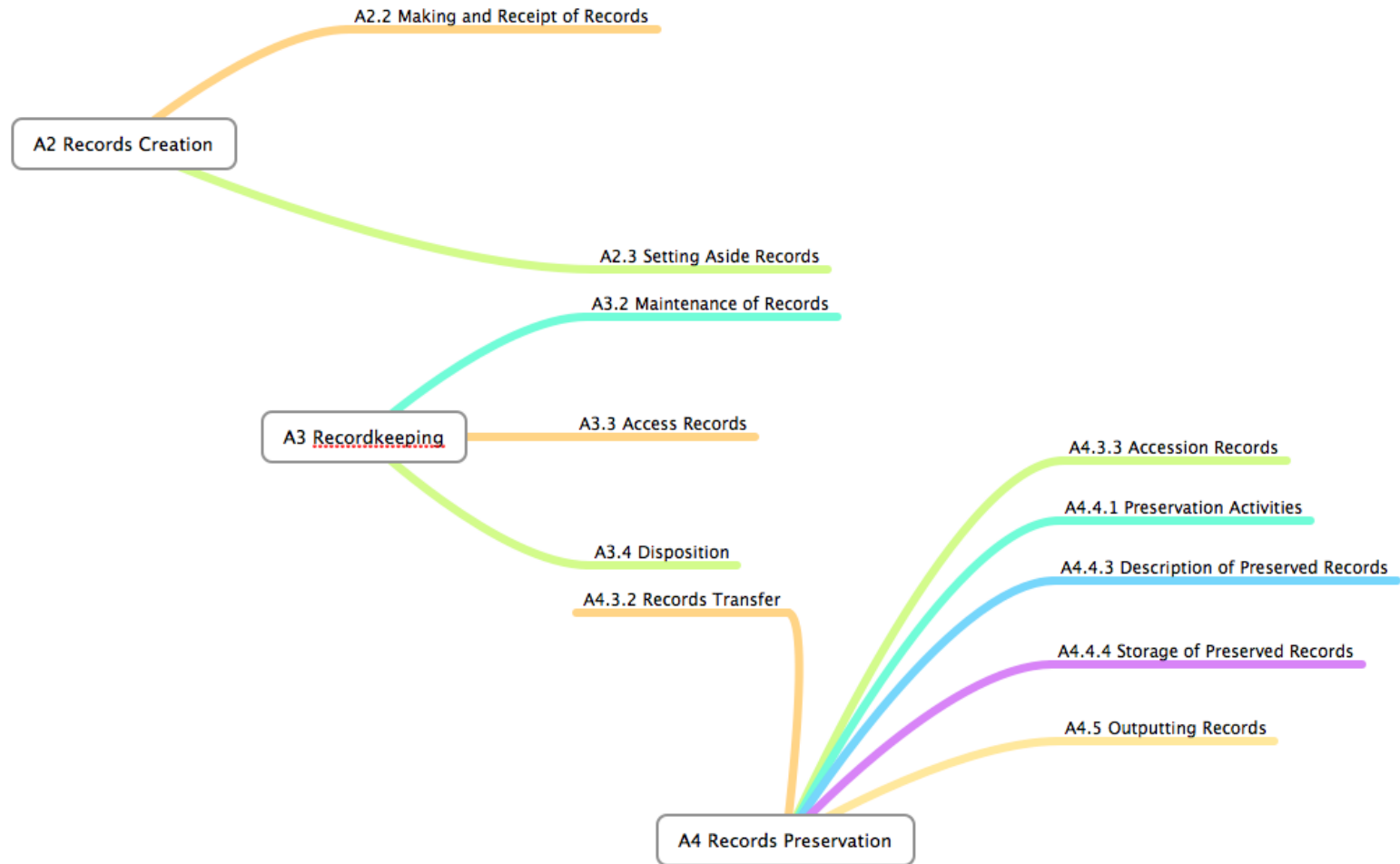Archival description

may be recorded through

*may also include legislation, standards, codes of practice, and any other documentation that exercises control over records from within or outside the creating organization

