Lost in the Cloud

Saving Humanity's Digital Documentary Heritage

Wednesday 3 October | Realm Hotel, Canberra, Australia

This symposium heard presentations from government, academia and the ICT industry exploring the nature of digital heritage and the vulnerabilities that place it at risk. Sss of documentary heritage to future memory, education and cultural heritage.

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Digital documentary heritage has critical importance for humanity – it has become a key resource for knowledge creation and sharing. In every corner of the world, we are changing from an industrial society into an information society. Nevertheless, we have not yet been able, publicly or privately, to find sustainable economic solutions to achieve 'continuity of content' upon which our cultural identity depends. Sustainability of the information society is a shared responsibility of public and private parties. The main parties to act on this responsibility are governments, memory institutions in the broadest sense of the term, and the ICT industry.

UNESCO has a convening power on a global level to bring these parties to the table. PERSIST, a UNESCO program under the Memory of the World banner, aims to create a space to support dialogue among these parties to enhance the continuity of content.

The Vancouver Declaration
At the Memory of the World Conference in Vancouver (September 2012) international experts agreed that there is a pressing need to establish a roadmap for solutions, agreements and policies, that ensure long-term access to and trustworthy preservation of digital information. In order to establish such a roadmap, governments, social organisations and the ICT industry will have to work together.

The UNESCO/UBC Vancouver Declaration was the starting point of the PERSIST project. However, the rationale behind PERSIST is not new. In 2003, in its visionary Charter on the Preservation for Digital Heritage, article 12, UNESCO defined its task 'to serve as a reference point and a forum where Member States, intergovernmental and international non-governmental organizations, civil society and the private sector may join together in elaborating objectives, policies and projects in favour of the preservation of the digital heritage'. This call to action was reinforced in UNESCO's 2015 recommendation concerning the preservation of, and access to, documentary heritage including in digital form.

The PERSIST project
In the PERSIST project, as part of the Action Plan for Strengthening the Memory of the World Programme (adopted by the 191th executive board, objective 4a), UNESCO has joined forces with the International Council on Archives (ICA) and the International Federation of Library Associations and Institutions (IFLA) to provide a global platform with the convening and advocacy power of UNESCO.

In close cooperation with other stakeholders, the PERSIST project aims to enhance the sustainability of the information society by establishing continuity of preservation of and access to information. In doing so, PERSIST seeks to help secure important mechanisms of good governance and the right of access to knowledge and information. To accomplish this, PERSIST will work to establish cooperation and dialogue between governments, social organisations and the ICT industry, and to create practical solutions in the area of sustainable digital preservation.

The symposium
This symposium heard presentations from government, academia and the ICT industry exploring the nature of digital heritage and the vulnerabilities that place it at risk. Speakers considered the implications, threats and opportunities presented by technological advancements or the loss of documentary heritage to future memory, education cultural heritage.

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9am to 4pm | Wednesday 3 October
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8.30 **Registrations**

9.00 **Opening statement** – Kylie Walker, Chair of the Australian National Commission for UNESCO and Chief Executive Officer of Science and Technology Australia

9.20 **Keynote UNESCO statement** – David Fricker, Vice-President of the UNESCO Memory of the World International Advisory Committee

9.45 **Keynote speaker:** Tim Gollins, Head of Digital Archiving, National Records of Scotland

10.30 **Morning tea**

11.00 **Panel 1: Digital – What are the preservation challenges for documentary heritage?**

- Panel MC: Kylie Walker, Chair of the National Australian Commission for UNESCO
- Tim Gollins, Head of Digital Archiving, National Records of Scotland
- Meg Labrum, General Manager, Collections and Access, National Film and Sound Archive
- Ryan Tassotti, Systems Engineer, DELL EMC
- Anne Lyons, Visiting Fellow, Australian Strategic Policy Institute

12.30 **Lunch**

1.30 **Keynote Speaker:** Dr Maya Haviland, School of Archaeology and Anthropology, Australian National University

2.15 **Panel 2: Memory, education and cultural heritage – What are the threats, implications and opportunities?**

- Panel MC: David Fricker, Director-General, National Archives of Australia
- Keynote: Dr Maya Haviland, School of Archaeology and Anthropology, Australian National University
- Dr Marie-Louise Ayres, Director-General, National Library of Australia
- Craig Ritchie, Chief Executive Officer, Australian Institute of Aboriginal and Torres Strait Islander Studies
- Professor Ross Harvey, Faculty of Information Technology, Monash University

