#### **ICA Congress Paper**

Title: Connecting Archives and Aboriginal and Torres Strait Islander Communities in Australia

Creating, preserving and connecting data in the digital domain.

Authors: Kirsten Thorpe and Gabrielle Gardiner, Aboriginal and Torres Strait Islander Data Archive (ATSIDA) University of Technology Sydney.

This paper has been written alongside the paper presented by Michael Jones of the Escholarship Research Centre, Melbourne University. The synergies between the two papers are evident and initially the proposal was to submit a joint paper but it became apparent in the drafting the stories needed individual submissions.

Both papers demonstrate the significant role that archivists and archival theory can play in connecting archives and communities. This paper focuses on demonstrating the need for a more proactive model of engagement to ensure that Aboriginal and Torres Strait Islander communities are active participants in the archival process; from creation and documentation, through to the preservation and ongoing management of data that relates to their communities.

This paper uses a case study to highlight the innovative and collaborative work that is being carried out in Australia within the consortium of the Australian Data Archive. When proactive engagement takes place, archivists can contextualise data with rich metadata and ensure that all rights associated with the data, such as intellectual property and moral rights, are recorded and managed. All of these elements contribute to the building of trust with Aboriginal and Torres Strait Islander communities.

The paper concludes by providing an overview of the opportunities that can be created in opening up the archival space to community engagement. Some of these include working with communities to follow appropriate protocols for management of data and records; keeping resources within the community for re-use which in turn promotes sustainability; creating ongoing engagement with data and records beyond the end of a research project; and developing meaningful collaboration across sectors to connect researchers, archivists and communities.

### **Acknowledgements**

The authors would like to acknowledge the contribution of Dr Alex Byrne, NSW State Librarian, and other ATSIDA Reference Group members to the formulation of the ATSIDA Protocol and other policy documents referred to in this paper. We would also like to acknowledge the wider ATSIDA team for their contribution to the work referred to in this paper.

#### Introduction

The digital domain provides researchers with exciting new possibilities for the creation, sharing and reuse of data. Researchers working with Aboriginal and Torres Strait Islander communities in Australia actively collect and document significant material relating to communities. This research is being conducted within the major Australian universities, government departments and in partnership with local communities. Indigenous Australian research data has the potential to become an important source of social and collective memory for future generations, and a significant resource for informing ongoing research and analysis of Aboriginal and Torres Strait Islander research agendas.

Often this research data is managed by an individual researcher or small research group in their office, and unconnected to the larger cultural institutions or archival and library repositories. Without appropriate archival management a large proportion of data gathered and created during research is vulnerable to loss. The proliferation of digital research tools also presents a challenge for archives in terms of managing and preserving a wide range of digital data. Archivists need to keep abreast of emerging technologies, tools and digital file formats to ensure that digital research data can be preserved with integrity and context for future use.

This paper explores the questions:

- What is the engagement of the archives profession in managing digital research data?
- Who is responsible for the archiving and preservation of Australian Indigenous research data?
- Are Universities actively working with researchers to manage their data from the conceptual stage of research through to the deposit of data?

This paper posits that archivists and archival theory can play a significant role in connecting archives and Aboriginal and Torres Strait Islander communities. Using the Records Continuum as a theoretical framework we suggest that a more proactive model of engagement should take place with Aboriginal and Torres Strait Islander people and communities to ensure that these communities are active participants in the archival process. We suggest that archivists should work proactively with researchers and communities to ensure that these significant collections of material are being preserved and managed for future generations of indigenous people and researchers.

The paper concludes by highlighting opportunities that might be created in opening up the archival space to community engagement.<sup>1</sup> These include for example, working with communities to follow appropriate protocols for management of data and records; keeping copies of resources within the community for re-use which in turn promotes sustainability; creating ongoing engagement with data and records beyond the end of a research project;

<sup>&</sup>lt;sup>1</sup> We define the 'archival space' in a post-modern context as a dynamic and virtual space where archivists actively contribute to the shaping of social memory. (Cook, 2000) It is an archival space where multiple perspective and meanings can be documented and interpreted (Ketelaar, 2000) and a place where parallel provenance can be recorded. (Hurley, 2005)

and developing meaningful collaboration across sectors to connect researchers, archivists and communities.

## Data archives - sharing and reuse

Literature in the information science fields and digital humanities are paying increased attention to the areas of data management, digital research and the sharing and reuse of data. Within this literature there is recognition of the importance of contextualising data for ongoing preservation and reuse. (Trealor & Wilkinson, 2008; Borgman, 2009 & Burrows, 2011). Researchers, librarians, archivists and digital preservation specialists all share a vision of capturing, managing and making better use of data created in the research process.

The digital environment has led to what is often referred to as the 'data deluge', (JISC 2004; Hey & Trefethen, 2003); the exponential growth of research data generation. This can be of great value, but poorly managed, it can also lead to researchers creating a wealth of data without meaning. Data needs to be managed to have meaning over time. It needs its creator to take the time and care to document the context of the data and all of the rights and ethical considerations that need to be in place for ongoing access and reuse to be considered and accounted for at the beginning of a research project. Specialist data archives are being established to assist the research community in preserving and making their data available for secondary research and use.

Unlike other countries, Australia currently has no formal federal legislative mandate for the management of research data. Currently, data management practices that discuss the research lifecycle – that is management and curation of data from the conceptual stage of research through to deposit – talk about data deposit as a model for best practice only. This model works well when data archives have strong relationships with researchers and communities, however, it is not so effective when researchers are reluctant to hand over their research materials for deposit.

The Australian Code for the Responsible Conduct of Research was developed by the National Health and Medical Research Council (NHMRC) in 2007 to provide guidelines on ethical and responsible practices in research. The Code includes discussion on the importance of the management of research data and materials. (NHMRC, 2007 and provides a more sustainable vision for Australian Universities to work towards with management of research data. In this broader context, we see the development of the Australian National Data Service (ANDS), Intersect and VeRSI.