What are the sources?
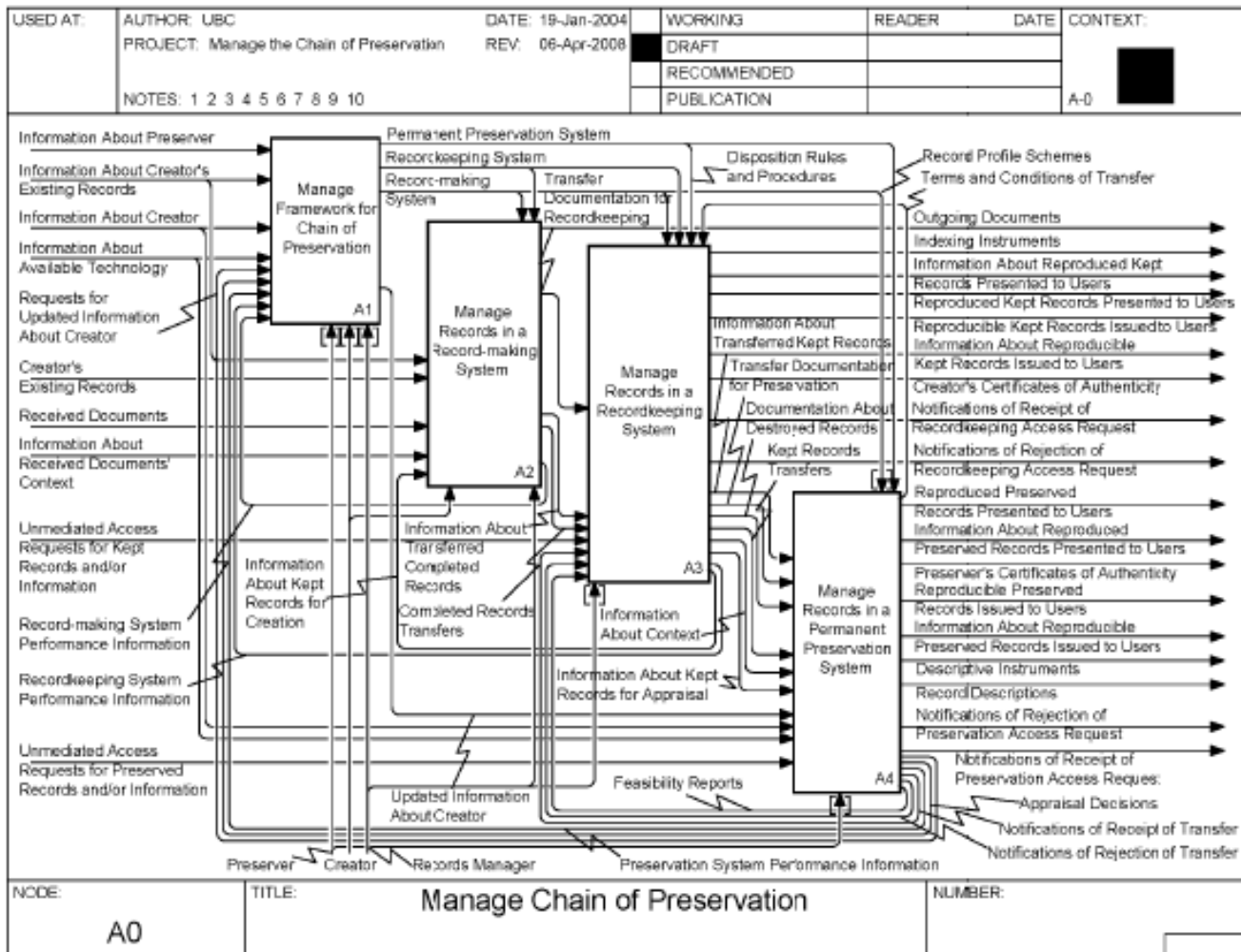
Chain of preservation