3.45 **Summation** – David Fricker

4.00 **Networking**

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SPEAKERS

Kylie Walker
Chair, Australian Commission to UNESCO and CEO of Science & Technology Australia

David Fricker
Vice-President, UNESCO Memory of the World International Advisory Committee and Director-General, National Archives of Australia

Tim Gollins
Director Digital Archiving, National Records of Scotland

Meg Labrum
General Manager, Collections and Access, National Film & Sound Archive

Anne Lyons
Visiting Fellow, Australian Strategy Policy Institute

Dr Maya Haviland
School of Archaeology and Anthropology, Australian National University

Marie-Louise Ayres
Director-General, National Library of Australia

Craig Ritchie
Chief Executive Officer, Australian Institute of Aboriginal & Torres Strait Islander Studies

Professor Ross Harvey
Faculty of Information Technology, Monash University

Ryan Tassotti
Systems Engineer DELL EMC

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The UNESCO Persist Symposium, held on 3 October 2018 in Canberra, Australia was a joint initiative of the National Archives of Australia, the International Council on Archives (ICA) and UNESCO. Convened by the National Archives, the symposium will explore the nature of digital heritage, the vulnerabilities that place it at risk and the strategies needed to identify, preserve and keep accessible digital heritage that could be lost through technological obsolescence.

SPEAKERS BIOS & ABSTRACTS

BIO: DAVID FRICKER

As Director-General of the National Archives of Australia, a position he has held since 2012, David Fricker's strategic focus has been on the whole-of-government transition to 'digital continuity' in records and information management; expansion of preservation capability for paper, audio-visual and digital records; acceleration of the declassification of sensitive archival documents; and the exploitation of emerging technology to enhance the public's access to archival resources.

David is currently the President of the International Council on Archives, and a Vice Chair of the UNESCO Memory of the World International Advisory Committee. In 2015 he was made Knight of the Order of Arts and Letters (Chevalier dans l'ordre des Arts et des Lettres) by the Republic of France.

BIO: KYLIE WALKER

Kylie Walker is CEO of Science & Technology Australia, Chair of the Australian National Commission for UNESCO, and co-Chair of the National Research and Innovation Alliance.

She specialises in connecting scientists and technologists with governments, business, media and society - skills built over many years in senior federal communication and advocacy roles in the science and health sectors.

Kylie's a passionate campaigner for gender equity and is a proud member of the board of the ACT Domestic Violence Crisis Service and the steering committee for NOW Australia.

She's also been a Press Gallery journalist for Australian Associated Press and the ABC, and is a visiting Fellow at the Australian National Centre for the Public Awareness of Science (CPAS).

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KEYNOTE

BIO: TIM GOLLINS

Tim has a long history with public recordkeeping and digital preservation. Since starting his career in the UK technical civil service in 1987, he has worked on Information Security, Information Management, Design and Development on numerous large government information projects. Tim joined the National Archives of the UK (TNA) in April 2008 and as Head of Digital Preservation he led TNA's work on digital preservation and cataloguing. He worked on the design and implementation of a new digital records infrastructure at TNA embodying the parsimonious preservation approach he developed. He recently completed a secondment in the School of Computing Science at Glasgow University where he studied the challenges of digital sensitivity review. Tim holds a BSc in Chemistry (Exeter), MSc in Computing Science (UCL), and MSc in Information management (Sheffield). Tim was a Director of the Digital Preservation Coalition for 6 years from 2009 and is a former member of the University of Sheffield I-School's Advisory Panel.

Title: Sensitivity: A Fundamental Challenge to Preservation

ABSTRACT:

There are significant, but currently little seen, tensions developing around the preservation of digital documentary heritage. The tensions come not from technical aspects of preservation itself, but the relationship between the act of preservation and the emerging digital world of the 21st century. In this new era we see calls to preserve our fragile digital documentary heritage for historical, accountability, and transparency reasons; we see simultaneous calls for increased privacy and the right to assert identity; we also see an erosion of trust in institutions. Preservation is ultimately economically driven; for digital documentary heritage to be preserved it will need to be of value. The digital world has democratised documentary heritage this means we will need to keep a lot more stuff about a lot of individuals. However, in our globally connected and intertwingled world, in this very act of transparent remembering, collections of digital documentary heritage could be seen as a threat to individuals' privacy and their ability to assert their own identity. How can this threat be mitigated? How can the tension be relaxed? I will discuss these aspects in tension and what I believe to be the core institutional response that is essential to relaxing this tension - Digital Sensitivity Review. I will move on to discuss why I feel that Digital Sensitivity Review may be the single biggest technical and intellectual challenge facing the preservation of digital documentary heritage. Finally I will aim to outline the areas of research in theory, technology and practice needed to meet this challenge and try to describe an optimistic vision for the preservation of our digital documentary heritage.

