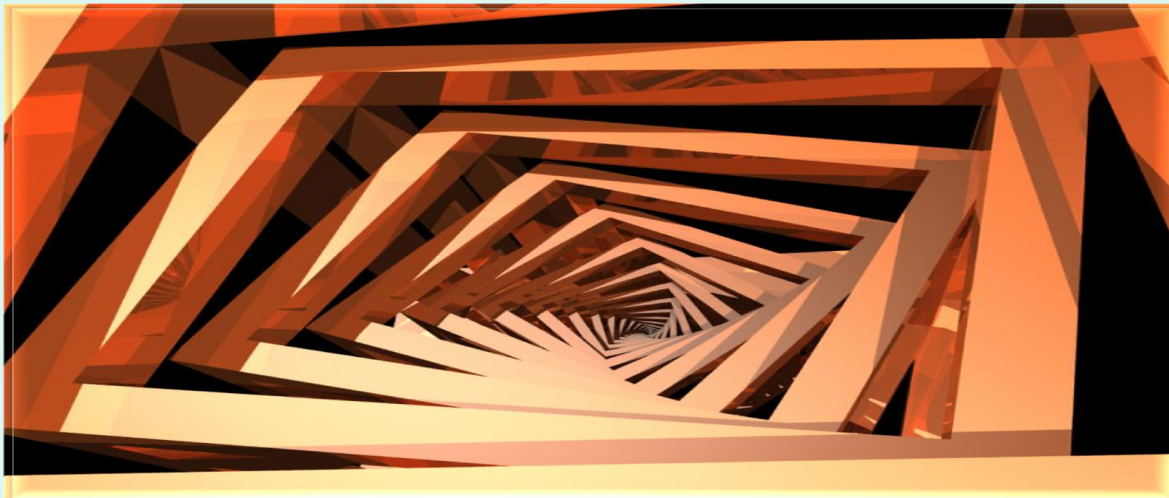


Protocols for Participatory Approaches to Application Design and Project Work

Key Reference: Frank Upward, Barbara Reed, Gillian Oliver,
Joanne Evans 'Recordkeeping Informatics: Re-figuring a discipline
in crisis with a single minded approach' *Records Management
Journal* Vol 23. No1 2013

The Continuum Mechanics of Archivalization





Focus of presentation

This presentation will focus on some of the basic elements needed to begin using continuum thinking within systems and application design and implementation.

- conscious archivalization (the capture of quality records and the formation of useful and usable archives)
- parallels between theories about the spacetime continuum and the continuum of recorded information
- the nature of an informatics approach to archivalization emerging from Monash Universities Centre for Social and Organisational Informatics
- the emergence of a suitable informatics architecture
- the need for a project based approach



What is archivalization?

Archivalization places emphasis upon a records continuum approach to the capture of quality records and the formation of a useful archive.

Nano-second archiving

(P_R_A_A[∞])

Perform

_Record

_Archive

_The Archival Multiverse

- Eric Ketelaar: “To be able to develop the information strategy and the record-keeping system of an organization, the archivistics professional has to understand the way people create and maintain records and archives. To arrive at such an understanding, one should also take into account the stage that precedes archiving. That is what I have called recently: archivalization, the conscious or unconscious choice (determined by social and cultural factors) to consider something worth archiving.”



Spacetime Continuum Theory (1900s -)

- Transcendentally Pragmatic (It is metaphysical, but produces outcomes)
- It deals with emerging phenomena
- It is about perpetual movement
- It is about a vast expanding whole composed of parts that increase in complexity

The first generation:

Some key initiators of different styles of continuum thinking in Western philosophy, post Charles Darwin, Immanuel Kant and Karl Marx:

- Gabriel Tarde, Henri Bergson, Albert Einstein, Edmund Husserl, Samuel Alexander, A.N. Whitehead, John Dewey, C.S. Peirce, William James, Georg Simmel, Max Weber, Herman Minkowski, Georg Cantor, Kurt Gödel, T.S.Eliot, J.M.Keynes



Records continuum theory (1920s -)

Defining characteristic:

A refusal to sharply separate records and archives services.

Pre-modernity (most of Europe)

- England, 1920s, (continuous custody and moral preservation)
- The USA in the 1930s (National Archives and Records Service)
- Australia from the 1950s

The first generation: Some key initiators of different styles of records continuum thinking in government recordkeeping:

- Sir Hilary Jenkinson, Margaret Cross Norton, Philip Brooks, Ian Maclean,
- And beyond government records: Peter Scott



Archivalization and Informatics

The Emerging informatics approach to archivalization at Monash University

There is a growing emphasis placed on connecting participatory design with archives and records services within the Centre for Organisational and Social Informatics:

- Community Informatics
- Recordkeeping Informatics
- Juridical Informatics

Community Informatics

e.g. Dr Joanne Evans is leading a fellowship project for “*Connecting the disconnected*” *Designing Socially Inclusive, Integrated Archival and Recordkeeping Systems and Services*.

