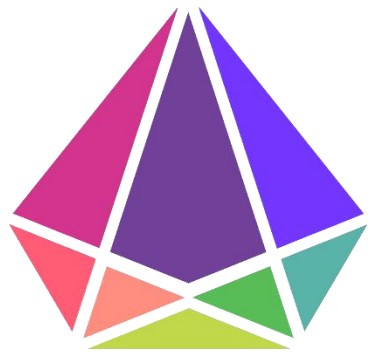


# RECORDKEEPING INFORMATICS





# Recordkeeping Informatics

Visby, Sweden

Archives Week

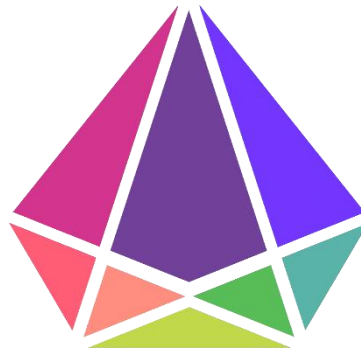
16 May 2017

- Presentation 1, Recordkeeping informatics and Continuum thinking, information cultures, business process analysis and access to records of action
- Presentation 2, Recordkeeping metadata and the Implementation of Recordkeeping Informatics

# What is Recordkeeping Informatics?

## Informatics

- Technology
- Social Aspects
- Cognition  
[epistemology  
or lens]



## Recordkeeping functionality

- Storage
- Appraisal (of applications)
- Source and Transmission
- Trust
- Audit
- Evolving functions, e.g.  
registration and workflow

# The Parts of Recordkeeping Informatics

Building Blocks for a  
multidisciplinary  
approach

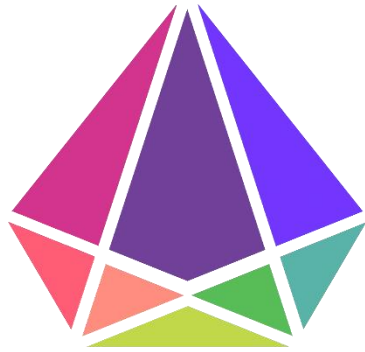
- Continuum thinking
- Recordkeeping metadata



Analytical facets for  
Recordkeeping  
functionality

- Information culture
- Business Process
- Access

The parts are more complex than the whole



### **Simplicity:**

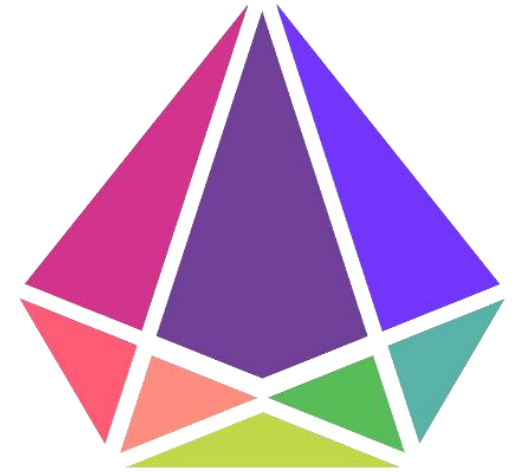
‘The guiding motto of every natural philosopher should be to seek simplicity and distrust it’

A.N.Whitehead, 1919

# The Continuum Episteme: The Flicker

But neither arrest nor movement. And do not  
call it fixity,  
Where past and future are gathered. Neither  
movement from nor towards,  
Neither ascent nor decline. Except for the point,  
the still point,  
There would be no dance, **and there is only the  
dance**

- T.S.Eliot, '*Burnt Norton*', II.



The  
Continuum  
Episteme:  
Digging into  
its Twentieth  
century  
archaeology

In a perduring epistemology:

- All is archive as historical practice
- Everything is in a state of becoming
- Everything is interconnected
- Problems are always breaking out in new idioms (i.e solutions are never simple]

# The Continuum Episteme: Its 19<sup>th</sup> and 20<sup>th</sup> century genealogy

- **The original giant shoulders:** Kant, Darwin, Marx as spacetime philosophers
- **The next tier:** Natural philosophers such as Einstein, (and many others) as well as archivists such as Jenkinson, Brooks or Maclean
- **Subsequent natural tiers** such as 'the Bergsonists' [e.g. Foucault, Derrida, Deleuze] mathematicians [e.g. Mandelbrot, Lakatos] and continuum archivists.

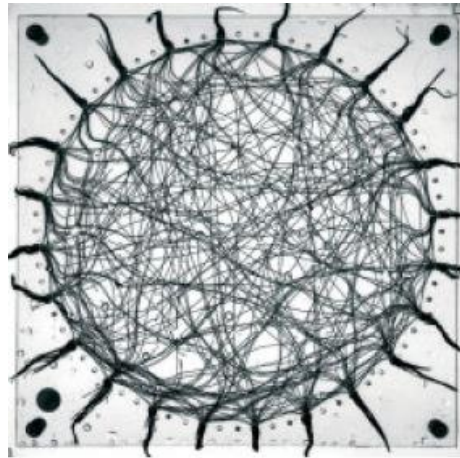
## The Continuum Episteme: The Archival Turn

The archive and desktop are already synonymous. Once denoting a material repository of documents governed by an established institution (e.g., a state archive), definitions of the archive continue to loosen. For a new generation of readers and writers, the archive may be known only as a site of virtual storage     *Kate Eichhorn.*