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PANEL 1

BIO: MEG LABRUM

Meg Labrum joined the Film Branch of the National Library of Australia in 1980, as a graduate librarian. When the NFSA was established in 1984, Meg was one of its founding staff members.

Over the years, she has not only maintained her passion for film as an art form, but as a Senior Curator she has also developed her skills and experience in collection context, policy development, evaluation, legal deposit, intellectual property and moral rights, and the impact of digitisation on archival services.

Meg has played an active and influential role in international archival organisations – including 10 years as Secretary General of FIAF - The International Federation of Film Archives. She is also a regular speaker at international film and archival forums and festivals.

TITLE: I want it now!!! Preserving documentary heritage, digital transformation and the needs of the audiovisual world.

ABSTRACT:

We are a part of the massive energy of digital transformation. Collecting institutions like the National Film and Sound Archive of Australia are adjusting to fundamental change in terms of what they are collecting, how it is preserved and how it can be delivered in a world of multiple delivery platforms, highly sophisticated publics with huge expectations re delivery, and more than a century of fabulous analog collections which need to be digitized to remain relevant! I will be focussing on audiovisual materials for obvious reasons, but the principle remains the same for our converged digital collecting, preserving and sharing future.

"I want it now!!!" may be the catch cry of the hungry users of content, but it also expresses the desire of those institutions to be able to transform in technical, rights management and risk appetite context to function as the beating heart of cultural community and communication. How can this be achieved and what are the challenges? Using examples that illustrate what can be achieved through partnership, collaboration, agreed standards and a shared appetite for productive archival adventures in the making,   the core principle of collective genius is our driver. And in this context, the likely role of the NFSA in providing a logical National Centre of Excellence for audiovisual digitization, preservation and delivery for our country and possibly beyond.

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BIO: RYAN TASSOTTI

Ryan has been working in the IT industry for over 20 years, across both public and private sectors. His most recent 11 years have been with Dell EMC, designing IT solutions for some of the largest organisations in the Public Sector, Banking, Resources and Aerospace verticals in Australia. Of the last 4 years with Dell EMC, Ryan has focused on architecting transformative IT infrastructure and data lake solutions into the Federal Government.

AUTHOR: Ryan Tassotti (DELL EMC)

TITLE: Considerations in the Creation of a Digital Heritage Preservation Platform – a Technologist's view

ABSTRACT:

With the world experiencing explosive growth in unstructured data, the UNESCO PERSIST project is an important initiative to capture our collective digital heritage. This presentation will not discuss what to preserve, but will discuss how to preserve, in the context of a platform architecture. Such a platform must be resilient on many levels, including time, politics and geographies, making a robust architecture vitally important. Architectural considerations for both below the line (infrastructure) and above the line (digital artefact) components will be explored.

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BIO: ANNE LYONS

Anne is Assistant Director-General and former Chief Information Officer (CIO) with the National Archives of Australia and a Visiting Fellow with the Australian Strategic Policy Institute's (ASPI) International Cyber Policy Centre. For the past 20 years Anne has worked as a senior executive in both the public and private sector in a broad range of roles including information policy & governance, service delivery, strategy & planning, communications and marketing and ICT. Most recently she lead the Commonwealth's whole-of-government transition to digital records and information management and delivered the Archives' Digital Continuity 2020 Policy, which will transform information management across all government business systems by 2020. She is currently undertaking an ASPI project looking at the protection of Australia's National Digital Identity Assets.

AUTHOR: Anne Lyons (Visiting Fellow at the Australian Strategic Policy Institute (APSI)

TITLE: National Identity Digital Assets Project

ABSTRACT:

As Australia and the world are becoming ever more digital, we are creating and collecting more digital information and data than ever before, and those information assets have never been more vulnerable to attack, destruction and manipulation. The National Identity Digital Assets Project explores the safety and security of digital assets that make up our National Identity – the evidence of who we are as a nation, how we see ourselves, and that underpins our democracy, the rights and entitlements of our citizens and forms the critical evidence of our history and culture now and into the future.

A key objective of the project is to start a conversation about how safe these valuable assets are and the impact on Australia should they be destroyed or manipulated. The project identifies key policy areas and issues to be addressed now and into the future, and makes recommendations on a way forward.