It is exciting to see the emergence of this new field of scholarship and practice, however Universities are challenged to bring in the required professional skills and resources to build infrastructure and sustainability in programs. In light of this, a gap often exists between the aspiration to share and preserve data, and real opportunities to provide support and tools to researchers to effectively achieve this.

Despite these challenges, there are many projects underway in Australian Universities that are actively working to manage and preserve research data. Without the legislative mandate to enforce deposit, Universities are relying on broader professional engagement to achieve

the goal of preserving research materials and data. The Australian Data Archive (ADA) is one network actively working with the research community to realise these aspirations.

#### The Australian Data Archive

The sharing of data in the social science research community in Australia has been occurring since the early 1980s within the facilities of the Australian Data Archive (formerly known as the Australian Social Science Data Archive ASSDA). The Australian Data Archive (ADA) consortia are working with researchers to collect and preserve digital research data and to make this data available for secondary analysis by academic researchers and other users.

The ADA is comprised of seven sub-archives:

- Social Science
- Historical
- Indigenous
- Longitudinal
- Qualitative
- Crime & Justice
- International

The initiative is sustained through the collaboration of leading Australian universities, managed by the Australian National University (ANU) with nodes at the University of Melbourne, University of Queensland, University of Technology Sydney and University of Western Australia.

The ADA aims to provide a national service for the collection and preservation of digital data relating to social, political and economic affairs and to make these data available for further analysis. (ADA, 2012) The ADA team includes professional data archivists who provide both stewardship and outreach services to the Australian research community. The ADA describes that the archive:

- acquires, documents, preserves and disseminates data online to a broad range of social science researchers in the university, government, and other sectors.
- provides the only comprehensive social science data collection in Australia, with a catalogue of over 2000 data sets.
- holds data from Australian surveys, opinion polls and censuses and includes data from other countries within the Asia Pacific region.
- is continually expanding and diversifying its collection
- locates and manages access to overseas social science data sets required by Australian based researchers
- adopts, develops and applies standards in line with international best practice
- belongs to international organisations (such as the International Federation of Data Organizations and the International Association of Social Science Information Service and Technology) and plays a major role in cross-national collaborative projects.
- plays an important role on behalf of the Australian Research Council (ARC) through the management and dissemination of ARC funded data collections arising from Discovery and Linkage grants. (ADA, 2012)

The National Computational Infrastructure (NCI) (formerly the ANU Supercomputer Facility) provides the online data services and supporting infrastructure, and develops this cyber infrastructure for the needs of the consortium.

The introduction of the consortium model, with its specialised thematic archives, broadens the scope of the ADA collection from its traditional focus on managing quantitative data. The preservation and reuse of qualitative data, especially from the social sciences, has brought real challenges to the traditional data archive systems that have been in operation at the ADA since the 1980's. The data archive is now required to manage data from many different types of media, for example text, audio and visual materials, and to document contextual information and the relationships between the various data. The archive may also be required to manage different types of access conditions for parts of a dataset. The management of datasets to include rich contextual information has become more and more evident in the work of ATSIDA, as the archive and community work with researchers to ensure that the appropriate access conditions and rights to records are documented in the ingest and deposit process.

# Aboriginal and Torres Strait Islander Data Archive (ATSIDA)

Aboriginal and Torres Strait Islander populations and issues relating to them continue to attract much study. But frequently, often due to ethical concerns intrinsic to small population research, compounded by the particular aspects relating to Indigenous peoples, datasets are often not made available for secondary analysis. It is important to collect and preserve these fragmented research resources and to make them available for further research, under appropriate protocols, so as to reduce the response burden on Indigenous communities while enabling informed analysis and commentary in areas of national priority.

UTS was invited to establish a national trusted repository for Indigenous data in 2008. This thematic archive of the ADA manages the collection, storage and appropriate management and reuse of Aboriginal and Torres Strait Islander research data. The archive addresses the need to manage research data in this priority area by collecting often dispersed data and managing it in accordance with appropriate protocols, drawing on the expertise of staff in the UTS Library, guided by the members of the ATSIDA Reference group from around Australia.

As well as ensuring the storage and preservation of data relating to Aboriginal and Torres Strait Islander peoples, ATSIDA staff work closely with:

- Aboriginal and Torres Strait Islander communities managing appropriate access and return of digital materials.
- Researchers developing data management plans and providing contextual information relating to their research.
- Higher Education Institutions identifying nationally significant datasets and research projects as well as assisting with development of strategies to ensure preservation and access to data

- Government influencing policies relating to research data, Indigenous research material, Intellectual Property (IP) and moral rights, etc.
- International Organisations collaborating with international Indigenous policy developers and researchers.

ATSIDA works proactively with researchers and communities to discuss the importance of preserving research data informed by Aboriginal and Torres Strait Islander participants. ATSIDA have a Memorandum of Understanding (MOU) with the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), whose collections are the largest resource on Australian Indigenous peoples. The MOU sets out a commitment to work together in areas concerning the management of Indigenous research data. This proactive engagement and awareness raising is an important part of the work of ATSIDA as it allows the time for researchers and participants to think through how they would like to manage research data relating to their project in the long term. Within this, the ethics process can extend beyond participation in the research process, to actively discussing and providing informed consent about disposal or preservation of research data. This also provides the opportunity for advice to be given on appropriate access conditions for future use of data.