Recordkeeping Informatics

The need for the participation of all information professionals in the capture of quality records and the formation of useful and usable archives (e.g. this presentation)

Juridical Informatics

Participation of organisations, community groups and information professionals in the formation of self-authenticating archives (e.g. Clever Recordkeeping Metadata]



What is Recordkeeping Informatics (RKI)

Informatics

Informatics is the science of information. It studies the representation, processing, and communication of information in natural and artificial systems. Since computers, individuals and organizations all process information, informatics has computational, cognitive and social aspects. Used as a compound, in conjunction with the name of a discipline, as in medical informatics, bio-informatics, etc., it denotes the specialization of informatics to the management and processing of data, information and knowledge in the named discipline.

(Fourman 2003)

Recordkeeping Informatics

The recordkeeping prefix indicates it is a form of informatics concerned with recording information about agents (usually people) in action, and the way that recorded information is shaped into quality records and useful and usable archives. It studies three major facets and two building blocks for archivalization:

- * Organisational Culture
- * Business Processes
- * Archival access to past and present records
- * Continuum Thinking
- * Recordkeeping Metadata



Archival Diplomatics and RKI

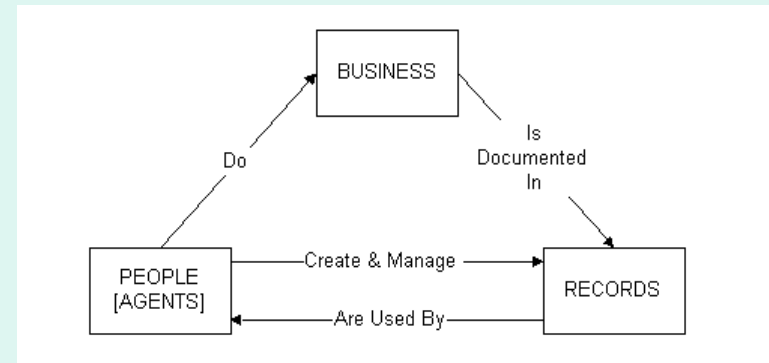
Authoritative Resource Management requires Protocols

Authoritative Resource Management according to the sociologist Anthony Giddens describes the way

- we manage things over spacetime
- we manage our mutual associations
- the way we look towards maximizing our life chances

This requires rules and regulations. At present the productive power and our technical protocols are galloping ahead of social protocols.

Authoritative resource management from an archivalization perspective requires diplomatic protocols for our business processes.





Application design and Project work

RKI projects

Continuum approaches reject inflexible end product based life-cycle models for the direct application of records and archives services within the business based contingencies of particular applications across the lifespan of recorded information. This gives projects a particularly important role in re-building records and archives services for the digital era

e.g. The development of the digitalization program at the State Records, New South Wales.

“Probably the most distinctive feature of the State Records NSW approach to preserving digital recordkeeping systems is its flexibility. Rather than delivering a tightly integrated end-to-end system with fixed rules for archiving digital objects, we’ve developed a project based methodology ... To support this open approach to digital archiving, we have favoured the use of small, simple and flexible tools that we can compose together to achieve the goals of different migration projects.”



Emerging Features of a Suitable Informatics Architecture

Agility

RKI is not always a subordinate activity. It can be the life-blood for the success or failure of a system and in those cases the expanding and complexifying features of the continuum of recorded information gives us no choice. We must take an agile approach to archivalization

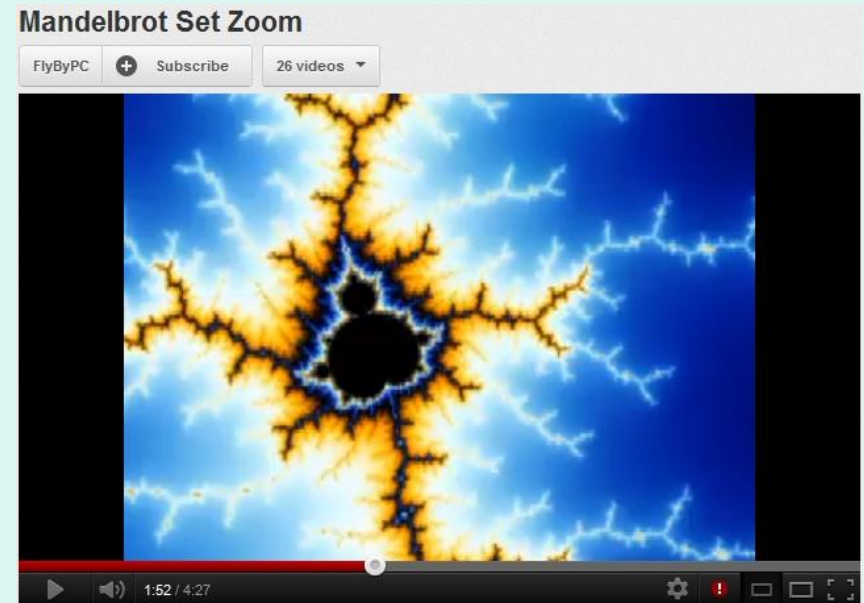
Creativity, consistency, coherence and the capacity to tailor recordkeeping interventions within a multitude of implementation environments, technologies, societal and technical spaces is the goal. The following modern styles of system design can help in this:

- Flexible and networked informatics architectures, e.g. plug and play technologies
- Prototyping of modules
- Tailorability of modules
- Identifying modules that are fractals



What is a fractal?