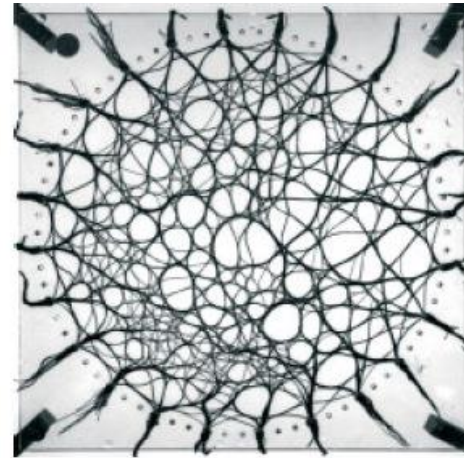
# The Continuum of Recorded Information and the Disrupted Archive

## The Archive

postcustodial



custodial



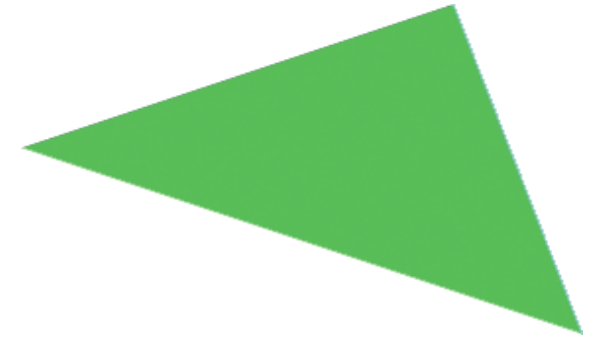
Nano-second archiving disrupts the traditional fixed order for archiving and generates chaos 'in the clouds'

# Continuum modelling

## Socio-technical models

- The Information Processing Continuum  
[creation, capture, organisation, pluralization]
- a multiverse of vectors]

Based on the ALL IS ARCHIVE form of cognition





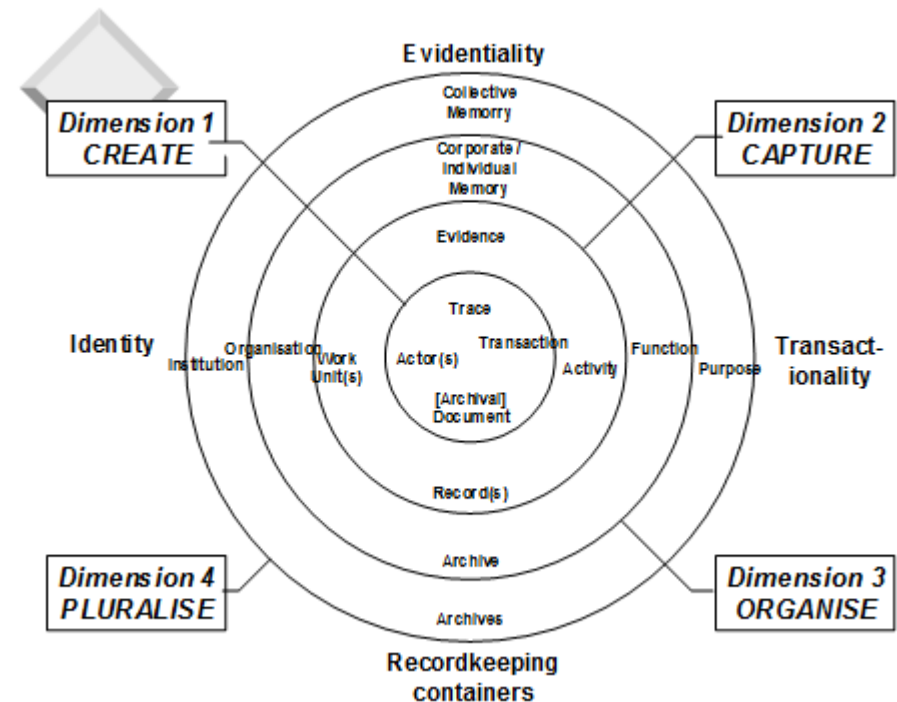
# The Records Continuum Model

## The four dimensions of the information processing continuum

Create, capture, organise, pluralise

## Vectors

- Evidentiality
- Identity
- Transactionality
- Recordkeeping Containers



# . Other Continuum Models and Vectors

The cultural heritage  
continuum (CHCM)

The Information  
Continuum (ICM)

The Publishing  
Continuum (PCM)

The Information  
Systems Data

Continuum (DCM)

The Digital Forensics  
Continuum (DFCM)

\*Time-space distancing \*storytelling  
\*Narrative scale \*Cultural Heritage  
Containers