Taking this proactive approach provides opportunities for more rigorous and informed discussions to take place about what material is placed in the archive and conditions under which it should be managed. This approach moves the work of the archive away from discussions about 'issues' and 'challenges' to look instead at opportunities and long-term benefits. Proactive engagement also takes into account the critical element of time. With time, appropriate resources can be allocated for researchers to consult with their participants about the management of data. Providing additional time reduces the risk of getting to the end of a research project only to realise that your research data is disorganised and decisions about rights and access are not recorded in line with current ethical requirements.

ATSIDA are aware of the resources required to be actively involved with embedding consultation and proactive engagement into the data archiving process and aim to work broadly with archive, museum, library and other allied professionals to collaborate wherever possible to connect data and projects. A number of significant projects are underway at the ATSIDA that showcase this broad collaboration across research, library, archive and museum fields. For example, since 2009 the ATSIDA project has been facilitating dialogue between the Buku-Larrngay Mulka Centre, Yirrkala, Arnhem Land, and the University of Sydney, Macleay Museum. Together we are working through the cultural protocols and parameters for making a collection of early Yolngu bark paintings available as a shared research dataset via the ATSIDA website. In order to make the bark paintings more accessible to the Yolngu community and others, the project aims to digitise and provide access to them via the ATSIDA website. To Yolngu people the designs and symbols in the paintings embody knowledge which can be read at different levels.

As a first step, the bark paintings have been digitally photographed. There are a range of contextual records that bring out different aspects of their history as well as making them more accessible to other audiences. These include: summaries of the mid-1940s field notes

made by anthropologist Ronald Berndt recording information directly from the artists, and 1975 audio recordings and transcription of interviews with Elder, Wandjuk Marika, which also explain their meaning and cultural associations. All of these records are being digitised. Together they comprise an important archive of this set of early Yolngu bark paintings from Yirrkala, documenting their creation, their embedded knowledge, relationships, and their continued and changing significance through time.

The ATSIDA team also relies heavily on the direction of the high level Reference Group to provide policy and strategic advice. The team see the preservation of research data as an important contribution to the larger archive, library and community projects that document Aboriginal and Torres Strait Islander people and communities. We see such potential to link data and collections - to connect dispersed information - so that the research and broader community are aware of what material exists in collections relating to Indigenous Australian communities.

## The role of the archivists in managing digital research data

What is the role of archivists and archival theory in being involved in the management of digital research data? Has the archival profession managed to broaden its focus to work with allied library and information professionals to provide advice and expertise about managing digital research data?

Our work indicates there are many opportunities for broader collaboration between the archive and data archive professions to share advice and expertise, particularly when research datasets require rich documentation and rights management.

For this to happen, the archival space needs to view itself in more pluralistic ways. Traditional archival practice – where archive equates to institution – must shift to accommodate more virtual and connected ways of creating archival collections. As Cook suggests:

In this new digital, political, and pluralistic universe, professional archivists need to transform themselves from elite experts behind institutional walls to becoming mentors, facilitators, coaches, who work in the community to encourage archiving as a participatory process shared with many in society, rather than necessarily acquiring all the archival products in our established archives. (Cook, 2012)

The Records Continuum provides a theoretical model for archival systems that capture information about records and their contexts over time, and could be used as a tool to assist data archives and Aboriginal communities when engaging with building archival collections. As McKemmish has suggested, the records continuum model is a tool for "...perceiving and analysing complexity, providing multi-dimensional views of recordkeeping and archiving at the point of creation, within groups, at organisational and interorganisational levels". (McKemmish, 2001, p.12).

The continuum theory also, "...posits multiple contexts for recordkeeping and enables multiple points of view." (McKemmish, 2011, p.7) These concepts have direct relevance to the work of data archives. The framework provides a model for conceptualizing multiple

stakeholders to research datasets. The Continuum framework can assist the work of ATSIDA in viewing the data archive in pluralistic ways. Providing, for example, possibilities for multiple perspectives to be recorded about research data and for documenting parallel provenance (Hurley, 2005). The Yirrkala Bark project illustrates the opening up of the archival space, to return original data to communities for commentary, so that the data archive can manage material with the appropriate intellectual property and moral rights.

#### **Opportunities of proactive engagement**

Community engagement brings with it exciting opportunities. Some of these opportunities include:

- working with communities to follow appropriate protocols for management of data and records;
- keeping resources within the community for re-use which in turn promotes self determination and sustainability;
- creating ongoing engagement with data and records beyond the end of a research project; and
- developing meaningful collaboration across sectors to connect researchers, archivists and communities.

#### Return of research data to communities

The return of research data to the communities from which it relates is an important commitment of ATSIDA. By building relationships with researchers and Aboriginal and Torres Strait Islander communities ATSIDA aim to identify appropriate community-based centres where research data can be maintained as a community resource. The team work with researchers to discuss effective ways to return data to communities. In some cases this has involved working with early career researchers who are building data deposit into their ethics and consent processes. In others, it has involved working with senior researchers who have compiled a wealth of research data and materials, and are now looking at solutions to have them documented and deposited into an archive and returned to communities. The ATSIDA team and Reference Group have developed a set of high-level protocols to manage the archive, which includes a section on the importance of digital repatriation or digital return of data. <sup>2</sup>

ATSIDA have recently been working with University of Sydney Anthropologist, Professor Gillian Cowlishaw, to arrange and describe photographs and audio records created during her research in New South Wales (NSW) and the Northern Territory (NT). A significant amount of digitisation work has been involved in this project and copies of photographs have been returned to the NT community. It is hoped that ATSIDA can record any details of names, places and events alongside of these photographs so that they can be utilised as an important research and community resource.

<sup>&</sup>lt;sup>2</sup> The ATSIDA Protocols are available online at: http://www.atsida.edu.au/protocols/atsida

Other projects have involved working with Aboriginal community groups to discuss protocols and local archival needs in relation to the management of research data. ATSIDA have been working with the Dharriwaa Elders Group (DEG) in Walgett, NSW, to identify and return research data that has been informed by the community. Earlier this year, Professor Heather Goodall of UTS, joined ATSIDA to return digital copies of audio recordings of her research in the far west community to the DEG.

