

# 2006 NHPRC Symposium Keynote Address

## *Uncertainty, Risk, Trust, and Digital Persistency*

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Digital preservation and curation is, in part, about the management of uncertainty and the engendering of trust. Management of uncertainty underpins mechanisms for ensuring the authenticity, integrity, and provenance of digital materials. The conversion of uncertainties into measurable and manageable risks involves an appreciation of the preservation pressure points and the methods, technologies, and processes that can be employed to ameliorate them. To manage risks associated with the fragility of digital objects auditable processes, workflows, and methods need to be supported by guidelines, metadata, a richer understanding of the nature of digital objects, and tools. Current research in digital preservation and curation is making strides towards better defining risks and ways of avoiding and managing them.

The discussion of approaches to measuring uncertainty and managing risk in digital curation is set against the backdrop of the work of key European projects in the area of digital preservation and curation. These include the work of The Digital Curation Centre (DCC) in the UK, Digital Preservation Europe (DPE), CASPAR (Cultural, Artistic and Scientific knowledge for Preservation, Access and Retrieval), PLANETS (Preservation and Long-term Access through NETworked Services), Digital Preservation Cluster of the DELOS Network of Excellence in Digital Libraries (DELOS-DPC), and ERPANET (Electronic Resource Preservation and Access Network). All these projects are contributing to the global effort to address the challenges which make long term accessibility of digital materials an uncertain activity and risks difficult to assess and manage.

Seamus Ross, Professor of Humanities Informatics and Digital Curation, and Director of Humanities Computing and Information Management at the University of Glasgow, runs HATII (Humanities Advanced Technology and Information Institute) (<http://www.hatii.arts.gla.ac.uk>) of which he is the founding director. He is an Associate Director of the Digital Curation Centre in the UK (<http://www.dcc.ac.uk>), a co-principal investigator in the DELOS Digital Libraries Network of Excellence (<http://www.dpc.delos.ac.uk>), and Principal Director of Digital Preservation Europe (DPE) (<http://www.digitalpreservationeurope.eu>). He was Principal Director of ERPANET a European Commission activity to enhance the preservation of cultural heritage and scientific digital objects (<http://www.erpanet.org>), and a key player in The Digital Culture Forum (DigiCULT Forum) which worked to improve the take-up of cutting edge research and technology by the cultural heritage sector (<http://www.digicult.info>). Before joining the University of Glasgow he was Head of ICT at the British Academy and a technologist at a company specialising in knowledge engineering. He earned a doctorate from the University of Oxford. Some of his publications are available at <http://eprints.erpanet.org> During 2005/6 Seamus Ross is Visiting Fellow at the Oxford Internet Institute (University of Oxford) and Visiting Scholar at Wolfson College (Oxford).