National identity information and data is held in both public and private organisations, and is also evidence of our place in the world, and underpins not only our internal identity, but how we are seen, and our relationships and important connections with the rest of the world and if attacked could have a major impact on our democracy, legal system, culture and history and on the rights, entitlements, safety and identity of Australians. While the project is not about identifying those assets, examples vary from our national & regional radio news bulletins, to births, deaths and marriage information, to court and parliamentary decisions, to the digital evidence of citizenship and who has entered the country and when.

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BIO: DR MAYA HAVILAND

Dr. Maya Haviland is a Lecturer in Museum Anthropology at the Centre for Heritage and Museum Studies, in the School of Archaeology and Anthropology at the ANU. Her current research focuses on co-creativity and the dynamics of collaboration in the cultural sector; creative practices in collaborative anthropology; and, the role of community arts in cultural and historical research and community development.

Maya has undertaken collaborative research with communities in Australia - especially in the Kimberley region - Mexico, the USA and Vanuatu. Her research career has spanned a range of topics, specialising in community focussed research with Indigenous communities, participatory action rsearch and evaluation, and practice-based research. She has facilitated a number of collaborative art and documentary projects in the Kimberley region of North Western Australia, in the USA, Mexico and most recently in Vanuatu. Her photographic and installation works have been exhibited in Australia and internationally. She and her partner Brad Riley recently produced a documentary about the Vanuatu Cultural Centre's Fieldworker Network – examining its role in cultural documentation and cultural revival. Her book Side by Side? Community Art and the Challenge of Co-Creativity was published in 2017.

AUTHOR: Dr Maya Haviland (ANU)

TITLE: 'Our Stories Told by Us' – Digital cultural heritage as tools for cultural sovereignty.

ABSTRACT:

Digital tools, especially portable audio-visual recording technologies have enabled a boom in 'insider' cultural documentation and story telling that has made significant contributions to diversity in perspectives in our global cultural records. However technological change, and the making and remaking of digital divides continue to challenge the viability of these forms of cultural heritage throughout their lifecycles. This talk will explore how the creation and preservation of digital cultural materials present us with specific opportunities and challenges in how we make and enact our cultural identities and cultural futures. Drawing on examples from a range of Indigenous-led projects around the world I will explore social, political, as well as technological challenges in ensuring the preservation of diversity in our global digital cultural heritage.

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PANEL 2

BIO: DR MARIE-LOUISE AYRES

Dr Marie-Louise Ayres was appointed Director-General of the National Library Australia in March 2017, having joined the Library in 2002. She has worked in research libraries for nearly 25 years, after completing a PhD in Australian Literature at the Australian National University.

Over the course of her career, Marie-Louise has developed and managed very large archival collections (including as Senior Curator, Pictures and Manuscripts at the NLA), and equally large digital services, including AustLit (at UNSW Canberra), Music Australia (at NLA) and – from 2011-2017 – Trove, the Library's flagship digital service.

Dr Ayres has been a leader and participant in many National and State Libraries Australia projects, including NED, the National eDeposit service being jointly developed by Australia's national, state and territory libraries. She was a founding member of GLAM peak, and has a special interest in – and is an advocate for – the need to better integrate the very large digital collections managed by cultural institutions, and the research infrastructure needs of Australia's humanists and social scientists.

She is committed to achieving the Library's strategic goals: to collect today what will be important tomorrow; to connect with communities and connect communities with collections; and to collaborate with others to maximise the national impact of cultural collections.

AUTHOR: Marie-Louise Ayres (NLA)

TITLE: Do it now! Because many small steps will eventually get you closer to where you want to go.

ABSTRACT:

The National Library of Australia's role is to ensure that documentary resources of national significance relating to Australia and the Australian people are collected, preserved and made accessible. The Library provides an authentic source of information in the digital era, with a rich collection of digital material that documents Australia's diverse culture and heritage.

The Australian community expects that digital material acquired by cultural institutions will be accessible, relevant, authentic and preserved. The Library's pathway to meet this challenge has been a long one, commencing in the 1980s with the acquisition of digital records on physical media within its archival collections and in 1990 with the Library's first digital recording of an interview with Dame Patti Menzies. The presentation will describe the Library's integrated approach to digital and physical preservation, its implementation of the Preservica managed digital preservation system and its successful development of an end-to-end digital lifecycle for new published born-digital works. Digital archives and oral history collections have posed particular preservation challenges. The Library continues to work collaboratively with the nine National, State and Territory libraries, responding to the major challenges of born digital material.