ATSIDA have also connected the DEG with the team of researchers developing *Mukurtu* - the free and open source platform for managing and sharing digital heritage, built for indigenous communities, archives, libraries and museums – to test suitability of the system to their local community needs. ATSIDA is interested in how we can return digital data with all associated metadata in ways more sustainable than providing digital copies on DVD's or USB's.

There may be cases where the return of data is not appropriate, for example, when the research data relates to individuals or is personal or sensitive in nature. However, it is important that high level study descriptions are available so that the community is aware of the research that has been undertaken.

#### Conclusion

This paper has introduced the work of ATSIDA and discussed the importance of working proactively with researchers and Aboriginal and Torres Strait Islander communities to open up the archival space. It highlights how ATSIDA aims to work with researchers at the conceptual stage of their research in order to start conversations about the management, preservation, reuse and return of data. The work of ATSIDA contributes to the larger social agenda of reducing the burden of research on Aboriginal and Torres Strait Islander communities. By creating a catalogue of research studies, we contribute to mapping a part of the landscape of research being conducted with communities. It also provides an opportunity for communities to be connected to data and materials that relates to them for future use as a community resource.

The digital domain requires active engagement. Without this, we run the risk of losing significant research data collections, or large quantities of data created that have no meaning or context attached. ATSIDA projects that connect research data and communities showcase the opportunities that can be gained from reaching out and involving communities in the archival process. We promote ongoing discussions between researchers and their participants about deposit and reuse of data so that informed consent can be obtained for any deposit or future use of data. Trust and collaboration are essential elements for building the data archive and this trust needs to be established and maintained with researchers, communities and other allied professionals.

#### References

Australian Data Archive (ADA). (2012) Australian Data Archive web site. Viewed online on 26 July 2012 at www.ada.edu.au

Borgman, C. L. (2009). The digital future is now: A call to action for the humanities. *Digital Humanities Quarterly*, 3(4). Retrieved from http://digitalhumanities.org/dhq/vol/3/4/000077/000077.html on 14 April 2010.

Borgman, C. L. (2011) The Conundrum of Sharing Research Data, *Journal of the American Society for Information Science and Technology*, pp. 1-40. Viewed on 19 July 2012 at: http://ssrn.com/abstract=1869155 or http://dx.doi.org/10.2139/ssrn.1869155

Burrows, T. (2011) Sharing humanities data for e-research: conceptual and technical issues, *Sustainable data from digital research: Humanities perspectives on digital scholarship.*Proceedings of the conference held at the University of Melbourne, 12-14th December 2011, retrieved from http://ses.library.usyd.edu.au/handle/2123/7938 on 25 July 2012

Cook. T. (2001) Archival science and postmodernism: new formulations for old concepts, *Archival Science*, 1.1 (2001)

Cook. T. (2012) Evidence, memory, identity, and community: four shifting archival paradigms, *Archival Science*, Online first 27 June 2012.

Hurley, C. (2005) Parallel Provenance: (1) What, if anything is archival description?. Archives in Manuscripts 33:1, 110-145

Hurley, C. (2005) Parallel Provenance: (2) When something is not related to everything else. Archives and Manuscripts. 33:2, 52-91

Ketelaar, E. (2001) Tacit Narratives: The Meanings of Archives, *Archival Science* 1.2 (2001): 131–141.

Hey, T. & Trefethen, A. (2003) The data deluge: An e-science perspective. In F. Berman, G.C. Fox, & T. Hey, (Eds.), *Grid computing: Making the global infrastructure a reality.* New York: Wiley.

Treloar, A. & Wilkinson, R. (2008) Access to Data for eResearch: Designing the Australian National Data Service Discovery Services, *The International Journal of Digital Curation*, Issue 2, Volume 3, 2008

JISC. (2004) *The Data Deluge: Preparing for the explosion in data,* November 2004, viewed online on 21 July 2012 at

http://www.jisc.ac.uk/media/documents/publications/datadelugebp.pdf

McKemmish. S (2001) Placing records continuum theory and practice, *Archival Science*, Volume 1, Number 4 (2001)

McKemmish, S. (2011) Evidence of me ... in a digital world, in *I, Digital: Personal Collections in the Digital Era*, eds Christopher A. Lee, Society of American Archivists, Chicago IL USA, pp. 115-148.

NHMRC (National Health and Medical Research Council). (2007) *Australian Code for the Responsible Conduct of Research*, Australian Research Council, viewed online on 21 July at: http://www.nhmrc.gov.au/ files nhmrc/publications/attachments/r39.pdf

Paper for the International Council on Archives Congress, Brisbane, Australia, 2012

Panel: Connecting Archives and Aboriginal and Torres Strait Islander Communities in Australia

'Encountering the Stranger': Working digitally to connect records and data for communities

**Author:** Michael Jones, Research Archivist, eScholarship Research Centre, The University of Melbourne: <a href="m.jones@unimelb.edu.au">m.jones@unimelb.edu.au</a> (@mikejonesmelb)

## **Summary**

This paper has been written alongside the paper by Kirsten Thorpe and Gabrielle Gardiner of the Aboriginal and Torres Strait Islander Data Archive (ATSIDA), University of Technology Sydney. Initially the proposal was to submit a joint paper but it became apparent in the drafting the stories needed individual submissions. Both papers explore how archivists can work to enhance the discoverability and accessibility of archives, collections and data, including those relating to Aboriginal and Torres Strait Islander people, Forgotten Australians and Former Child Migrants and other significant but often marginalised communities. Rather than being passive agents in the archival process, archivists should engage directly with record holders while records are still in active use, help build capability in others to document records, metadata and contextual information, and proactively promote community engagement with digital and physical data and records.