\*Action & Structure \*Categorization

\*Technology \*Storage and Memory

\*Learned Knowledge \*Reach

\*Issuance \*Publication Containers

\*Power Modalities \*Data Plumbing

\*Data Modelling Data Storage

\*Weight of Evidence \*Patterns of

Evidence \*Manifestation of Evidence

\*Keeping of Evidence

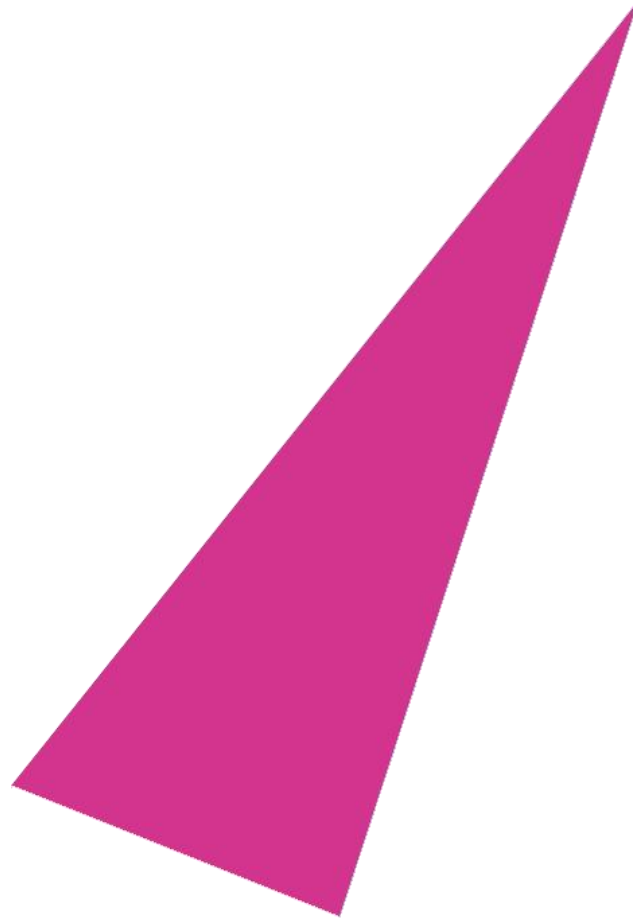
# The Analytical Facets of Recordkeeping Informatics

- Information culture
- Business Process
- Access



Support for recordkeeping functions, developing business applications in nano-second archiving contexts, and for determining recordkeeping metadata requirements within projects

# Information Culture



Values

Attitudes

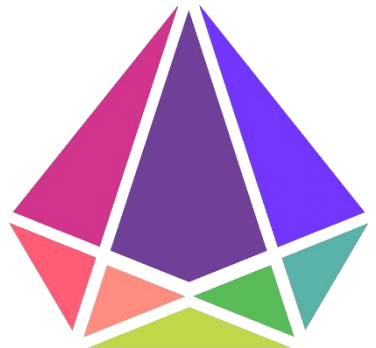
Behaviours

Individual

Group

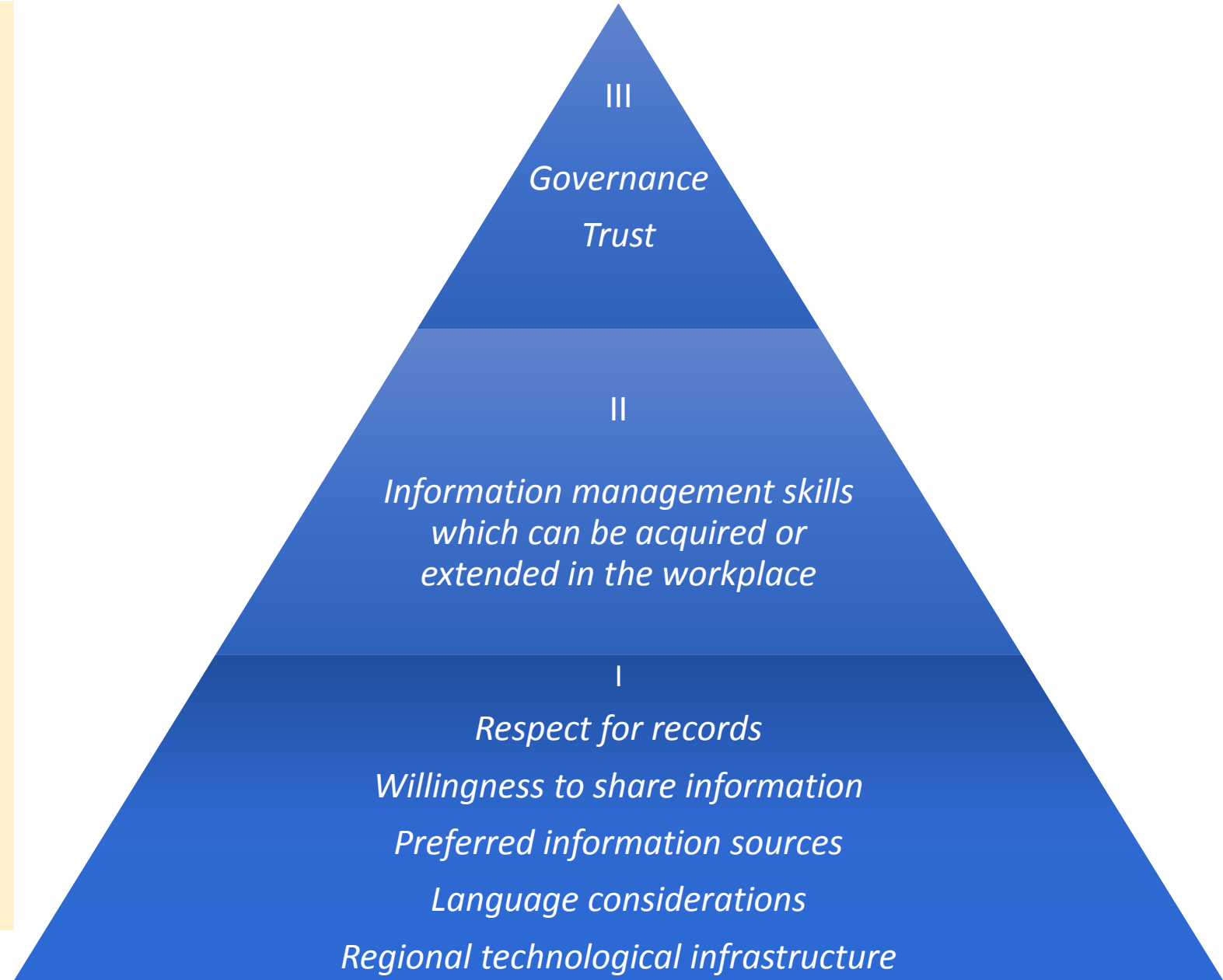
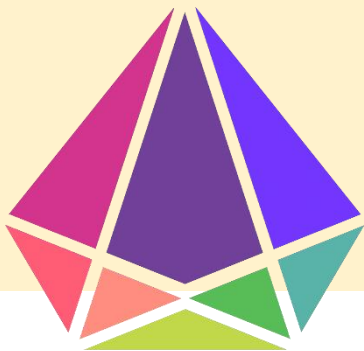
Organisational

