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# Questions and Possibilities: The Four-Dimensional Future of Metadata

Stephen Downes  
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Creating metadata standards is the act of defining all possible worlds within a space...

Posing questions is the act of articulating those possibilities that we can comprehend...

But what of the possibilities we cannot comprehend?

They exist in four dimensions...

# 1. Resources

*What is the nature of things? Is a rose, by any other name, still a rose?*

# What Exists?

- Works, Expressions, Manifestations, Items (Chris Oliver)
- Different ‘things’ – consider, for example, the status of geographic data, which is classed by latitude and longitude (Andrea Buffam) – what is the ontology of a shoreline?
- Paul Johanis – the ‘survey object’

# What Doesn't Exist?

- "We may have more labels than we have things out there." – Jutta Treviranus
- *But* how can we avoid creating ontologies through classifications – inheritance, the dispute between Ockham and Scotus
- Some artifacts are not 'works' – they are merely expressions – a ticket stud, for example – Wendy Duff

# How Are Things Grouped?

- ... and do these groupings become entities that exist? (And does this invalidate the existence of the things grouped?)
- In archival metadata the font places a key role... is a font an entity? (Wendy Duff)

# What's in a Name?

- Wendy Duff – filing complaints under ‘crackpots’ changes the nature of the items
- Is a name simple? Maybe not: statistical unit (the things we observe) + property (thing being measured) + representation (form of the data) = variable. These three elements are used to create the name of the variable. - Paul Johannis

## 2. Descriptions

*To describe is to perceive, but each of us is alone in our perceptions...*



# What Types of Things Are There?

- This is like asking, how are things grouped...maybe?
- More types that we can possibly imagine: Walter Lewis - newspaper archives, image archives, books, census reports, wills, property records, military records, cemetery information, business directories, maps....
- Transactions, events, etc. - Catherine Zongora – Supply chain metadata – Doug Minett

# Where is the Description?

- The description is not always in the object –  
“The description is usually the first level of encounter; without the description it floats anonymously.” – David McKnight

# What is the Logical Structure of Description?

- It's more like a crossword than a tree, isn't it? - Wendy Duff.
- Descriptions – the *nature* of descriptions – varies across language (Sarah Klotz and Lorraine Gadoury)
- Controlled vocabularies – Nancy Brodie

# Can We Describe Different Types?

- Walter Lewis: describe each type appropriate to the medium – but what dimensions of type are there? Medium, message, creator, format... each with a bearing on description
- There may be a ‘core’ – but we can’t standardize on the core, we need much more information (Lewis)

# Can We Create Venn Diagrams from Silos?

- Comment to Wendy Duff: harmonization won't happen. Reality is more like a Venn diagram. We all see items - we need a way to create things at the item level. We need the 'ANDs' and the 'NOTs'.
- *Is there* a common element set?
- If not, how do we translate? Several people (e.g., Norm Friesen) mentioned 'crosswalks'

# How Can We Ensure Our Descriptions are Reliable?

- Museums – provenance (Sheila Carey) and we have descriptions without open access?
- Where do descriptions come from – who is responsible? - Catherine Zongora – elements for sign-off, trustee, other data management
- Can we have descriptions without open access?

# What Is the Range of Descriptive Possibility?

- The card catalogue? – Ron Wakkary
- Chris Oliver – Attributes and Relations – Is that all? What about, say, attitudes?
- Tom Delsey – information about availability, rights, reviews...
- Several people: ‘administrative metadata’ – metadata about the management of the metadata

## 3. Time

*Time – that most unreal of dimensions – is the only dimension unchanged in the digital world*



# What Can We Find?

- What we can find is changing. Consider the use of MPEG-7 to define parts of video.
- Alex Eykelhof: "When you're dealing with video, metadata takes us past the black box."
- Time is relevant – Statistics Canada – ‘The Daily’

# How Does Time Change Objects?

- More than just living and dying... (though these are of some importance)
- Wendy Duff: “Categories are historically situated artifacts and like all artifacts are learned as part of membership in a community of practice.”
- What is cool today is cold tomorrow; "Rust never sleeps.“ – David McKnight

# What are the Other Dimensions of Time?

- Time is closely related to place (just ask Einstein). An object's place is a *temporal* property.
- But what is the 'place' of metadata? Of a digital object? And how does that relate to identity?
- How does 'place' change metadata – e.g., Doug Minett – no use of 'trade paperback' category in U.K.

## 4. Community

# Who Am I?

- Questions of authentication, etc., for data management, but not just that...
- People as entities? No discussion...
- Who am I from the point of view of accessibility – personal preferences – Jutta Treviranus

# Who is our Audience?

- Ian Wilson – opening remarks – the focus is on Canadians
- Nancy Brodie – client focus

# How do we reach them?

- The question is: how do we make our data accessible? (Ian Wilson)
- Will the users go to *your* site? “Users do not differentiate searches by professions. They want access regardless of institution type. To meet our user needs we must collaborate and develop compatible metadata schemes.”  
– Wendy Duff

# How Do They Understand?

- The challenge is the task of translating many languages, some of them secret, with source material in many locations and sometimes hidden. – Jutta Treviranus
- Maps and Metaphors (James Turner, the MetaMap)
- Not only a map, but also a structure. – David McKnight



# Can They Access?

- Questions of rights, of course – MPEG-21 and ODRL
- But also models: Grace Welch – data on a cost recovery model so people created their own data rather than reuse
- Education: reuse is the only economically viable model – Norm Friesen

# How Do They Speak?

- The 'human element' in metadata
- Wendy Duff – people do not know how to use the DGCI metadata... don't use all the fields
- CanCore – bridging the gap – Norm Friesen
- Sheila Carey – museums – Community Memories
- "integrated, unconscious authoring" – the TILE Project – Jutta Treviranus

# What Tools Do They Use?

- Cataloguing Tools – e.g., Sheila Carey, museums
- News Input – Robert Oates
- But – will people go to *your* website to input *their* data?

# What Does Our Audience Say?

- Was listening for the other direction of communication...
- Personal portfolios?
- E-government?
- How do we incorporate their contribution into our metadata (or do we dare?)

# What are Metadata Networks?

- eduSource – Gilbert Paquette – types of network forms – it not just search on a given website (can't be)
- RSS Feeds – Robert Oates
- Is there an overlap with commercial book distribution networks? – Tom Delsey

# Why?

- We welcome standards, so long as they don't hinder our capacity to create – Ron Wakkary
- Reusability isn't itself enough - Wakkary
- The idea of the 'third wave' semantic web – more than just document management; you need to work with the knowledge representation to get access to the knowledge that you need. - Gilbert Paquette

- Stephen Downes
- <http://www.downes.ca>
- [stephen@downes.ca](mailto:stephen@downes.ca)