### Introduction

On 26 July 2012, Sydney Morning Herald columnist Elizabeth Farrelly wrote of the value of archives and archivists as 'keepers of knowledge'. She concludes: "We should revere these people, house them in temples, bathe them in frankincense, for they are the seed-keepers of the future." However, while reverence is always welcome, it is interesting to consider the model of archivist she puts forward. She writes of the archive as a 'keeping place', tells of treasures "hidden away along anodyne corridors of plain brown boxes and metal cabinets," and claims "archivists, like geologists, engage at a poetic level with terrain that most people find forbiddingly arid." While likely similar to the views of many in society, this traditional, perhaps even old-fashioned vision of the archivist's domain, when combined with the religious symbolism of Farrelly's conclusion, suggests we are somehow separate from the rest of the community, guardians of some great, unknowable mystery.

This is a problem. While preservation and custodianship is a key function of archives, we are not doing our job well if users feel like strangers in a strange land. In this paper, I will look at various

<sup>&</sup>lt;sup>3</sup> Elizabeth Farrelly, 'We should revere the keepers of knowledge,' *The Sydney Morning Herald* [online], 26 July 2012. Date Accessed: 30 July 2012. <a href="http://www.smh.com.au/opinion/politics/we-should-revere-the-keepers-of-knowledge-20120725-22qqa.html">http://www.smh.com.au/opinion/politics/we-should-revere-the-keepers-of-knowledge-20120725-22qqa.html</a>

<sup>4</sup> ibid.

projects undertaken by the University of Melbourne's eScholarship Research Centre to explore how we can use digital technology to extend the story of records and data to communities beyond the walls of repositories and institutions. Hopefully, in the process, we can make archival terrain more accessible and less 'forbiddingly arid'.

## The eScholarship Research Centre

The University of Melbourne's eScholarship Research Centre (ESRC) was established in 2007 to build on more than 20 years of prior work as the Australian Technology and Heritage Centre (Austehc), and the Australian Science Archives Project (ASAP). The Centre works with the following broad aims:

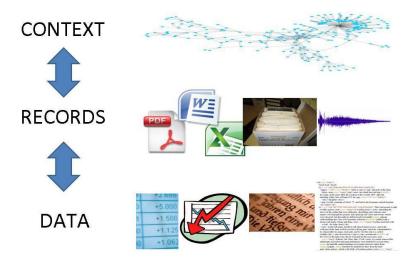
- to collaborate with researchers in the use of digital technologies to extend their research capabilities;
- to work with the University of Melbourne and others to enhance their digital archive and knowledge preservation infrastructure; and,
- to participate with the community in the creation and dissemination of information to address societal needs.

Since the establishment of ASAP in 1985 the core staff of the ESRC have been non-custodial archivists, and have therefore developed significant experience applying archival theory and practice in many, diverse contexts with a wide range of collaborators, including archives and archivists, historians, social workers, education researchers, state and federal government, community heritage groups, NGOs, and large cultural organisations.

Two core aspect of the ESRC's work are: the development of online archival guides, including digitised records and related material; and the development and maintenance of structured public knowledge spaces, designed to operate in the fourth dimension of the Records Continuum.<sup>5</sup> The latter are contextual information frameworks designed to make scholarly content, distributed archival collections, published resources and digital objects discoverable and understandable via networks of key entities, including people, organisations, events, places, legislation and more.

Much of the ESRC's work is based on the idea that knowledge can be considered as three closely connected layers: context; records; and data (Figure 1).

<sup>&</sup>lt;sup>5</sup> Sue McKemmish, Franklyn Herbert Upward and Barbara Reed, 'Records Continuum Model,' *Encyclopedia of Library and Information Sciences*, Third Edition, 1:1, 2010, p. 4451.



**Figure 1:**Three Layers – Context, Records, and Data

Context here is rich, structured metadata about the key entities mentioned above, and the complex network of relationships between them. This information is often found embedded in records, in people's minds and experiences, and in the physical fabric of the world. When extracted and documented separately from those records a contextual information framework is created which can be used to structure knowledge about the past, support knowledge management in the present, and sustain knowledge and understanding into the future.

Records, used very broadly, refers to the ways in which context and data are preserved in a fixed, time-specific format – in documents, files, publications, photographs, audio and video recordings, spreadsheets, web pages and more. Records are – as archivists know – the evidence of activity by people and organisations in the world, and a primary means by which society stores or remembers information.

Data are the information, facts, figures, and other content utilised for analysis, aggregation, decision-making, planning, evaluation and related activities. While often stored in records, data increase substantially in their utility when they can be extracted from records and combined, filtered, sorted or otherwise manipulated.

This model has implications for research data management, data archiving, and paper based archival practice. While established data archives such as the Australian Data Archive (and equivalent international bodies) have systems for storing and disseminating manipulable data, many are not equipped to effectively manage the records or context required to fully explore and understand that data, particularly for users not accustomed to statistical analysis. Similarly, established archival repositories provide access to fixed records but rarely have the

13

<sup>&</sup>lt;sup>6</sup> See Gavan McCarthy and Ian Upshall, "Radioactive Waste Information: Meeting our Obligations to Future Generations with regard to the Safety of Waste Disposal Facilities," International Council on Archives, Study 18, May 2006.

infrastructure or experience to manage data; and contextual information managers can create and disseminate networks of entities but rarely run archival repositories or data archives.

The ESRC therefore works collaboratively across all three domains, with custodial archives, creators of distributed collections of records and data (akin to the 'post-custodial' model), organisational knowledge managers, data archives – including the Aboriginal and Torres Strait Islander Data Archive (ATSIDA) and ADA – and with researchers, academics and communities on the creation of public knowledge spaces. What follows are brief outlines of some of these projects.

