


Digital Cultural Heritage in New Zealand: An Ecological Approach and Participatory Culture

Chern Li Liew
Victoria University of Wellington
School of Information Management



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Outline

- Background and Context
- Cultural heritage in New Zealand
- Digital cultural heritage (DCH) in New Zealand
- Issues and Potentials
- An ecological approach to DCH
- Establishing participatory culture in DCH

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Background and Context

- Living in New Zealand 
- ... but not a 'Kiwi'

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A Bit About Myself

- Originally from Sabah (North Borneo, East Malaysia)



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A Bit About Myself

- Senior lecturer, Information Studies programme
- Visiting Scholar at University of British Columbia, Vancouver (Feb-June 2007)
- Joined VUW (NZ) in June 2003 from Singapore
- PhD at NTU, Singapore (1998-2001)
- MSc., Loughborough Univ; BA (Hons), Univ of Brighton, U.K.
- **Teaching at VUW (Masters-level):** Managing digital collections; Research methods for information management; Organising information; Web Content Management
- **Research interests:** Design & usability of digital cultural heritage – Information interaction and information use; Value-adding to digital contents; Context-sensitive information seeking/ knowledge discovery

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Cultural Heritage in New Zealand: Background + Context

- **Aotearoa** - “Land of the long white cloud”
- Population: About 4.4 million
- Ethnic groups (2011 Interim Census):
 approx. 70% European + others; 15% Māori;
 9% Asian; 6% Pacific peoples

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New Zealand Cultural Heritage

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“The Māori people are most likely descended from people who emigrated from Taiwan to Melanesia and then travelled east through to the Society Islands. After a pause of 70 to 265 years, a new wave of exploration led to the discovery and settlement of New Zealand.”

Wilmshurst, J. M.; Hunt, T. L.; Lipo, C. P.; Anderson, A. J. (2011). "High-precision radiocarbon dating shows recent and rapid initial human colonization of East Polynesia". *Proceedings of the National Academy of Sciences of the United States of America* 108 (5): 1815–1820.

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Digitisation of New Zealand Cultural Heritage

- Cultural properties and knowledge owned by Māori communities
- Memory institutions are mostly run by 'Pakeha(s)' using Anglo-American concepts and systems
- Cultural significance and preferences
- Concepts of authenticity and kaitiakitanga (guardianship)
- Certain knowledge is *tapu* (sacred)
- *whānau* (families, extended families), *hapū* (sub-tribes) and *iwi* (tribes)
- Highly contextualised (some: tacit; intangible; interlinked) ... "textured sculpture"

(Dorner, D, Liew, C.L. and Yeo, Y.P (2007), "A Textured Sculpture: An Examination of the Information Needs of Users of Digitised New Zealand Cultural Heritage Resources", Online Information Review – The International Journal of Digital Information Research and Use, 31(2), 166-184.)

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Digitisation of New Zealand Cultural Heritage

Prospect for a Sustainable & Meaningful DCH

- ▶ Reconciliation
- ▶ Integration and sustainable structure
- ▶ Contextualisation of indigenous knowledge in its cultural and historical perspectives
- ▶ Integrity and trustworthiness
 - Consultation and involvement
 - Reciprocity in collaborative collection building and value-adding

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An Ecological Approach to Digital Cultural Heritage

- ▶ Emphasises a holistic understanding of DCH as part of an **information ecology**, and of the **activities** taking place between and amongst the various elements of the ecology
- ▶ Requires more than enumerating the digital objects, the organisation and structures and users/stakeholders that comprise a knowledge environment
- ▶ Requires also an understanding of the relationships and interactions that take place between and amongst the elements and their co-evolution through changes
- ▶ Crouch (2010): "...heritage is continually emergent in living."

Crouch, D. (2010). *The Perpetual Performance and Emergence of Heritage. In Culture, Heritage and Representation: Perspectives on Visuality and The Past*, edited by Waterson, E. and Watson, S. Ashgate Publishing, Surrey.

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An Ecological Approach to Digital Cultural Heritage

■ Information Ecology (Nardi & O'Day, 1999)

Nardi, B. A. & O' Day, V. (1999). *Information Ecology: Using Technology with Heart*. MIT Press, Cambridge, Mass.

■ Activity Theory (Kaptelinin & Nardi, 2006)

Kaptelinin, V. and Nardi, B. A. (2009). *Acting with Technology: Activity Theory and Interaction Design*. MIT Press, Cambridge, Mass.

Liew, C. L. (Forthcoming) *Towards Dynamic and Evolving Digital Cultural Heritage Libraries*. *Information Research*.