Societal

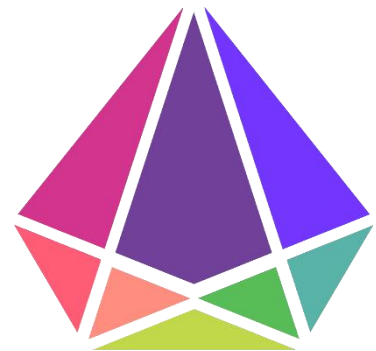
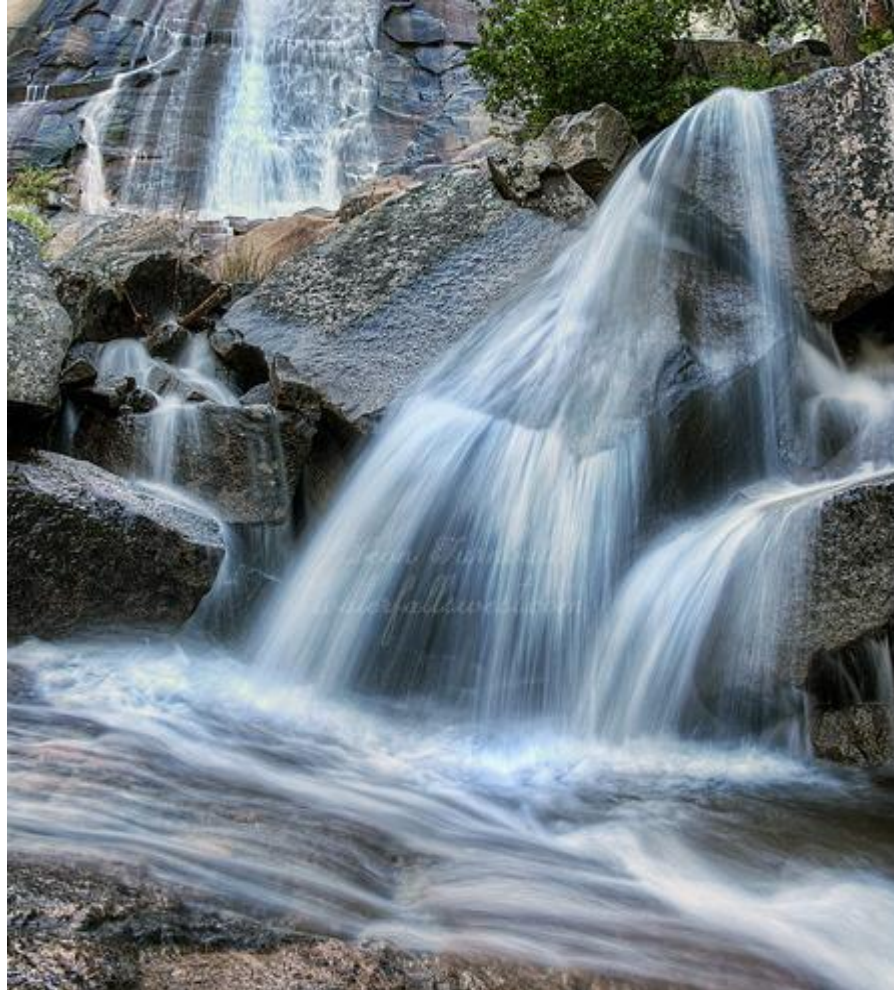
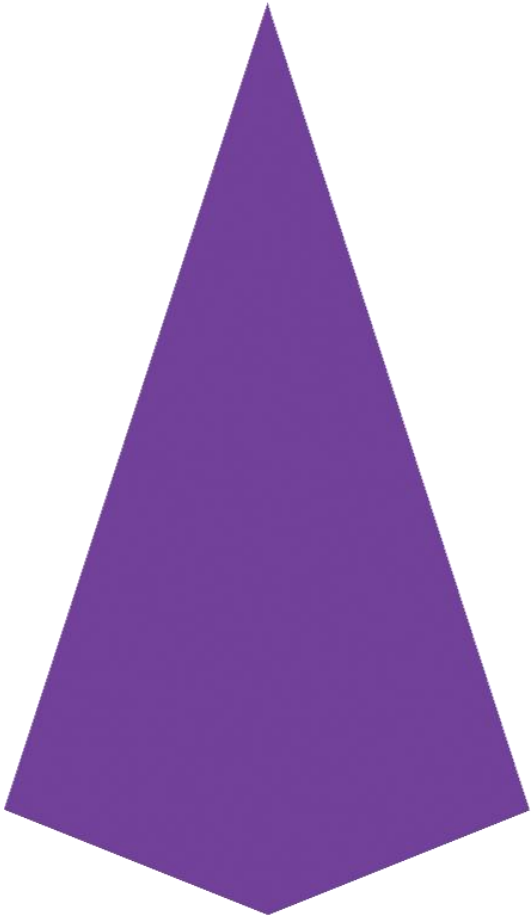