# Making collections accessible - the collections and papers of Ernest Westlake (1855-1922)

In 2000, historian Rebe Taylor first began work on the papers of Ernest Westlake, stored in archive boxes at the Pitt Rivers Museum, Oxford. The collection is highly significant for Australia. Westlake travelled to Tasmania and, between 1908 and 1910, collected 13,033 Tasmanian Aboriginal stone artefacts – the largest collection of its kind. He also filled exercise books with references to Tasmanian material such as Government records, newspapers and published sources; and, significantly, recorded interview notes with ninety-five Tasmanians, many of them Aboriginal people, in five small notebooks.

Due to the combination of institutional demands and limited resources familiar to custodial archives everywhere, the paper collection had never been catalogued; therefore, Rebe was asked to number items and create a temporary box list while working with the papers. She writes of the experience: "I did so happily, but it was not merely my lack of expertise that left me dissatisfied with my efforts. While the box list gave me dates and factual descriptions of the records, it did not make a coherent sense of the archive, neither the reasons for its creation nor its own history as an entity."

Therefore, in 2006, Rebe began conversations with Gavan McCarthy, Director of what was then the Australian Science and Technology Heritage Centre (Austehc), now the ESRC. Rebe, Gavan and I have continued working on this project when time and resources allow and the first edition of the annotated history and guide to the collection will be published online this year. In the intervening time, we have added inventory descriptions of related Westlake material in the Oxford University Museum of Natural History (OUMNH) to those from Pitt Rivers, digitised both collections in their entirety (a total of more than 8,200 images), and Rebe has worked on adding historical depth and context to the archival descriptions.

Just as Rebe lacked the expertise to create full, standardised archival descriptions of the Westlake material, ESRC archivists (and the archivists from Pitt Rivers and OUMNH) lacked the depth of historical knowledge and familiarity with related collections and material Rebe brought to the

<sup>&</sup>lt;sup>7</sup> Rebe Taylor, 'A Journey of 13,033 Stones: The Westlake Collection and Papers,' *Collections: A Journal for Museum and Archives Professionals*, 2012, in press.

project. The guide is therefore more than a finding aid for the physical collections of two institutions. It is a digital collection in its own right, and a history of that material, with historical cross-references between inventory items and series, and references to publications, articles and other collections. Also included in the digital guide are documents and images related to Rebe's work and the creation of the guide itself.

While the first edition is near completion, the project will not end here. There are plans for a more expansive contextual 'layer', and Rebe intends to write a new digital narrative history of Westlake which will incorporate direct navigable links into the guide and collection itself. More broadly, the Westlake guide highlights the benefits of archivists engaging directly with active researchers, and vice versa, to digitally extend archival collections beyond repositories and make them more discoverable; to help capture and make available researcher knowledge related to collections; to consider new ways of combining historical narratives with archival description; and to make the results if this collaborative work available in their entirety to the community.

# Working with Communities - Who Am I? and the Find & Connect Web Resource

Another focus for the ESRC is the contextual information space, creating 'fourth dimension' digital public knowledge resources which link and contextualise large numbers of collections held by both creating organisations and custodial archives. A key example is the Australian Research Council funded project Who Am I?: The Archive as Central to Quality Practice for Current and Past Care Leavers (Forgotten Australians).<sup>8</sup> Starting in 2009, Who Am I? was conducted by the University of Melbourne and the Australian Catholic University (ACU) in partnership with 15 other organisations, and in consultation with consumer support and advocacy groups. All these stakeholders, as well as 'care leavers' and government representatives, were involved in the project from day one, through ongoing workshops, site visits, regular meetings, usability testing, invitations to events, and collaborative decision-making processes.

One of the key project outputs was the Pathways website, launched in the first year of the three year project. Community feedback became a vital part of the ongoing development of the site, and Pathways had a demonstrable impact on practice in the sector, used by 'care leavers' and their families, journalists, genealogists, researchers, heritage workers, and case managers in child and family services. Organisations managing heritage collections also reported an increase in enquiries, with most of those enquiring citing Pathways as their source of discovery, and ESRC archivists actively engaged with many of these organisations to help them make collections more discoverable and accessible for the target audience. This support was a vital part of the project's

15

<sup>&</sup>lt;sup>8</sup> Cate O'Neill, Vlad Selakovic and Rachel Tropea, 'Access to records for people who were in out-of-home care: moving beyond "third dimension" archival practice,' *Archives and Manuscripts*, Vol. 40, No. 1, March 2012, pp. 29-41.

success, as the organisations involved often lacked sufficient funding, staff or experience to carry out such work alone.

Following a scoping study by the Australian Government's Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA),<sup>9</sup> Pathways became the model for the Find & Connect Web Resource (funded by FaHCSIA),<sup>10</sup> a national contextual information network with the ultimate goal of mapping every child welfare organisation in the country, along with information on the location of the records and record collections created by or related to these organisations. The resource also includes key events, people, legislation, photographs and documents, all designed to help Forgotten Australians, Former Child Migrants and anyone with an interest in out-of-home 'care' understand more about their past and the historical context of child welfare in Australia.

The national Find & Connect Web Resource is producing a number of effects and outcomes (as did Pathways), though some are still difficult to quantify at this stage of the project. Our experiences to date suggest the following:

- Forgotten Australians, Former Child Migrants and their families, and others with an interest in out-of-home 'care' in Australia can more quickly access information which helps them find records and understand the context of their time in 'care';
- the Web Resource team is developing a relationship of trust with Forgotten Australians and Former Child Migrants, and with support services, past and present providers, and federal and state governments;
- users are providing significant feedback which leads to enriched content, new research directions, and the development of more intuitive, user-friendly interfaces;
- many record-holding institutions have become actively engaged in the project, and are working to improve the discoverability, accessibility and management of their own collections; and,
- all stakeholders, including state record offices, archives, libraries and other record-holding
  institutions are developing a better understanding of Forgotten Australians and Former Child
  Migrants, and have an increased awareness of the need to effectively support discovery and
  access for these users.