Over the past decade the Library has redeveloped its digital infrastructure to meet the challenges of and improve management of its digital collection. This development program has built on a philosophy of continuous improvement and innovation that is at the heart of the Library's services to the nation. The challenge of digital cannot be met in isolation and the Library has sought to work collaboratively with other institutions to develop

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and participate in communities of practice to address the threats and opportunities raised by published and unpublished digital works. The underlying principle of how to address these issues and challenges is that we must act.

BIO: CRAIG RITCHIE

Craig Ritchie is an Aboriginal man of the Dhunghutti and Biripi nations and is the Chief Executive Officer at the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS). Craig joined AIATSIS as Deputy CEO in April 2016, and formally appointed CEO in May 2017. Craig has worked in other senior roles within the APS, most recently in the Department of Education and Training 2011-2016, as well as in the ACT Government. Craig has experience in the community sector, including as CEO of the National Aboriginal Community Controlled Health Organisation (NACCHO) - the peak advocacy body for Aboriginal community controlled health services.

Craig is one of growing cohort of senior Indigenous public servants who provide significant leadership in the broader whole-of-government Aboriginal and Torres Strait Islander affairs, particularly as a member of the APS Indigenous SES Network. Craig studied at the University of Newcastle and has a post-graduate qualification in management and is currently completing his PhD in Public Policy.

AUTHOR: Craig Ritchie (AIATSIS)

TITLE: Preserving what was, what is, and what will be

ABSTRACT:

Memory, education and cultural heritage are among the things that make us what we are as cultures and peoples. As knowledge centres and cultural institutions, we need to be collecting and keeping what has been made, what is being made, and what will be made in the future. How do we ensure that all peoples can participate in the safekeeping and appropriate sharing of those stories?

BIO: ADJ PROF ROSS HARVEY

Dr Ross Harvey is an adjunct professor at Monash University, Melbourne, having previously held academic positions at universities in Australia, Singapore, and the United States. His research interests focus on the stewardship of digital materials in libraries and archives, particularly on its preservation. Ross has published widely in the fields of bibliographic organization, library education, the preservation of library and archival material, and newspaper history. His most recent books are (with Jaye Weatherburn) Preserving Digital Materials, 3rd ed. (2018) and (with Gillian Oliver) Digital Curation, 2nd ed. (2016).

AUTHOR: Adjunct Professor Ross Harvey (Monash University)

TITLE: Mindset Changes and Grassroots Revolutions: New Directions for Digital Preservation

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ABSTRACT:

Great strides have been made in digital preservation in recent years as the effort and resources invested in it have significantly increased. We now work in a maturing digital preservation landscape. Effective digital preservation systems are available that increasingly show the benefits of developers and vendors working together; system vendors and the organisations that are their principal customers are collaborating more than ever before. Australia's large national institutions, such as the National Library of Australia, National Archives of Australia, and National Film and Sound Archive, are doing excellent work in this maturing digital preservation space. Although these efforts are undoubtedly laudable and worthy, they are only tinkering around the edge of a massive, ongoing, constantly changing and enormously challenging problem. The digital preservation systems, processes, and ways of thinking that are now in place can only deal with a small amount of the digital stuff that should be preserved. Current activities do not scale up to handle larger quantities. A major change in mindset and a grassroots revolution are needed in digital preservation. If inroads in dealing with this massive problem are to be made, rather than have collecting institutions and big businesses set the agenda, we need to empower ALL data creators as primary actors in digital preservation. I explore some of the areas in which I believe major changes can be made for digital preservation to expand beyond its current focus on institutional responses.

CLOSING STATEMENT

BIO: JULIA MANT

Julia Mant is the current President of the Australian Society of Archivists, the peak professional association for archivists and recordkeepers, which was formed in 1975. She was first elected to the ASA Council in October 2013 as National Secretary and served in that capacity until August 2015. She then continued as Councillor and Co-convenor of the 2016 ASA Conference, held in Parramatta. Julia has been President since 18 October 2016. The President holds the Advocacy and Governance portfolios on Council as well as oversees the operational management of the National Council.

Julia is the Archives and Records Manager at the National Institute of Dramatic Art (NIDA). She has worked in educational archives since 1999, first at Tranby Aboriginal College, then from 2004 to 2012 at the University of Sydney Archives. Julia has a BA (Hons I) from the UNSW (majoring in History and Theatre) and has a Graduate Diploma in Science (Information Services) from Edith Cowan University and a Graduate Diploma in Applied Intellectual Property from the UNSW.

AUTHOR: Julia Mant (ASA)

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