## Information cultures

From  
recordkeeping  
fundamentals and  
information  
management skills  
to changeable  
governance  
outcomes



# Business process analysis





## Cascading inscriptions

•

"An isolated image has no scientific referent – but it generates, of course, like all images, a virtual image, the ‘what’ that it is said to be the representation ‘of’. Taken in isolation, an electron microscopic image of a virus, a photograph of a galaxy, and the drawing of a skeleton in a natural history museum, has no specific value (even though they might have powerful aesthetic, pedagogical, or rhetorical strength). If you want to understand what an isolated inscription means in science, you have to reinsert it inside the cascade of other inscriptions out of which it has been extracted."

V.November, E.Camacho-Hubner, B Latour

# Bundling of Activities and Recordkeeping Architectures

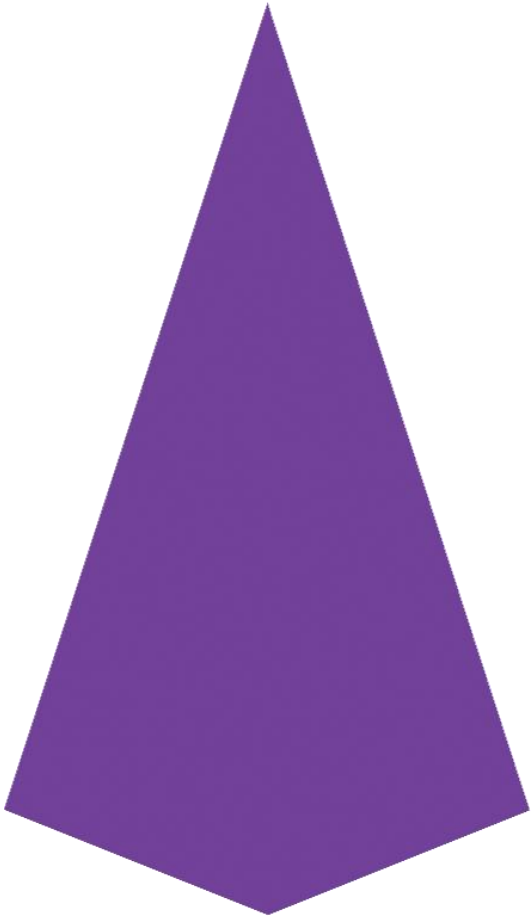
" ...Organizations can now be conceptualized as bundles of activities grounded in language and communication ...

Information systems can now be viewed as architectures that define social relationships and organizational action ... "

Mark Aakhus, Pär Agerfalk, Kalle Lyytinen  
and Dov Te'eni,



# Bundling of Activities and Recordkeeping



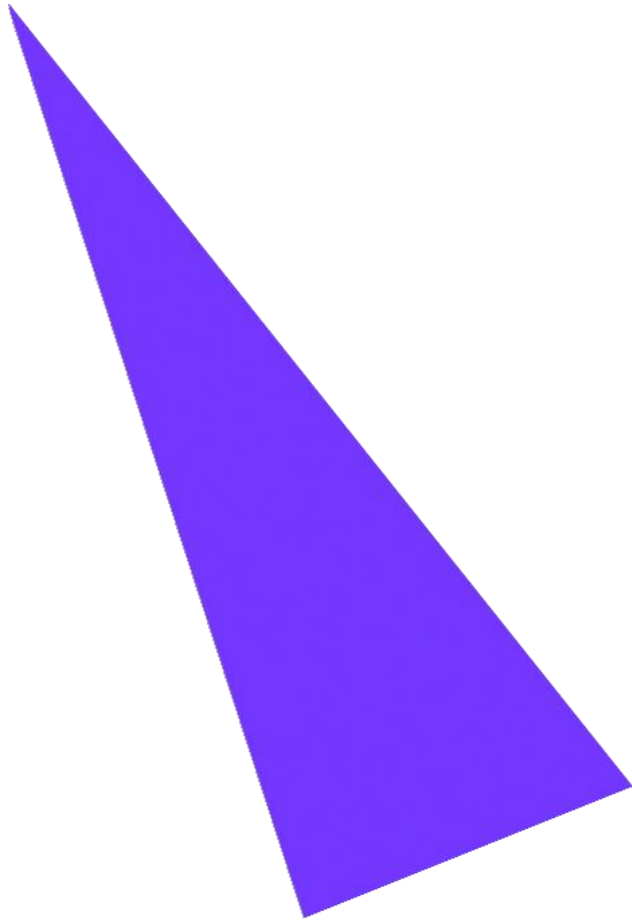
Recordkeeping features [traditional]

- Organisations as bundles of activity {e.g Weberian bureaucracy}
- Linking cascading inscriptions

Modern challenges

- Flood of inscriptions
- Nano-second archiving
- Disappearance of recordkeeping behind and beyond the screen