Areas of description

+ Identity
    + P-persons
    + D-date
    + S-subject (action or matter)
    + B-bond
    + A-attachments

+ Integrity
    + T-technology
    + F-form
    + SS-seals & signs
    + AU-means of authentication (inc digital sig, attestation etc

+ R-rights and access; H-handling (office)

+ DO-external documentation and system metadata (policy, context, appraisal, transfer, audits of system activity, requests on the records)

Elements

A2.2.3.5	P6	- *receiver(s) or recipient(s)*—that is, the physical or juridical person(s) to whom the document may be copied or blind copied for information purposes;
A2.2.3.6	S1	• name of the action or matter—that is, the subject line(s) and/or the title at the top of the document;
A2.2.3.7	AU1	• indication of the presence of a digital signature;
		• indication of other forms of authentication, including:
A2.2.3.8	AU2	- *corroboration*—that is, an explicit mention of the means used to validate the document;
A2.2.3.9	AU3	- *attestation*—that is, the validation of the document by those who took part in the issuing of it, and by witnesses to the action or to the 'signing' of the document;
A2.2.3.10	AU4	- *subscription*—that is, the name of the author or writer appearing at the bottom of the document; and
A2.2.3.11	AU5	- *qualification of signature*—that is, the mention of the title, capacity and/or address of the person or persons signing the document;
A2.2.3.12	A1	• indication of any attachments—that is, mention of autonomous digital objects linked inextricably to the document.
A2.2.4		**Declaring Captured and Identified Documents as Records (A2.2.4)**
		Identity metadata captured for this activity could include:
		New metadata
A2.2.4.1	B1	• classification code; and
A2.2.4.2	B2	• registration number.

Crosswalks

+ CoP model

+ PREMIS

+ Dublin Core

+ MoReq 2010

Function	MoReq 2010	Dublin Core	CoP	AuthAP	Description
creation			A2.2.5.2	D04	· transmission date, time and/or place;
creation			A2.2.5.4	D05	· dates and times of further action or transmission; and
creation	M14.4.1 (M14.4	dateAccepted	A2.3.2.1	D06	· archival or filing date—that is, the date on which a record is officially incorporated into the creator's records;
creation	M14.4.28		A2.3.3.4	D07	· date/time of the transfer.
management		modified	A3.2.3.2.5	D08	· date/time of any modification(s);
management	M14.4.28		A3.2.3.2.8	D09	· date/time the record(s) was/were placed in storage; and
management			A3.2.3.3.2.5	D10	· date/time of the backup;
management		modified	A3.2.3.3.3.6	D11	· date/time of the correction(s);
management		modified	A3.2.3.3.4.6	D12	· date/time of the update(s);
management		modified	A3.2.3.3.5.6	D13	· date/time of the refreshing(s);

Term Records

Author

Property URI	http://interpares.org/aapip/author
Qualified name for property	aapip:author
Defined by	http://interpares.org/aapip
Type of term	property
Subproperty of	NA
Source label	author
Source definition	(IP definition of author)
Usage in this AP	(definition as necessary)
Comments for this AP	
Uses vocabulary encoding scheme	No
Obligation	Mandatory (Recommended or Optional)
Condition	Manditory if...
Minimum occurrences	0
Maximum occurrences	No limit

Next steps

+ Refine – finish creating term records

+ Test in cIRcle, the University of British Columbia's institutional repository

  + Test case: student theses and dissertations

  + Currently using enhanced Dublin Core, primarily for access

  + These are university records and as such require a more robust metadata application to ensure their authenticity over time

+ Refine – *parsimony!*

+ Make available

Thank you!

+ Corinne Rogers cmrogers@interchange.ubc.ca

+ Joe Tennis jtennis@uw.edu

+ Elizabeth Shaffer eshaffer@interchange.ubc.ca