In addition, ESRC staff are working on an archival listing tool and associated training package for 29 organisations around the country. (Each holds significant records in this area and made an application to FaHCSIA as part of the Records Access Documentation Project, another initiative supported by the national Find & Connect program.) This work will build capability in

<sup>&</sup>lt;sup>9</sup> Find and Connect Service: Scoping Study, Department of Families, Housing, Community Services and Indigenous Affairs, Commonwealth of Australia, September 2010.

<sup>&</sup>lt;sup>10</sup> The Find & Connect Web Resource, Find & Connect Web Resource Project, Commonwealth of Australia, 2011. Date Accessed: 30 July 2012. <a href="http://www.findandconnect.gov.au/">http://www.findandconnect.gov.au/</a>

organisations nationally, improve the discoverability of their records, and will be used to further develop a number of entries in the Find & Connect Web Resource.

The Find & Connect Web Resource project is demonstrating that proactive engagement and collaboration between archivists, researchers and the community has numerous benefits, and these flow in more than one direction.

## Linking collections and context to data

With reference to the 'three layers' model introduced earlier in this paper, the Westlake guide is primarily focused on the records layer (with plans to link a contextual network to this in future), while the Find & Connect Web Resource is a large-scale contextual information network, with some links to high level descriptions of distributed records collections. As noted, the ESRC also works to connect these layers with analysable, manipulable data sets. For example:

- Documenting Demography and Health Records of Aboriginal and Torres Strait Islanders a
  large, diverse collection (165 boxes, foldered material, maps, punch cards and more),
  including a significant quantity of records and hard-copy data related to the annual Aboriginal
  censuses held between 1921 and 1944. The ESRC, ATSIDA and the ADA are working with
  researchers Len Smith and Gordon Briscoe (who collected this material) to document and
  digitise the physical records, prepare them for deposit with the ANU archives, create a digital
  finding aid, and link this material to analysable datasets held by ADA.
- University of Melbourne Social Survey, 1941-1943 a survey of more than 6,000 homes in Melbourne, conducted during a 14-year break in the national census record. The physical records for this collection are held by the University of Melbourne Archives, a sample of which researchers John Lack and Graeme Davison re-coded digitally in the early 1980s. ESRC archivists worked with John Lack and other researchers, the ADA, and the Archives to prepare and deposit this data with ADA, and links were created between this analysable data and listings for the physical records.
- The Saulwick Age-Poll Archive funded by the Australian Research Council, this project (which is nearing completion) will create a public knowledge space containing the contextual network of individuals, companies and other key entities responsible for polling and associated research, with a focus on the Age Polls conducted between 1971 and 1994, along with a digital guide to records for the physical Saulwick collection and links to manipulable Saulwick datasets held by ADA. The project is also contributing to refreshed and expanded metadata for a number of these ADA datasets, based largely on material located in the physical records.

As is evident from all these projects, working effectively in multiple 'layers' requires extensive collaboration networks. The Saulwick Age-Poll Archive – which encompasses all three layers –

involves ESRC archivists, the University of Melbourne Archives, ADA, political science academics from three Universities, and Irving Saulwick himself.

All three projects also involve data already held within archives, whether physical collections or the Australian Data Archive, as well as the creation of new digital resources linking these collections with pre-existing material or newly-discovered material. Archivists are vital here, not just as custodians but also as experts in standardised metadata and contextual information mapping; but the expertise of researchers, creators and repositories is equally important. And, significantly, each development creates new pathways to archival content and research data for the public, and new ways of using, accessing and understanding that content once it has been discovered.

### **Challenges**

Considering all the examples provided above, there are significant challenges in creating public digital resources based in whole or in part on archival collections. Gudmund Valderhaug acknowledges these issues when writing about Norwegian 'war children' and their attempts to access archival records. He suggests that, while archivists have the option of introducing users to finding aids and helping them locate and identify records, things do not have to end here:

There is another option; the archivist may use her archival expertise to uncover the conditions of the record creation in the given period: What administrative procedures may have been used? What kind of information might have been archived in the first place? Is it probable that any of the records might have been lost? Could there be found better information at other archives?

For an archivist used to handling enquiries from researchers, students and family historians, from people more or less belonging to our professional family, choosing this second option implies encountering the stranger. Individuals who approach the archives to find documentation of injustice committed against themselves are very often strangers to the archives. They have never been to an archive before; they do not know how to use our finding aids; they may not even understand the record's bureaucratic rhetoric. They represent a new kind of user.<sup>11</sup>

A number of ESRC projects have received feedback supporting this view. Working on Westlake with Rebe Taylor – a trained historian with considerable experience working in and with archives – she found some of the terminology contained within guides and finding aids was a barrier to

<sup>1 /</sup> 

 $<sup>^{11}</sup>$  Gudmund Valderhaug, 'Memory, justice and the public record,'  $Archival\ Science$ , Vol. 11, No. 1-2, 2011, p. 20. Accessed Online: 26 July 2012. DOI 10.1007/s10502-010-9110-5

understanding. The solution here was not just to educate her, but to change the terminology to ensure online users did not face similar barriers.

Similarly, our guide to the records of Diane Elizabeth Barwick is a comprehensive and significant piece of scholarship in its own right (the text is over 300,000 words), and documents a collection containing substantial knowledge about Aboriginal history and culture including rich genealogical data. However, we have received feedback from some users that parts of the guide are difficult to understand and use due to the archival terminology and formalised language used.