# Access to evidence of action



## **allocative information resource management:**

- the power of production (the expanding continuum)

## **authoritative information resource management:**

- spacetime management
- mutual association
- life-chances [Source, Anthony Giddens]

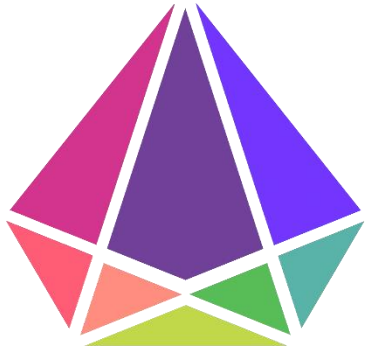
# Access: Allocative Information Resource Management and Evidence



The expanding continuum of recorded information is a transformative force

- The Information superhighway
- 'Information wants to be free'
- but is too much information actually sludge because of lack of understandings, control, or management of provenance (source and transmission) data?

# Access: Authoritative Information Resource Management and the Disruption to Evidence



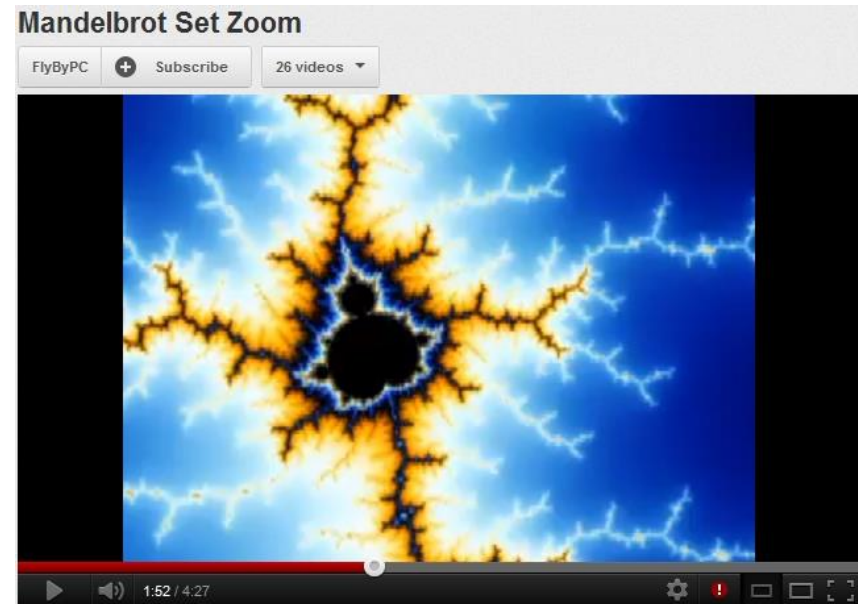
The expanding continuum of recorded information is productive but is also a disruptive force causing access difficulties in areas such as

- restrictions/permissions
- FOI and privacy codes and practice
- Leaking and hacking
- Accountability and transparency in a 'post-truth era'
- Custodial archival control

# The goal of the analyses: An agile fractal-based computing strategy

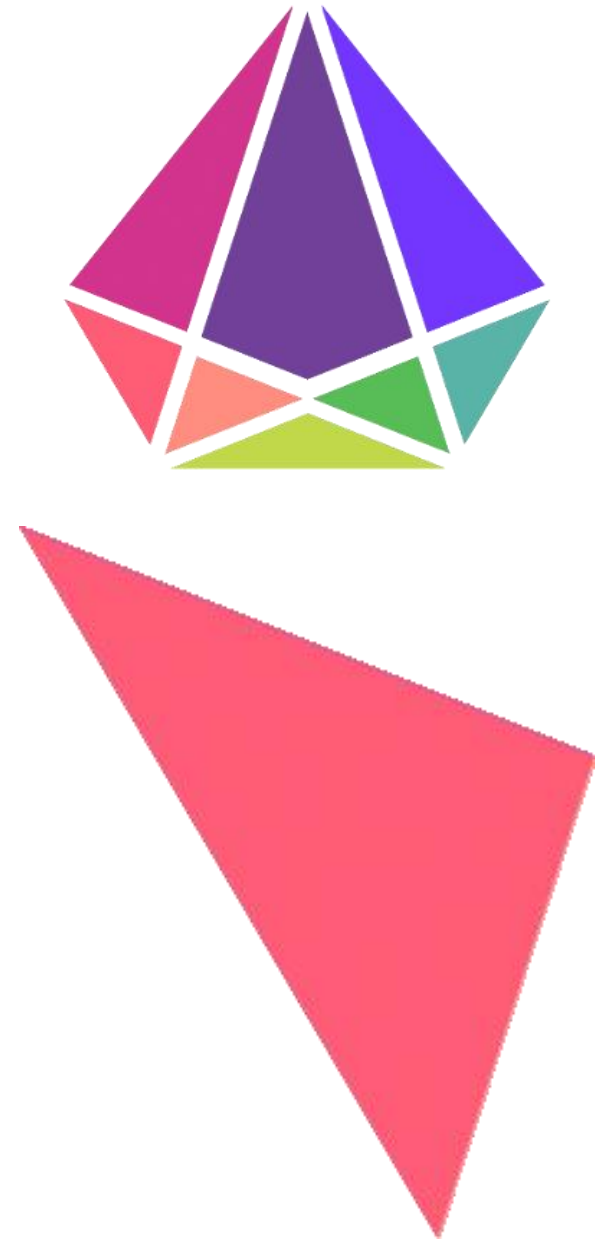
## Fractalization

- Identifying local, regional, national and global patterns across groups and organisations
- Feeding fractals in to modular recordkeeping architectures
- tailoring of modules
- approving and authorizing modules