In RKI fractals are the recurring patterns that can be found at different levels across the vastness of the continuum of recorded information. Unless we can identify them for RKI purposes archivalization will never again be a manageable process.





Big and small projects

Big projects (the largeness of the whole)

A range of major authoritative resource management problems are challenging us including climate change, environmental damage, the spread of terror and corruption, the decline in confidence in our governments, the need to make better use of the multiple perspectives contained in records, and the perennial problems of poverty, famine, and economic collapse.

Small projects (the complexity of the part)

- The myriad of things we administer badly these days – choose your own examples, but in the ‘AngloSphere’ they are abundant.

The whole/part disjunction

- information storage in general has become more insecure in direct proportion to our increase in our reliance upon large data stores and firewalls for the electronic storage of memory
- but the information objects at granular levels are often better described as information sludge because of archivalization failures



The Records Continuum Model

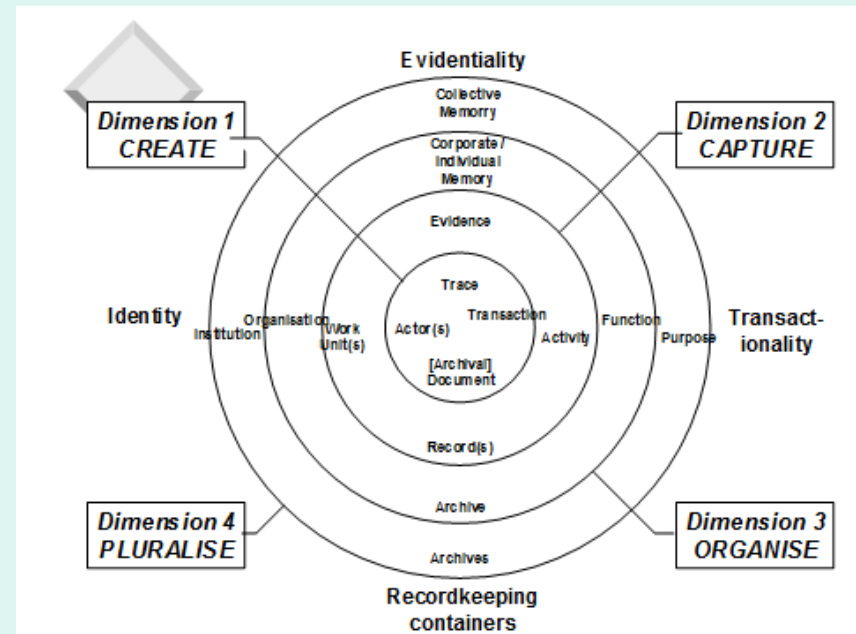
RKI Home Base

Dimensions

- The four dimensions of archival time

Vectors

- Evidentiality
- Identity
- Transactionality
- Recordkeeping Containers





Other Continuum Models

Community Informatics

The cultural heritage continuum (CHCM)

The Information Continuum (ICM)

The Publishing Continuum (PCM)

Vectors:

- *Time-space distancing
- *Narrative scale
- *Action & Structure
- *Technology
- *Learned Knowledge
- *Issuance
- *storytelling
- *Cultural Heritage Containers
- *Categorization
- *Storage and Memory
- *Reach
- *Publication Containers

Juridical Informatics

The Information Systems [Data] Continuum (DCM)

The Digital Forensics Continuum Model (DFCM)

Vectors:

- * Power Modalities
- * Data Plumbing
- Data Modelling
- Data Storage
- *Weight of Evidence
- *Patterns of Evidence
- *Manifestation of Evidence
- *Keeping of Evidence



Sustainable growth will depend much on RKI

- The crisis in digital recordkeeping is obvious (e.g. access)
- The meta-reality of the expansion of the continuum of recorded information means that others are discovering process based archivalization by themselves
- agile archivalization is possible using recordkeeping metadata as the basis for new approaches to appraisal, access, description and business process analysis
- Agile forms of computerization (e.g proto-typing design methods, fractalization, tailorable modules, plug and play methods) will start to change information cultures

Crisis of digital convergence

Digital information sludge

Collapse of collective memory

Expanding complexity ... massive expansion in recorded information

Growing inability to connect our recordkeeping processes with new demands for archival access.



A Recordkeeping Informatics Ark?

An Archivalization Application Store

Archivists and records managers globally and locally can be involved in establishing app stores for shared and sustainable growth containing modules for distribution built upon the P_R_A_A[∞] mantra:

Perform_
Record
Archive
_Archival Multiverse

With acknowledgement to Taipei's Eco Ark founded on the mantra of Reduce, Re-Use and Recycle)