Our most substantial user testing has been on the Find & Connect Web Resource, and the results are telling. The primary target audience – Forgotten Australians and Former Child Migrants – are, as a rule, not researchers, academics or historians, and average literacy levels (online and offline) are lower than for the general population. Testing revealed many of these users do not understand terms used on our site (including 'Glossary' and 'Timeline'), have difficulty with standard search functionality and alphabetical browse lists, and are unable to navigate effectively through pages containing large amounts of text. Though the team of archivists, historians and social work academics responsible for the site took great care to try and provide clear navigation in plain, non-technical language, reaching out to the target community established we still have a way to go. Therefore, we are now looking at how to present complex historical context and archival description in a clear, navigable and easy to understand way. This remains a work in progress.

Meeting the challenges of new kinds of user should not mean attempting to induct people into the arcane terminology and conceptual complexity of formal archival description. Instead, we need to engage with diverse groups, request feedback, and – where possible – adjust our own practice to suit the needs of the broader community.

#### Conclusion

I am going to finish with an idealistic vision. In the digital world, archivists have the opportunity – dare I say, the responsibility – to embrace Valderhaug's second option; to do all of these things, ideally before we are asked to do so (but at least in response to enquiries), and to capture and disseminate this information as a fundamental part of our role. Archivists working with researchers and communities in this way leave distinctions between 'custodial' and 'post-custodial' behind, instead working in pre-custodial, custodial and post-custodial realms as

<sup>&</sup>lt;sup>12</sup> Ann McCarthy and Gavan McCarthy, *Diane Elizabeth Barwick (1938-1986) Guide to Records*, The University of Melbourne eScholarship Research Centre, 2007. Date Accessed: 30 July 2012. http://www.austehc.unimelb.edu.au/guides/barw/barw.htm

<sup>&</sup>lt;sup>13</sup> Don Boadle, 'Reinventing the Archive in a Virtual Environment: Australians and the Non-Custodial Management of Electronic Records,' *Australian Academic & Research Libraries*, Vol. 35, No. 3, September 2004, pp. 242-252. Date Accessed: 30 July 2012. <a href="http://alia.org.au/publishing/aarl/35.3/boadle.pdf">http://alia.org.au/publishing/aarl/35.3/boadle.pdf</a>

required, and making and documenting connections between all three.

Digital technologies make this easier than ever before, and mean that many users whose lives and stories could be enriched by better access to archival records and data will never have to enter the daunting, unknown world of the archival repository. Or, if they do, they will arrive knowing more and fearing less. In turn, we should not fear these 'strangers' – we should, instead, seek them out.

Finally, though this vision does not explicitly consider the perennial issues of how to fund and resource what appears to be an expansion of current archival activity, our response to dwindling support cannot be to try and ensure we remain mysterious guardians of our own worlds. Rather, it is to reach out and engage with as many people as possible from every walk of life, so our records are not viewed as arid terrain necessitating some kind of poetic understanding, but as a vital, active part of communities, and of current and future society.

#### References

Boadle, Don, 'Reinventing the Archive in a Virtual Environment: Australians and the Non-Custodial Management of Electronic Records,' *Australian Academic & Research Libraries*, Vol. 35, No. 3, September 2004, pp. 242-252. Date Accessed: 30 July 2012. <a href="http://alia.org.au/publishing/aarl/35.3/boadle.pdf">http://alia.org.au/publishing/aarl/35.3/boadle.pdf</a>

Farrelly, Elizabeth, 'We should revere the keepers of knowledge,' *The Sydney Morning Herald* [online], 26 July 2012. Date Accessed: 30 July 2012. <a href="http://www.smh.com.au/opinion/politics/we-should-revere-the-keepers-of-knowledge-20120725-22qqa.html">http://www.smh.com.au/opinion/politics/we-should-revere-the-keepers-of-knowledge-20120725-22qqa.html</a>

*Find and Connect Service: Scoping Study,* Department of Families, Housing, Community Services and Indigenous Affairs, Commonwealth of Australia, September 2010.

*The Find & Connect Web Resource*, Find & Connect Web Resource Project, Commonwealth of Australia, 2011. Date Accessed: 30 July 2012. <a href="http://www.findandconnect.gov.au/">http://www.findandconnect.gov.au/</a>

McCarthy, Ann, and Gavan McCarthy, *Diane Elizabeth Barwick (1938-1986) Guide to Records*, The University of Melbourne eScholarship Research Centre, 2007. Date Accessed: 30 July 2012. <a href="http://www.austehc.unimelb.edu.au/guides/barw/barw.htm">http://www.austehc.unimelb.edu.au/guides/barw/barw.htm</a>

McCarthy, Gavan, and Ian Upshall, "Radioactive Waste Information: Meeting our Obligations to Future Generations with regard to the Safety of Waste Disposal Facilities," International Council on Archives, Study 18, May 2006.

McKemmish, Sue, Franklyn Herbert Upward and Barbara Reed, 'Records Continuum Model,' *Encyclopedia of Library and Information Sciences*, Third Edition, 1:1, 2010, p. 4451.

O'Neill, Cate, Vlad Selakovic and Rachel Tropea, 'Access to records for people who were in out-of-home care: moving beyond "third dimension" archival practice,' *Archives and Manuscripts*, Vol. 40, No. 1, March 2012, pp. 29-41.

Taylor, Rebe, 'A Journey of 13,033 Stones: The Westlake Collection and Papers,' *Collections: A Journal for Museum and Archives Professionals*, 2012, in press.

Valderhaug, Gudmund, 'Memory, justice and the public record,' *Archival Science*, Vol. 11, No. 1-2, 2011, p. 20. Accessed Online: 26 July 2012. DOI 10.1007/s10502-010-9110-5