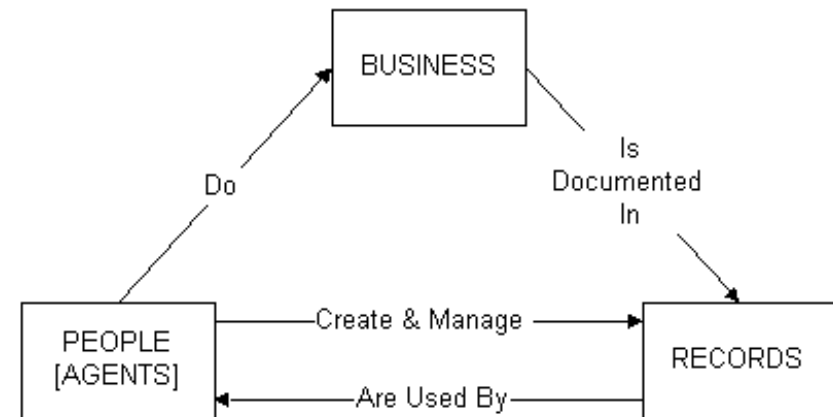
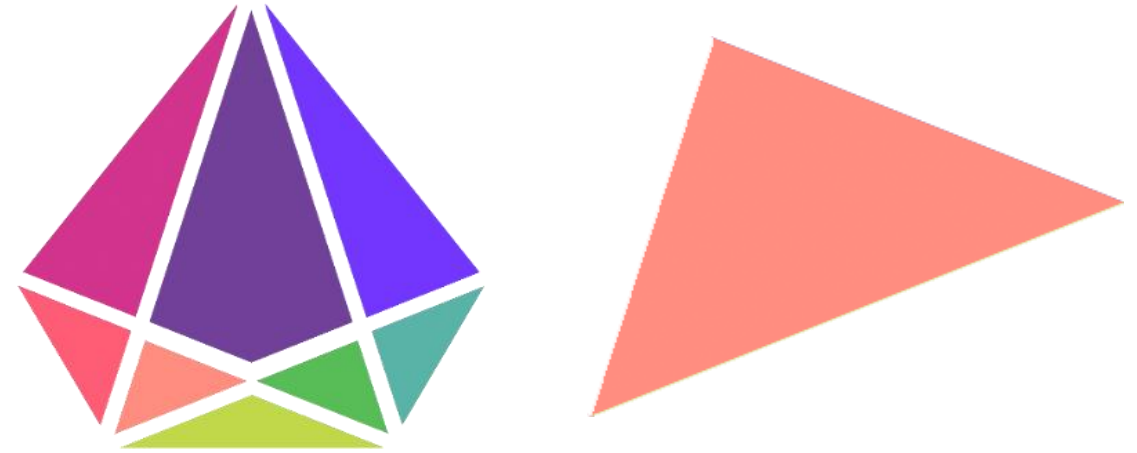
# Recordkeeping metadata and the continuum episteme

- Authoritative information resource management requires a perduring perspective (continuum thinking)
- Implementing this within recordkeeping informatics as a system requires using metadata
- Team projects directed at business applications can help sort out the current babble about metadata



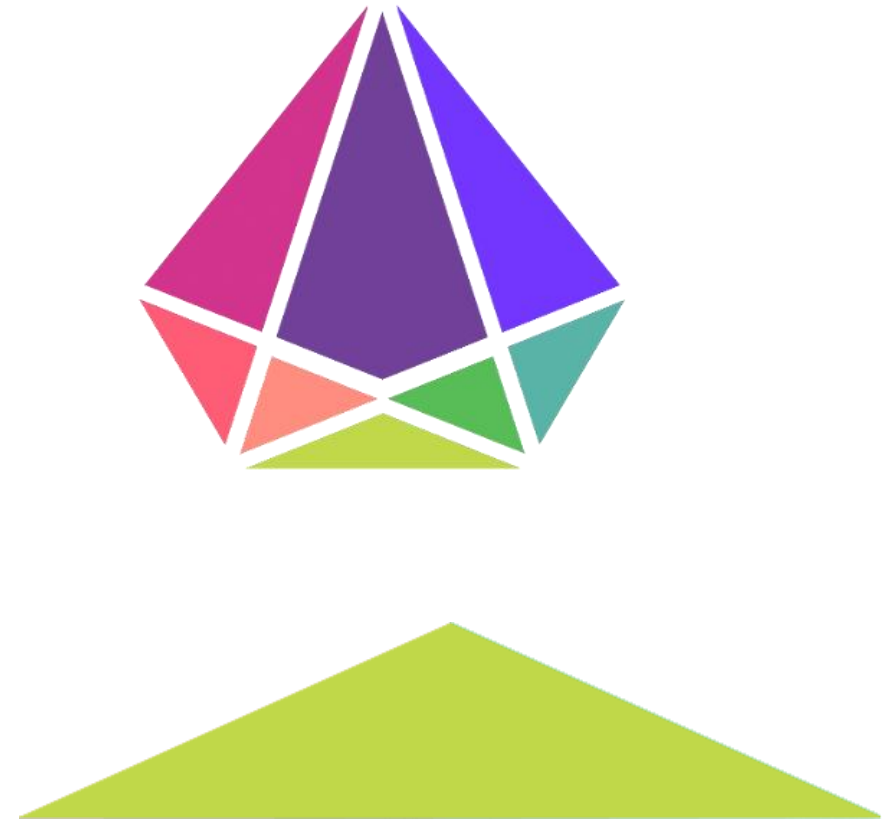
# A Social model for recordkeeping Metadata