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An Ecological Approach to Digital Cultural Heritage

- We can build a digital library with a rich repository of resources but it is not used as it is deemed to have very little value or it does not fit in with target users' practice (i.e. A technological innovation may appear good in isolation and yet turn out to be problematic or incomplete in actual settings of use due to lack of understanding of *locality* and *values*)
- We can start with a seemingly good conceptualisation for a digital library but fail to build it or to sustain it because of lack of funding and/or of other forms of essential support (i.e. A lack of understanding of *keystone genus* and roles of stakeholders and mediators)
- We successfully build a digital library according to a seemingly good conceptualisation but a critical problem later emerge (e.g. on data ownership) that creates conflict and threatens the sustainability of the digital library (i.e. A lack of a holistic understanding of the *diversity* of resources, tools, stakeholders, roles and *intentions* as well as the socio-cultural context concerned)
- We manage to build a digital library that is used but once another repository/ system comes along or a new technology is introduced, the digital library becomes obsolete and redundant (i.e. A lack of understanding of *co-evolution* of the digital library in its contextual environment).

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An Ecological Approach to Digital Cultural Heritage

■ Information Ecology (Nardi & O'Day, 1999)

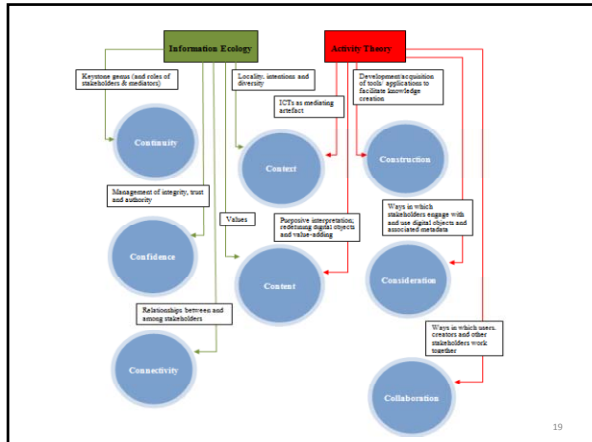
Facilitates the exploration of the values and intentions that drive activities

■ Activity Theory (Kaptelinin & Nardi, 2006)

Understanding and designing of information systems should be based on analysis of its role and place in activity -- help bridge the investigation of relationships between motivations and activities

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Dimension	Related issues & questions
Context	The social, cultural, political, economical and technical affordances and constraints affecting (and being influenced by) the information ecology and activities concerned
Content	The digital objects and associated metadata; added value
Connectivity	The various relationships among stakeholders (including content owners, digital library creators and developers and users) and the various communication avenues between and amongst the various stakeholders
Consideration	The ways in which stakeholders interpret, engage with and use digital objects/ associated metadata
Collaboration	The ways in which users, creators and other stakeholders work together
Construction	The development and /or acquisition of tools and applications to facilitate further knowledge creation and value-adding
Confidence	The management of integrity, trust and authority in the information ecology (or overlapping ecologies) concerned
Continuity	Importance of keystone genus and issues related to the evolution and sustainability of the digital library

Participatory Culture in Digital Cultural Heritage

- Consultation and involvement
- Reciprocity in collaborative collection building and value-adding

Technologies and applications that support an ‘architecture of participation’ – a platform that harness collective intelligence, empower users and facilitate greater engagement and interaction in a participatory approach.

Participatory Culture in Digital Cultural Heritage

- “a transition **from Acropolis** – that inaccessible treasury on the fortified hill – **to Agora**, a marketplace of ideas offering space for conversation, a forum for civic engagement and debate, and opportunity for a variety of encounters” (Proctor, 2010)

Proctor, N. (2010). Digital: Museum as platform, curator as champion, in the age of social media. *Curator: The Museum Journal* 53(1), 35-43.

Participatory Culture in Digital Cultural Heritage

- ‘Collective intelligence/Wisdom of the crowd’
- ‘We is greater than I’

Participatory Culture in Digital Cultural Heritage

- ***If you build it, will they come?***
- ***If they come, will they behave?***

Participatory Culture in Digital Cultural Heritage

- In what ways can DCH introduce a meaningful participatory culture that will benefit their goals as well as their users and stakeholders?
- How can social media applications be used to facilitate this participatory culture in DCH?

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Participatory Culture in Digital Cultural Heritage

- **Three-level Framework**

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Participatory Culture in Digital Cultural Heritage

- **Level 1: Rationale**
 - Pragmatic
 - Purpose-driven
 - Transformational
- Level 2: Policies (Principles & Objectives)
- Level 3: Practice (Methods & Indicators)

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- Level 1: Rationale
- **Level 2: Policies (Principles & Objectives)**
 - User-centric
 - Fostering community
 - Responding to and making effective use of UGC
 - Accommodating multiple perspectives and empowering user construction of meaning
 - Supporting creative expression through encouraging re-use
 - Value-added through greater use
 - Evolving
- Level 3: Practice (Methods & Indicators)

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- Level 1: Rationale
- Level 2: Policies (Principles & Objectives)
- **Level 3: Practice (Methods & Indicators)**
 - ‘Scaffolding’
 - Motivating participants
 - Quality assurance
 - ...

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ありがとうございます
Terima Kasih
 謝謝
Thank you
Tēnā rāwā atu koe

ChernLi.Liew@vuw.ac.nz

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