The Monash Metadata Model  
for authoritative forms of  
transaction based recordkeeping  
focusses on the relationships  
between business activities, the  
people involved in them and the  
records that are produced from  
and by them



# Recordkeeping metadata and multiple technical inputs

Using Projects the various technical metadata schemes devised by different professional groupings can be brought together within a more traditional systems design meaning of metadata as the data structures relating to the application itself, an important component of a fractalization strategy



# A Major Challenge: The Creative Evolution of Authoritative Information Resource Management

The exponentially expanding Continuum of Recorded Information when left to its natural drive is:

- Morally Indifferent
- Plastic [William James]

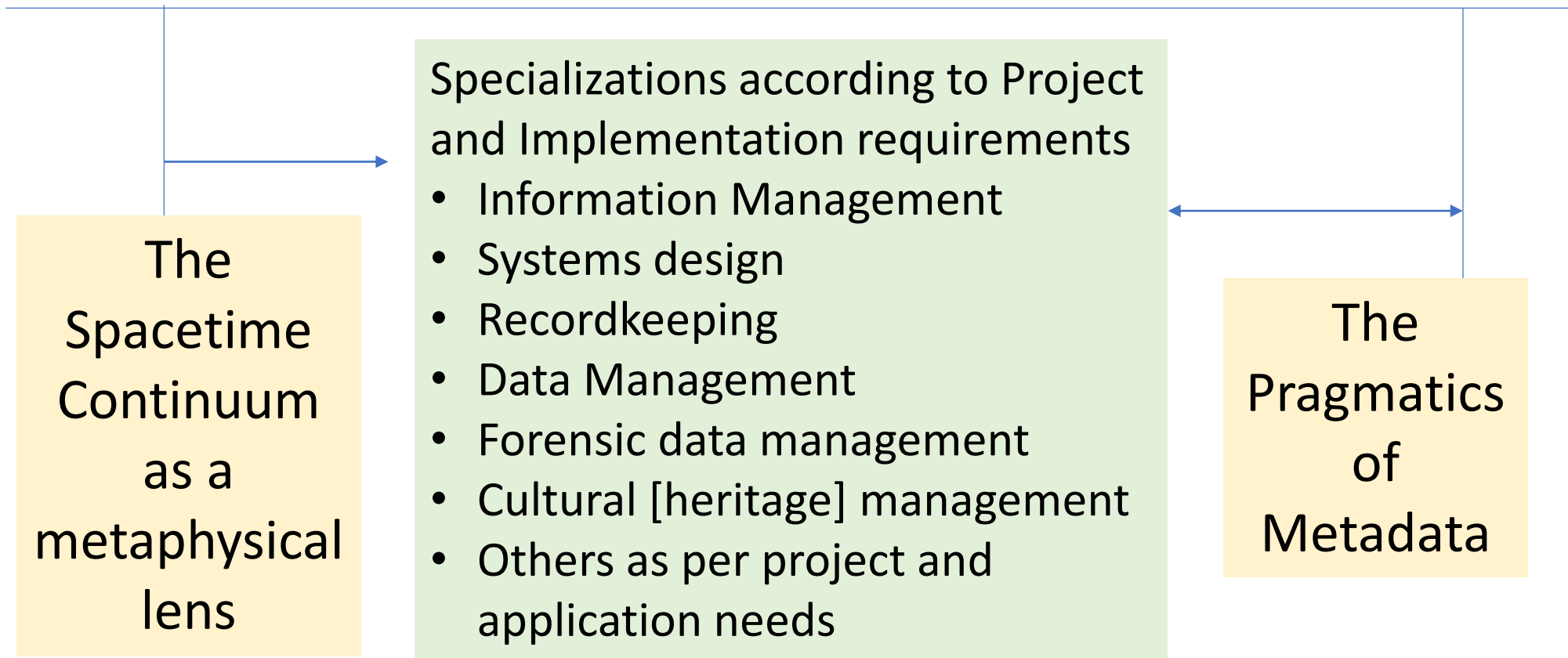
placing a premium on the need for ethical informatics professionals. Are there too few sharp points at the leading edge of the evolution of the formation of evidence?



Image credit: <http://cc.eestage.com/blog/11-tips-creating-authoritative-content-post-authorship-world>

# A Professional Continuum Informatics Actor-Network

## Authoritative Information Resource Management and Evidence



# The Recordkeeping Specialization within the Continuum Informatics Network

Nanosecond  
archiving and  
agile  
computation



## Recordkeeping Informatics and Project Design and Implementation

### Analytical Input:

- Information Culture (e.g recordkeeping architectures)
- Business Process Analysis (e.g. workflow)
- Access (e.g. registration techniques)

### Recordkeeping functionality

- Recordkeeping metadata
- Spacetime management of storage
- Project methodologies for authoritative information resource management
- Appraisal (e.g. application evaluation)

Moral  
Defence  
of the record  
[transparency  
accountability  
& legitimated  
restrictions on  
access

